



Design guidelines for hospitals and day procedure centres

Issue 1 Release Notes

This release represents the first public issue of the new Victorian Guidelines for Hospitals and Day Procedure Centres (DGHPD). All previous releases were marked DRAFT for review and comment only.

Every effort has been made to check the new guidelines for errors and inconsistencies. Many different stakeholders, proof-readers and reviewers have participated in this process. Nevertheless, As may be expected of issue 1 of a comprehensive set of new guidelines, errors and inconsistencies may still be found. These will be progressively corrected in future editions of the guidelines

Important Disclaimer

These Guidelines have been created as "Stand-alone" documents. Nothing in these Guidelines implies that compliance with them will automatically result in compliance with other Legislative or Statutory requirements. Similarly, nothing in these Guidelines implies compliance with the Australian Standards or the Building Code of Australia. Parts of these Guidelines such as Room Layout Sheets necessary show elements which may be subject of those Legislative or Statutory requirements. Every effort has been made to ensure such compliance, however no guarantees are made. It is the responsibility of each user to check and ensure compliance with other "Stand-alone" Legislative and Statutory requirements.

As the name suggests, the documents provided are "Guidelines". Users are advised to seek expert opinion on the important issue of Health Facility Design whilst considering these Guidelines. Many of the concepts covered by these Guidelines require a minimum level of knowledge of Health Facilities and Health Facility Design. Due to the generic nature of these Guidelines, all the individual circumstances can not be anticipated or covered. Furthermore, these Guidelines do not cover the operational policies of individual facilities. Delivery of excellence in health care as well as the provision of a safe working environment will depend on appropriate operational policies. The authors of these Guidelines as well as those involved in the checking or approval of these Guidelines accept no responsibility for any harm or damage, monetary or otherwise caused by the use or misuse of these Guidelines.

What is New?

These guidelines were specifically prepared by Health Projects International for Victoria using a specially customised database of health design knowledge. Over the last few years, thanks to a framework of cooperation between different State Departments of Health, the guidelines have been offered as the core of the proposed future National Health Facility Design Guidelines. The same database system is used to deliver the new NSW Health Facility Guidelines over the next few years. The delivery system, the structure and content database are shared, whilst each State initially has its own version meeting legislative and policy requirements. Over time, various State variations of the guidelines are expected to reduce to pave the way towards the future unified Guidelines.

Use of Other Guidelines

These Guidelines have been prepared after considering numerous other Guidelines available in Australia and overseas. Both words and concepts found in the other Guidelines have been used when appropriate, sometimes with changes to terminology or methods of measurement. Since very similar concepts and requirements are covered by many different guidelines, a clause by clause reference to other guidelines would be impractical. A short list of other Guidelines reviewed for the preparation of these Guidelines can be found under "References and Further Reading" in each section of the Guidelines. Nothing in these Guidelines implies or guarantees compliance with every requirement of those other Guidelines.

Credits

These Design Guidelines as well as the Guidelines Web Site have been prepared by:
Health Projects International Pty Limited (HPI) for the Department of Human Services, Victoria, (DHS).



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Part A - Introduction and Instructions for Use

10	Introduction	6
20	Terms of Reference	10
30	How to Read	12
40	Administration	15
45	Role Delineation and Levels of Service	17
50	Abbreviations	18

Part B - Health Facility Briefing and Planning

60	Site Development	20
70	Construction Standards	21
80	General Requirements	23
90	Standard Components	30
110	Acute Spinal Unit	74
120	Administration Unit	77
130	Admissions Unit	81
132	Adolescent/ Child & Family Acute Mental Health Inpatient Units	84
134	Adult Acute Psychiatric Inpatient Unit	93
135	Aged Persons Acute Psychiatric Unit	102
140	Allied Health Unit	113
150	Ambulance Unit	123
170	Cardiac Catheterisation Unit	126
180	Catering Unit	130
190	Central Sterile Supply Unit (CSSU)	139
220	Child Care Unit	146
230	Cleaning/ Housekeeping Unit	147
240	Clinical Information Unit	150
250	Community Mental Health	153
260	Coronary Care Unit	160
270	Day Procedure Unit	164

280	Dental Unit	172
290	Education & Training Unit	177
300	Emergency Unit	181
310	Engineering & Maintenance Unit	195
320	Geriatric Evaluation & Management	199
340	Inpatient Accommodation Unit	200
350	Integrated Health Care Centres	207
360	Intensive Care - General	215
370	Intensive Care - Coronary	224
390	Intensive Care - Neonatal / Special Care Nursery	226
400	Intensive Care - Paediatric	231
410	Laundry / Linen Handling Unit	234
430	Main Entrance Unit	237
440	Medical Imaging - General	240
450	Medical Imaging - Angiography	246
460	Medical Imaging - CT Scanning	250
470	Medical Imaging - MRI	253
480	Medical Imaging - PET	258
490	Mortuary Unit	265
500	Nuclear Medicine Unit	268
510	Obstetric Unit	274
520	Operating Unit	280
530	Orthotics Unit	290
540	Paediatric/ Adolescent Unit	298
545	Palliative Care Unit	304
550	Pathology Unit	311
560	Pharmacy Unit	315
590	Public Amenities Unit	321
600	Radiotherapy Unit	324
610	Rehabilitation Unit	330

620	Renal Dialysis Unit	336
630	Secure Extended Care Unit	341
635	Spiritual/ Meditation Unit	350
640	Staff Amenities Unit	351
650	Sub-acute Care Unit	354
660	Supply Unit	362
670	Waste Management Unit	365
680	Furniture & Equipment	369
690	Traffic and Car Parking	371
700	Services Briefing	374

Part C - Access, Mobility, OH & S

710	Space Standards & Dimensions	378
720	Ergonomics	383
730	Human Engineering	389
750	Signage	391
760	Doors	394
765	Grab Rails & Hand Rails	399
770	Windows and Glazing	400
780	Floors	403
785	Acoustics	407
800	Security	410

Part D - Infection Control

820	General Requirements	416
825	Handwashing Facilities	417
830	Isolation Rooms	419
860	Physical Environment	420
880	Surfaces & Finishes	422
900	Construction & Renovation	424
910	Verification	426



Part A – Introduction and instructions for use

10 INTRODUCTION

General

- 10.1.00 This document and its various attachments represent the minimum Design Guidelines for Hospitals and Day Procedure Units (DGHDP). They may be referred to as 'the DGHDP' or 'these Guidelines' through the text.

For a quick start, please refer to the section under "How to Read"

- 10.2.00 These Guidelines do not represent the ideal or best standards. Neither do they cover management practices beyond the influence of design. The main aims of these guidelines is to:
- Establish the minimum acceptable standards for design and construction
 - Maintain public confidence in the standard of Health Care Facilities
 - Determine the basis for the approval and registration of private hospitals
 - Provide general guidance to designers seeking information on the special needs of typical Health Care Facilities
 - Promote the design of health facilities with due regard for safety, privacy and dignity of patients, staff and visitors
 - Eliminate design features that result in unacceptable practices
 - Update guidelines to meet current medical practices
 - Eliminate duplication between various standards.
- 10.3.00 These Guidelines were compiled by Health Projects International for the Victorian Department of Human Services (DHS) in 2002. Many existing guidelines and standards used in Australia and the United States of America have been evaluated in order to arrive at the requirements of these guidelines. These can be found in the credits list. Furthermore, these are forward looking guidelines, reasonably anticipating and allowing for emerging health care practices.
- 10.4.00 Although design has a major impact on the quality of health care, it is not the only influence. Management practices, staff quality and regulatory framework potentially have a greater impact. Consequently, compliance with these guidelines can influence but not guarantee good health care outcomes.
- 10.5.00 It should be noted that Private Nursing Homes are included in Classification IXA Institutional Health Care Building of the Victoria Building Regulations.
- Through amendments No. 3 and 4, which came into force on 1 July 1986, the following basic building matters are now covered by the Victoria Building Regulations:
- Structural Integrity
 - Basic Health and Amenity
 - Fire Safety and Fire Resistance.
- Only briefing and functional design matters are covered by these guidelines.
- 10.6.00 These Guidelines place emphasis on achieving Health Care Facilities that reflect current health care procedures in a desirable environment for patient care at a reasonable facility cost.
- 10.7.00 The model standards suggested in the Guidelines are performance and service oriented. Where prescriptive measurements are given, these have been carefully considered relative to generally recognised standards. These standards are self evident and do not require detailed specification.

Part A - Introduction and Instructions for Use

General

- 10.8.00 In many instances it may be desirable to exceed minimum requirements to achieve optimum standards. For example, doorways that are wider than the stated minimum patient bedroom door width will minimise damage to beds and door frames where frequent traffic may occur.

Administrative Provisions

- 10.9.00 Equivalent Alternatives

The primary objective of the Guidelines is to achieve a desired performance result or service. Prescriptive limitations, when given, such as exact minimum dimensions or quantities, describe a condition commonly recognised as a practical standard for normal operation.

Where specific measurements, capacities or other standards are described, equivalent alternative solutions may be deemed acceptable if it is demonstrated that the intent of the standards has been met.

It is important to note that these Guidelines are not designed to restrict innovation which might improve performance and/or outcomes.

- 10.10.00 Compliance and Accreditation

Compliance with these Guidelines does not imply that the facility will automatically qualify for accreditation by the Australian Council on Health Care Standards.

Accreditation is primarily concerned with hospital management and patient care practices, although the standard of facility is certainly a consideration.

For detailed information on accreditation requirements contact:
Australian Council on Health Care Standards
PO Box 95
Waterloo NSW 2017

Phone: (02) 9662 2311
Fax: (02) 9662 6370

for detailed information on accreditation requirements.

Glossary of Terms

- 10.11.00 the Act - An Act of Parliament

Acceptable standard - A standard acceptable to the Department of Human Services, Victoria.

Area, space - The Guideline requirement need not be fully enclosed but form part of a larger space; for example trolley park alcove off a corridor.

Building Code of Australia - Building Code of Australia (1996) and any subsequent amendments or updates.

Building Service Equipment - equipment items including heating, air-conditioning, ventilation, humidification, filtration, chillers, electrical power distribution, emergency power generation, energy / utility management systems, and other equipment with the primary function of a building service.

Compliance - To act or provide in accordance with the requirements or recommendation of these Guidelines or referenced standards or regulations.

Part A - Introduction and Instructions for Use

Day Procedure Centre (DPC) - A facility primarily composed of a Day Procedure Unit with additional support facilities. This may be stand-alone or attached to a hospital or medical centre.

Disabled facilities - Facilities that are designed for use by the disabled, to AS 1428 series.

Egress - A safe means of escape in the event of an emergency.

Ensuite - A room fitted out with a shower, a toilet and a basin/mirror combination. An Ensuite associated with a bedroom should have a door which opens directly off the bedroom. There are other types of Ensuities such as Shared Ensuities. Variations are fully and semi-assisted types.

Facility - The physical aspects of the development; for example the buildings.

Fixed Equipment - items that are permanently fixed to the building or permanently connected to a service distribution system that is designed and installed for the specific use of the equipment.

Fully assisted facilities - Facilities for toileting, showering and bathing that are designed for the patient to be assisted by two staff members.

Guidelines - A collection of requirements and recommendations, some mandatory, some non-mandatory, which describe a minimum level of facility provision.

Inpatient Unit - The module by which a hospital is developed to ensure cost efficient nurse coverage for patient safety and service for example one inpatient unit = 32 acute patient bedrooms = One ward.

Interpretation - The meaning of something as understood by the Department of Human Services, Victoria.

LDR - Labour, Delivery, Recovery room within a Birthing Unit.

LDRP - Labour, Delivery, Recovery, Post Partum room within a Birthing Unit.

Life Cycle Cost Analysis - A technique of economic evaluation that sums the costs of initial investments, replacements, operations, and maintenance and repair of an investment decision over a given study period.

Minimum - The least level of provision that is considered necessary for a given function. Anything below minimum is considered unsatisfactory.

Mobile Equipment - mobile equipment items (medical or non-medical) that require electrical or mechanical connections or floor space but are portable, such as wheeled items, moveable office furnishings and monitoring equipment.

Office or Room - The function is to be fully enclosed to create its own space for example Birthing Room, Operating Room. This is in contrast to the definition of 'Workstation or 'Space/Bay' where the function is within a larger area which contains other items or users.

Optimum - The preferred level of provision, not necessarily the best, but higher than the minimum level.

PACU - Post Anaesthesia Care Unit within a Day Procedure Unit or Operating Unit.

Partially assisted facilities - Facilities for toileting, showering and bathing that are designed for the patient to be assisted by one staff member.

Part A - Introduction and Instructions for Use

Patient Care Area - Area as defined in the Building Code of Australia part of Health Care Facilities normally used for the treatment, care, accommodation, recreation, dining and holding of patients, including a ward and treatment area.

Private Hospital - A registered premises where persons are provided with health services of a prescribed kind or kinds and for which a charge is made and includes a privately-operated hospital but does not include -

- a public hospital or denominational hospital
- a day procedure centre
- a residential care service

Radiographer (Medical Imaging Technologist) - A person eligible for membership with the Australian Institute of Radiography who is permitted by the Radiological Council to operate major x-ray equipment under the direction and supervision of a licensed Radiologist.

Shall - Implies that the requirement referred to is mandatory.

Should - The item being discussed requires attention and a suitable solution such as the one provided. However the example given is not mandatory. In short "Should" is not as strong as "Shall".

Standards - The Standards of the Standards Association of Australia or parts of these Guidelines depending on the context.

Treatment Area - Area as defined in the Building Code of Australia (BCA) - an area within a Patient Care Area such as an Operating Suite or Unit and rooms used for recovery, minor procedures, resuscitation, intensive care and coronary care from which a patient may not be readily moved.

X-ray Operator - A person who has received approval by the Radiological Council to perform a range of X-ray examinations, limited to chests and extremities, using low powered mobile X-ray equipment.

Maintenance

10.12.00 Refer to Section E5 of the Building Code of Australia - Maintenance.

In designing and detailing a Hospital or Day Procedure Unit, the recurrent costs involved in maintaining the building stock should be an important consideration. The aim being to prevent the building from deteriorating to the point where the facility no longer complies with these Guidelines. Hospital proprietors are encouraged to consider establishing an asset management program to ensure that building stock is maintained to an appropriate standard. The architect and engineers should optimise the impact of maintenance on the life cycle costs of the facility, with obvious due consideration to the proprietor's capital commitment. Selection of building material, finish, fitments, plant etc., and maintenance access are all important considerations.

20 TERMS OF REFERENCE

Objectives

- 20 .1.00 The Department's prime concern is in the area of patient care. These Guidelines are intended to enhance the quality of patient care by ensuring that hospital facilities are designed to provide appropriate living conditions and standards of care for patients, staff and visitors.

Facilities Covered

- 20 .2.00 The following health facilities are included in these Guidelines:
- Public Hospitals
 - Privately Operated Public Hospitals
 - Private Hospitals
 - Day Procedure Units (within hospitals or separate)
 - Integrated Care Centres (ICC)
 - Mental Health Inpatient Facilities
 - Rehabilitation Centres
 - Geriatric Evaluation and Management (GEM) Centres
 - Palliative Care Centres
- 20 .3.00 The following health facilities are excluded from these Guidelines:
- Community Residential Facilities
 - Aged Residential Care Facilities
 - Supported Residential Services
 - Medical Practitioners and Consulting Rooms
 - Pharmacies (Retail Stand-alone)
 - Stand-alone Dental Health Services
- 20 .4.00 The facilities listed above may be public or private or any combination of the two. These guidelines apply equally to all such facilities.

New and Refurbished Buildings

- 20 .5.00 These Guidelines apply to all new facilities or existing facilities being refurbished as one of the health facility type covered.

Requirements for full compliance for a whole unit when a partial redevelopment is proposed will be determined in consultation with the Department of Human Services.

For existing planning units within health buildings that are being cosmetically redecorated without replanning, compliance with these Guidelines is confined to those applying to surfaces and finishes being altered.

New and Refurbished Engineering Services

- 20 .6.00 These Guidelines apply to the engineering services of all new health facility types covered.

Refurbishment or upgrading of existing Health Facility Engineering Services such as HVAC services, hydraulic services, medical gas services, electrical and communication services, will require compliance with these Guidelines in the same manner but independently of the building works.

Engineering services within existing planning units that are being refurbished by more than 50% (of area coverage), with or without re-planning, will require

Part A - Introduction and Instructions for Use

full compliance with these Guidelines for the entire planning unit. All refurbishment work within the previous three years will be counted as part of the 50% calculation of areas.

For engineering services within existing planning units that are being refurbished by no more than 50% (of area coverage) compliance with these Guidelines is highly recommended.

If compliance with these Guidelines is required due to any building work, change of use or services upgrade, then compliance with all engineering requirements also is required.

For example, if the air-conditioning system for 70% of an existing Operating Unit is being refurbished, then the entire air-conditioning system for the Unit should comply with these guidelines.

New Facility Types

- 20.7.00 New facility types are proposed from time to time due to the changes in health practice. These new facility types do not necessarily invalidate the requirements of these Guidelines. In situations where the names of facilities and their processes are changed, the fundamental requirements of similar facilities or processes should be followed. In other words, changing the names of facilities (or sub-components) will not alter their minimum requirements.

The Structure of these Guidelines

- 30 .1.00 These Guidelines are structured as follows:

Parts: The Guidelines are divided into parts. The intention is to cover each discrete subject in a compartmented fashion to avoid duplication of the same information under different Hospital units.

- 30 .2.00 The parts are as follows:

Part A Introduction and Instructions for Use
Part B Health Facility Briefing and Planning
Part C Access, Mobility, Occupational Health & Safety
Part D Infection Control
Part E Building Services and Environmental Design
Enclosures

- Standard Components Room Data Sheets
- Standard Components Room Layout Sheets
- Functional Relationships Diagrams

- 30 .3.00 HEADINGS

These represent the main topics in each part.

SUB-HEADINGS

These cover the details of each Heading.

CLAUSES

This represents one discrete concept or topic under the sub-heading.

NOTES

These expand the clause by giving more explanations or examples of ways to achieve the main intent of the clause.

- 30 .4.00 LEVELS OF RECOMMENDATION

MANDATORY

All clauses by default are mandatory. In situations where the text has the potential for misunderstanding, the note "mandatory" may be used to clarify any aspect which is absolutely required without re-interpretation. If the word "Mandatory" does not appear in a clause, it does not indicate that the clause is optional.

RECOMMENDATION

On some occasions a standard is mandatory but a higher standard is recommended. The intention is to guide designers who wish to voluntarily upgrade the facility to a higher standard and wish to know what the higher standard is.

OPTIONAL

Shows clauses that are not mandatory requirements but are non-mandatory alternatives.

- 30 .5.00 CHARTS AND TABLES

Certain concepts, especially numerical standards, are expressed in charts and tables. Similarly, parametric requirements, depending on the size of components, may be expressed in charts and tables.

Part A - Introduction and Instructions for Use

DIAGRAMS AND DRAWINGS

Depending on the context and notation, the items illustrated are either mandatory, recommended or optional. The text will make this clear.

PICTURES

These provide a visual context for the issues being covered. The issues or subjects may be mandatory, however, the pictures are only examples.

The Style of these Guidelines

- 30 .6.00 These guidelines are expressed in a combination of performance based standards and prescriptive requirements. In the interest of clarity, only one subject is covered per clause.

Unless otherwise noted, all performance based and prescriptive guidelines are mandatory. However, where appropriate additional information is provided to guide designers.

Checklists

- 30 .7.00 At the end of each major section of these Guidelines, a checklist is provided for the users' convenience. The purpose of these checklists is to verify compliance with the key prescriptive requirements. The checklists themselves are not part of the mandatory requirements of these Guidelines.

How to Measure Drawings

- 30 .8.00 To measure drawings, the following measurement technique will apply.

FOR ROOMS

- Areas are measured to the inside face of outside walls,
- To centre of walls to adjoining rooms,
- To the full thickness of corridor walls facing rooms,
- To the centre of departmental boundary walls (except where boundary wall adjoins a corridor).

Areas not included are:

- Circulation % (represented by Departmental corridors)
- Service risers, Service cupboards and Plant Rooms
- Fire Hose Reels, Fire Stairs, Lift Shafts

- 30 .9.00 FOR DEPARTMENTAL CORRIDORS REPRESENTING CIRCULATION %

- Areas are measured to the face of corridor walls
- To the inside face of outside walls

Areas not included are:

- Service Risers, Service Cupboards and Plant Rooms
- Fire Hose Reels, Fire Stairs Lift Shafts

- 30 .10.00 FOR 'TRAVEL'

- Corridors between departments (HPUs) to the face of corridor walls
- To the inside face of outside walls
- Stairs including Fire Stairs
- Internal Fire Stairs and ramps.

Areas not included are:

- Service risers and cupboards
- Fire Hose Reels, Lift Shafts

Part A - Introduction and Instructions for Use

- Plant Rooms.

30.11.00 FOR ENGINEERING

- Plant Rooms, Fire Hose Reels and Service Cupboards to the centre of adjoining walls,
- To the inside face of outside walls,
- To the full thickness of riser walls.

Areas not included are Lift Shafts (the void area).

30.12.00 The minimum room sizes in these Guidelines assume wall thicknesses of 100 mm. For wall thicknesses of more than 120 mm, the minimum area of the room (as measured in accordance with these Guidelines) shall be increased to compensate for the greater wall thickness.

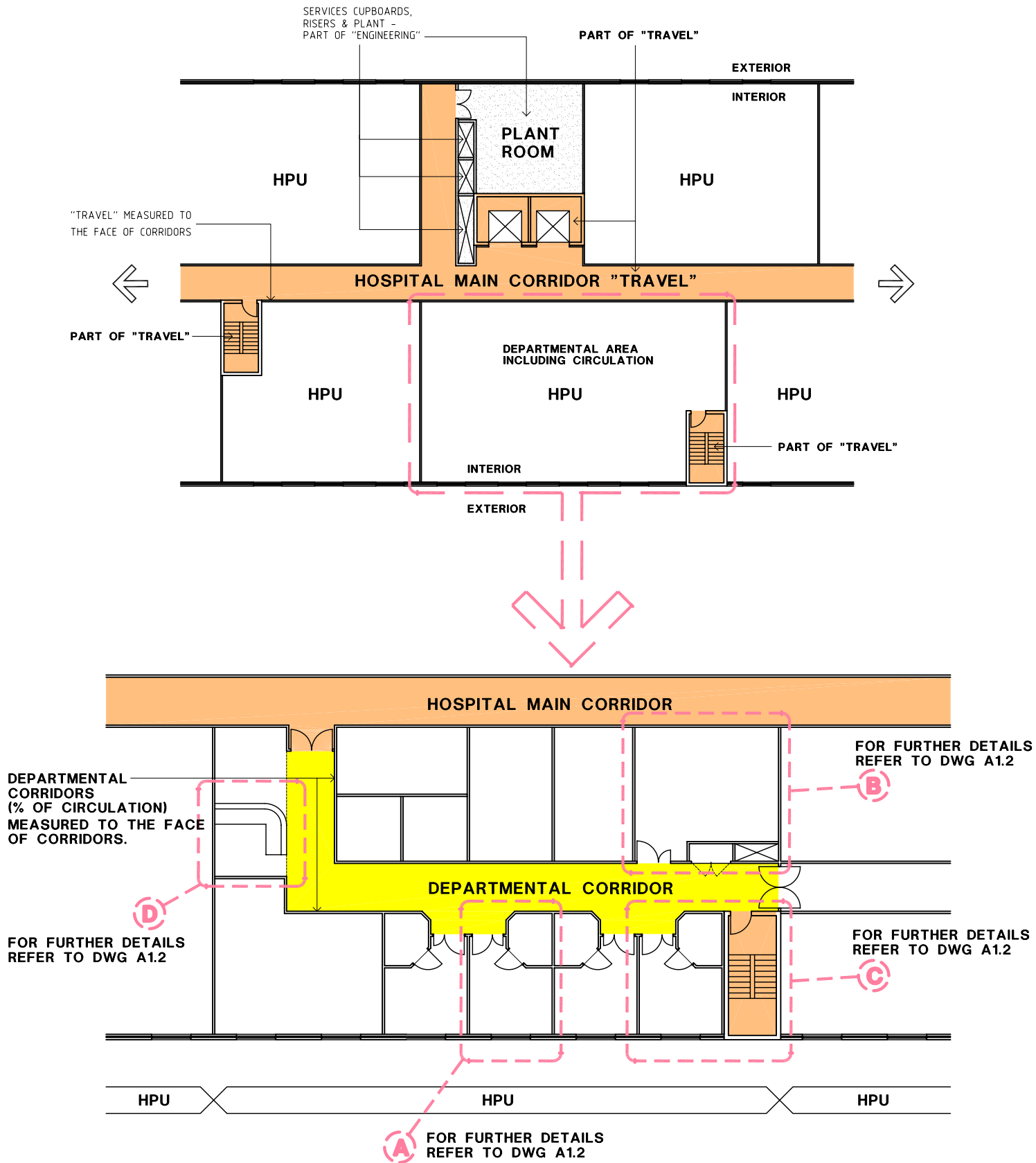
30.13.00 Refer to Enclosures - Area Measurement Diagrams A1.1 and A1.2 for a visual representation of these area measurements.

Legend of Colours for Diagrams

30.14.00 Refer to the attached Enclosures for the Legend of Colours used in the Functional Relationships Diagrams.

DGHDP STANDARD COMPONENTS

Room Layout Sheet



Rev	Revision Description	Date	Rev	Revision Description	Date	Rev	Revision Description	Date
1	FIRST ISSUE	22.10.04						
						Drawn	Checked	Date
						CC	DB	22.10.04
						CAD File		NTS
						Area Measurement		Drawing No.
								A1.1
						Scale		Sheet
						1 of 2		1

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Design guidelines for hospitals and day procedure centres

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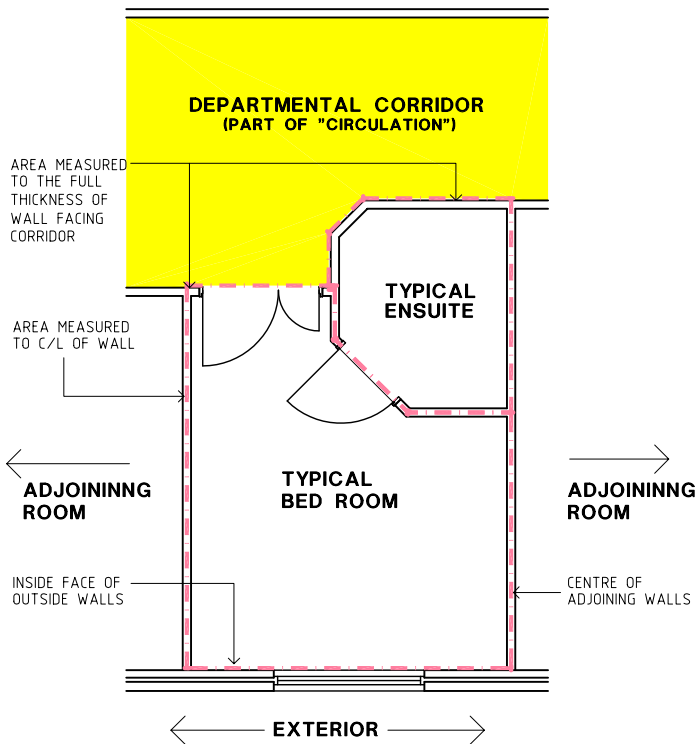
Drawn	Checked	Date	Scale	Sheet
CC	DB	22.10.04	NTS	1 of 2
CAD File		Drawing No.		Issue
Area Measurement		A1.1		1

DGHDP STANDARD COMPONENTS

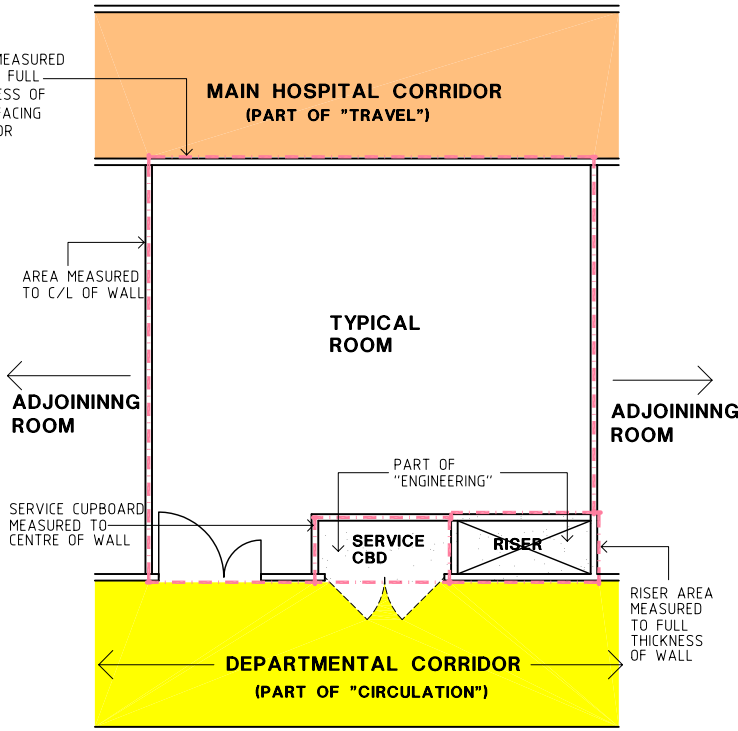
Room Layout Sheet

Room Name **Area Measurement Diagrams**

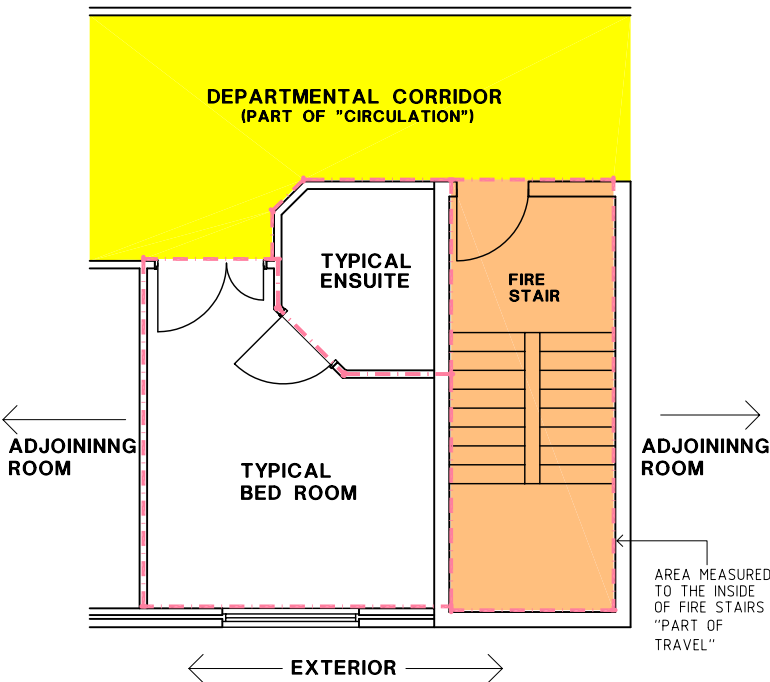
ID No **A1.2**



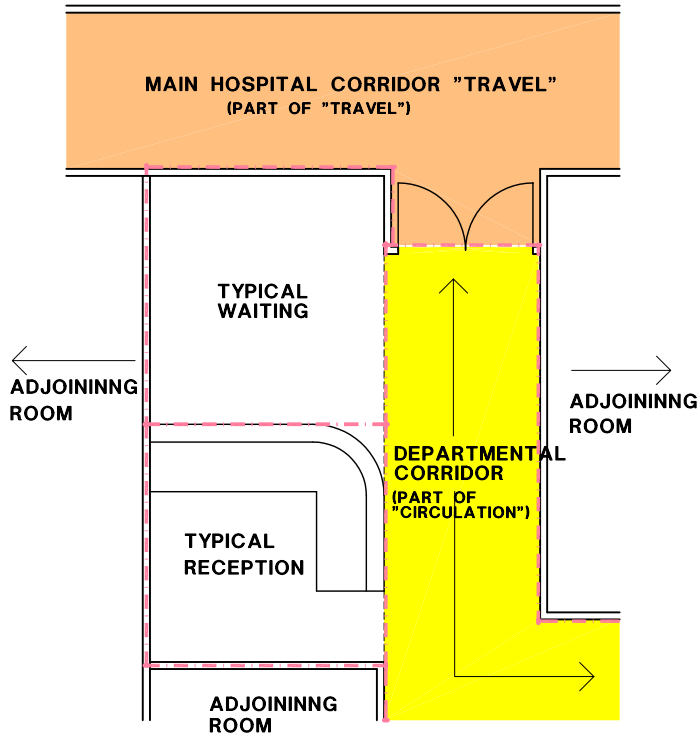
A. PART PLAN






B. PART PLAN















C. PART PLAN



D. PART PLAN

Rev	Revision Description	Date	Rev	Revision Description	Date	Rev	Revision Description	Date
1	FIRST ISSUE	22.10.04						
 HEALTH PROJECTS INTERNATIONAL (c) Ground Floor, Suite 1, 68 Alfred Street, Milsons Point NSW 2061 Ph: (02)9460 4199 www.hpi.net.au ACN: 066 856 595			 The Department of Human Services, Victoria Design guidelines for hospitals and day procedure centres			 Drawn CC Checked DB Date 22.10.04 Scale NTS Sheet 2 of 2 CAD File Drawing No. Area Measurement A1.2 Issue 1		

LEGEND OF COLOURS FOR FUNCTIONAL RELATIONSHIPS DIAGRAMS

	Administration
	Circulation
	Dedicated Lifts
	Education
	General Lifts
	Inpatient Beds
	Outpatient Services
	Plant Rooms
	Procedural
	Research
	Stairs
	Support Services

Interpretation of these Guidelines

- 40 .1.00 These guidelines define the minimum requirements for hospitals and day procedure centres. Variation from these requirements requires approval from the Department of Human Services.

Private Health Care Facilities

- 40 .2.00 The Department and its officers will administer these requirements on the basis that they are guidelines. This will be taken into account in determining applications related to the registration and construction of Private Hospitals and Day Procedure Units.

If at any time subsequent to the registration and construction of Private Health Care Facilities, an inspection is required or organised by the Department, continued compliance with these guidelines will be expected.

- 40 .3.00 It is emphasised that compliance with these Guidelines is only one element of the Private Hospital registration process. Conformity with other service planning criteria and relevant regulations is essential. It is assumed that other facets of the overall service planning process have already been finalised or are proceeding concurrently. In particular, the need for any proposed facility will have already been established and agreed, as will the size and range of services to be provided.

Inspections

- 40 .4.00 No patients shall occupy uninspected unapproved facilities
- 40 .5.00 The proprietor shall give notice in writing to the Department a minimum of ten working days before the anticipated completion date so that the premises can be inspected prior to occupancy.
- 40 .6.00 The building shall be deemed acceptable for final building and nursing inspections when it has been completed according to approved plans and specifications, is connected to all services, and has been issued a Certificate of Occupancy by the Local Government Authority. The site shall be cleared of all rubbish and building equipment. Fittings and furnishings shall be in place and operational at this time, for registration under the Health Service Act, 1988.

Public Health Care Facilities

- 40 .7.00 These Guidelines are the minimum requirement for the briefing, planning and construction of Public Hospitals.

The Department of Human Services will administer compliance with these guidelines through the brief development, conditions of employment for design consultants and contractors, as well as internal management policies.

Approval In Principle Process

- 40 .8.00 Private Hospitals and Day Procedure Centres must comply with these guidelines and go through an approval process. The steps involved in the approval process, related to compliance with these Guidelines are summarised below and shown in the attached Enclosure. Applicants should contact the DHS for queries and further requirements of the approval process.

Part A - Introduction and Instructions for Use

STEP 1

Proprietors and designers will have ready access to these Design Guidelines on the Web. Furthermore, a simple compliance checklist can be obtained from the DHS. Blank versions of the checklist are included in the Design Guidelines.

STEP 2

The design documents including plans are submitted to the DHS, together with a Schedule of Accommodation and a completed and signed compliance checklist.

DHS assess the application in accordance with the new Design Guidelines and issue an Approval In Principle (AIP) with or without conditions. The design documents submitted for this step must be equal to that required for a Building Permit by a registered building surveyor. The engineering documentation will require a compliance checklist signed and certified by qualified engineers.

The design documents are submitted to a Building Surveyor together with self-certification by the design engineers. The Surveyor will provide a Building Permit after ensuring that the design is in compliance with the AIP. Any changes, deviating from the AIP and/or the prescriptive portions of these Design Guidelines must be referred back to the DHS for a variation of the AIP.

STEP 3

Upon the completion of construction, the Surveyor inspects the building and provides an occupation certificate. This certificate is submitted to the DHS together with engineers' certificates. DHS organises an inspection of the building to ensure compliance with the AIP.

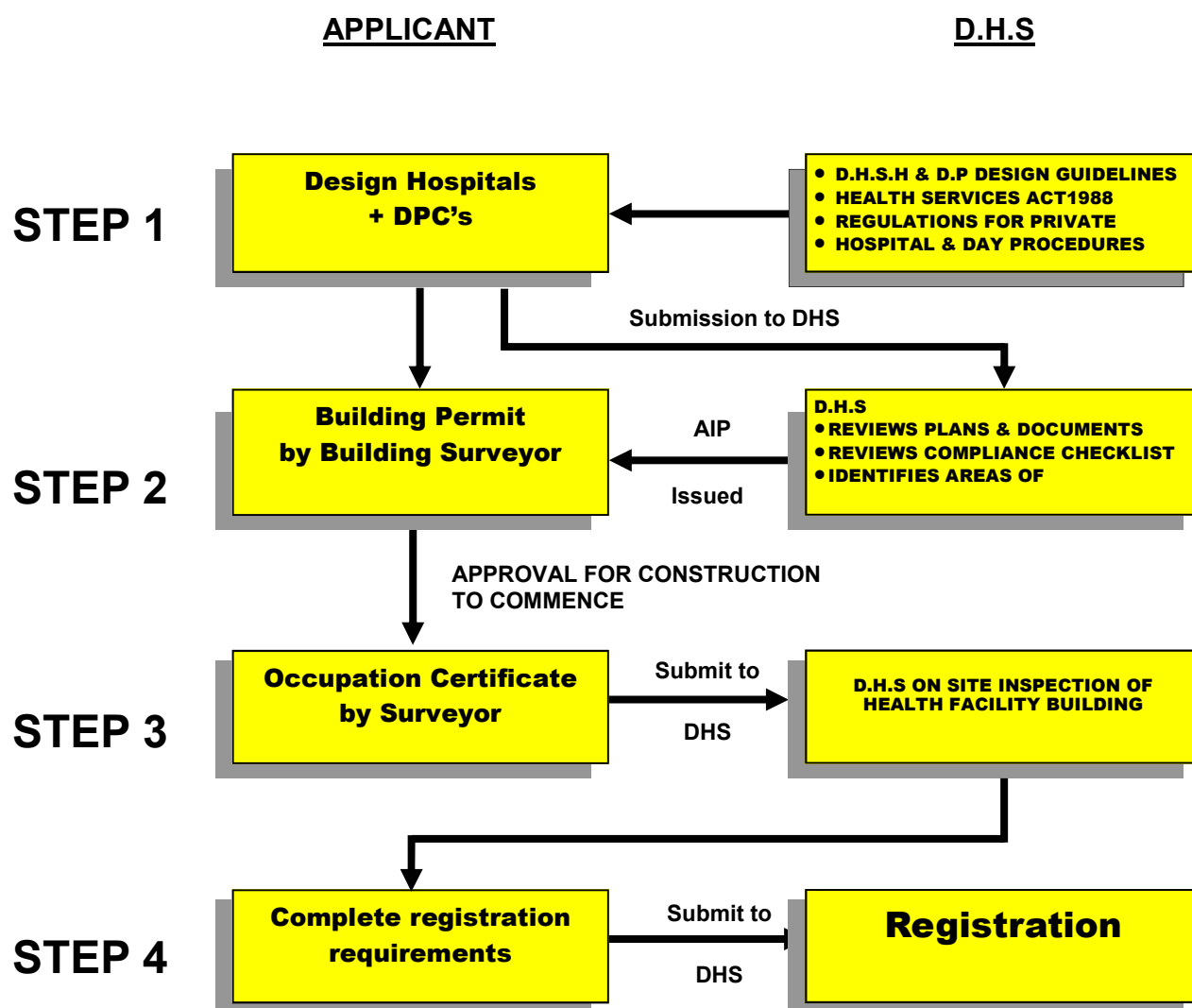
STEP 4

Subject to compliance with all DHS administrative requirements as well as the original AIP, the facility is registered or an existing registration is modified.

Engineering Services Approval

- 40.9.00 In the case of Private Hospitals and Day Procedure Units, the Consulting Engineer shall certify that the facility complies with the following:
- Part E of these guidelines
 - Documentation submitted for approval and/or registration
 - Approval in Principle
 - Any conditions imposed on the approval
 - Other statutory codes and guidelines including the BCA

APPROVAL IN PRINCIPLE & REGISTRATION PROCESS



45 ROLE DELINEATION AND LEVELS OF SERVICE

Definition

45 .1.00 Role Delineation refers to a level of service that describes the complexity of the clinical activities undertaken by that service. Each level of service has associated minimum standards, support services and staffing profiles considered appropriate.

45 .2.00 The Levels of Service referred to in Schedules of Accommodation in these Guidelines are based on the NSW Health model 'Guide to the Role Delineation of Health Services' which is widely used around Australia.

The NSW Health model 'Guide to the Role Delineation of Health Services' has not been reproduced in these Guidelines, but can be obtained separately.

45 .3.00 Levels of Service range from 0 to 6 for each major clinical activity or support service associated with health facilities with Level 0 referring to the lowest complexity service and Level 6 describing the most complex.

Not all services which are provided by health care facilities are described in the Role Delineation Guide - only the core services for hospitals and community health facilities. Those services not identified will generally follow the Role Delineation of the particular hospital or facility they are applicable to.

A hospital or health care facility is considered as a particular level when the majority of clinical and support services provided are of that particular level.

It is possible to determine the role delineation level of a particular hospital component or the entire hospital between two defined levels, eg between levels 4 & 5. This usually applies to existing facilities which may have minor deficiencies in certain areas compared with the full definition of a role delineation level.

Application

45 .4.00 The Role Delineation and Levels of Service are applicable to all hospitals and health services. They may be used in a consistent manner to describe the size, service profile and roles of the institutions in the region and to develop functional and strategic plans.

45 .5.00 Based on the Role Delineation Levels, each service identified may be planned and developed at the level necessary to meet the needs of the catchment population for that service.

As a logical consequence of the definition of the level of service, accommodation requirements of one level may vary from another level. The generic schedules of accommodation included in these Guidelines make this distinction clear.

As part of the AIP process, applicants for Private Hospitals and Day Procedure Centres will be required to declare the level of service the facility is designed for.

50 ABBREVIATIONS

General

- 50.1.00 Throughout these Guidelines and in Health Facility Design in general, certain definitions and abbreviations are commonly used. In order to standardise the definitions and guide new designers, some of these abbreviations are listed here. This is not a comprehensive list.
- 50.2.00
- ADL - Activities of Daily Living
 - ADMIN - Administration
 - AFFL - Above Finished Floor Level
 - AIP - Approval in Principle
 - ANAES - Anaesthetic Induction Room
 - BCA - Building Code of Australia
 - CCTV - Closed circuit television
 - CCU - Cardiac / Coronary Care Unit
 - CLEAN - Cleaner's Room
 - CLN - Clean-Up Room (as in Operating Unit)
 - CSSU - Central Sterile Supply Unit
 - CT - Computerised Tomography
 - CU - Clean Utility
 - DDA - Disability Discrimination Act
 - DHS - Department of Human Services
 - DIN - Dining
 - DU - Dirty Utility
 - ECG - Electrocardiograph
 - ECT - Electro-convulsive Therapy/ Treatment
 - ED - Emergency Department
 - END - Endoscopy
 - ENG - Engineering and Maintenance
 - ENS - Ensuite
 - ENT - Ear, Nose & Throat
 - EPA - Environmental Protection Authority
 - EQUIP - Equipment Room or Bay
 - ESD - Environmentally Sustainable Design
 - GEN - General as in GEN X-RAY
 - GP - General Practitioner
 - GPO - Socket Outlet formerly known as General Power Outlet
 - H - Height
 - HDU - High Dependency Unit
 - HEPA - High Efficiency Particulate Air
 - HOLD - Holding Room or Bed Bay
 - HPU - Hospital Planning Unit
 - HVAC - Heating, Ventilation and Air-Conditioning
 - ICU - Intensive care Unit
 - IV - Intravenous
 - KG - Kilogram
 - KIT - Kitchen or Catering
 - LDR - Labour Delivery, Recovery - Birthing Room
 - LIN - Linen Room or Bay
 - M - Metres
 - M2 - Square Metres
 - MAMO - Mammography
 - MEPA - Medium Efficiency Particulate Air
 - MED - Medical
 - mm - Millimetres
 - MRI - Magnetic Resonance Imaging
 - NICU - Neonatal ICU
 - OH&S - Occupational Health & Safety

Part A - Introduction and Instructions for Use

OPT - Optional
OR - Operating Room
OT - Occupational Therapy
PABX - Private Automatic Box Exchange - (Switchboard)
PATH - Pathology
PHA - Pharmacy
Physio - Physiotherapy
QA - Quality Assurance
QTY - Quantity
RAD - Radiology
RCD - Residual Current Device
RPZ - Residual Pressure Limiting Valve
REC - Records
SCRUB - Scrub-up Room (in Operating Unit)
SES - State Emergency Service
SH - Shower
SURG - Surgical
TSSU - Theatre Sterile Supply Unit
ULT - Ultrasound
VDU - Video Display Unit
XRAY - X-ray Room

Part A - Introduction and Instructions for Use

COMPLIANCE CHECKLIST

No	Item	Yes	No
1.0	Terms of Reference:		
1.1	Have you understood the Terms of Reference and Objectives of these Guidelines?	<input type="checkbox"/>	<input type="checkbox"/>
2.0	How To Read		
2.1	Have you understood the structure of these Guidelines, how to read it and how to apply it correctly?	<input type="checkbox"/>	<input type="checkbox"/>
3.0	Administration		
3.1	Have you understood how these Guidelines will be administered in relation to your project?	<input type="checkbox"/>	<input type="checkbox"/>
4.0	Role Delineation		
4.2	Have you determined the Role Delineation level applicable to each one of the services in your project?	<input type="checkbox"/>	<input type="checkbox"/>

Checked and certified by:

Name: _____

Date: _____

Company: _____

Position: _____

Signature: _____



Part B – Health facility briefing and planning

Part B - Health Facility Briefing and Planning

60 SITE DEVELOPMENT

Planning

- 60 .1.00 The location and development of the site shall be in accordance with the requirements of the Local Authority Town Planning Scheme, or in the absence of a scheme be approved by the Local Council or Authority.

Environmental Impact

- 60 .2.00 The aesthetics and form of a hospital facility shall be sympathetic with its immediate environment, either built or natural; for example domestic scale and treatments where built in a residential area. The building should enhance the streetscape.
Note: This is not a mandatory requirement but is highly recommended.
- 60 .3.00 Consideration should also be given to the siting of a hospital facility to ensure that it is accepted as an asset by the majority of the community, and not thought of as an imposition and inconvenience on the neighbourhood.

Landscaping

- 60 .4.00 A suitable landscaping scheme shall be provided to ensure that the outdoor spaces are pleasant areas for patients to view from their beds and in which patients, visitors and staff may relax. The scheme should also ensure that the buildings blend into the surrounding environment, built or natural.
- 60 .5.00 Water conservation should be a consideration when designing layouts and selecting plants. Bore water (if available) for reticulation is recommended. The use of mains water for reticulation is restricted. The Water Supply Authority should be consulted for current regulations.

Site Grading

- 60 .6.00 The balance of a Hospital site not covered by buildings should be graded to facilitate safe movement of the public and staff. Where this is not possible, access should be restricted.

Public Utilities

- 60 .7.00 Impact on existing local service networks will be substantial. In establishing a hospital facility on any site, the requirements and regulations of authorities regulating water, electricity, gas, telephones, sewerage and any other responsible Statutory or Local Authority must be complied with.

Structural requirements

- 60 .8.00 If the site is low lying, on the side of a hill, or partly consists of rock, then structural engineering advice should be sought at an early stage to minimise future drainage or settlement problems.

70 CONSTRUCTION STANDARDS

Building Regulations

- 70 .1.00 Construction and design standards in new and refurbished projects shall comply with the requirements of the latest edition of the Building Code of Australia (BCA).

The requirements of these Guidelines may be in addition to or in excess of the BCA requirements. In such situations, the higher standard or further requirements of these Guidelines will be required.

Nothing in these Guidelines implies that compliance with a provision of the BCA is not required.

Both the BCA and these Guidelines refer to other codes and standards such as the Australian standard AS1428. When such standards are referenced by the BCA or these Guidelines, they also become a mandatory requirement.

- 70 .2.00 Under the Building Code of Australia, a hospital is regarded as class 9a building. Day Procedure Centres, depending on size and operation may be regarded as class 9a or class 5.

Therefore, the Department of Human Services requires that all Day Procedure Centres shall be constructed to a BCA building classification 9a.

- 70 .3.00 OTHER BUILDING REGULATIONS

Facilities covered by these Guidelines may also be covered by other building regulations covering areas such as:

- Local Government planning instruments
- State Government policies and directives
- Food Services regulations
- Federal Anti-discrimination Acts (such as the DDA)
- EPA or ESD regulations
- Import bans
- Occupational Health and Safety Acts

Compliance with these Guidelines does not imply compliance with any other regulations. Approval under the Health Services Act 1988 of a Hospital or Day Procedure Centre by the Department of Human Services does not imply that the facility has complied with other relevant regulations.

The Department of Human Services, through its approval and licensing processes will, in accordance with the Health Services Act 1988, require verification or proof of compliance with other relevant regulations.

- 70 .4.00 DISABILITY DISCRIMINATION ACT (DDA) - ADVISORY NOTE

This Federal Act has the potential to influence many aspects of the design and construction of health facilities covered by these Guidelines. This influence goes beyond the other disabled access standards such as AS1428 series.

Designers are strongly advised to review the DDA and proceed with caution. It is helpful to employ a disability specialist to recommend the best way of complying with the DDA requirements without causing conflicts with these and other Guidelines and codes.

- 70 .5.00 LEGISLATIVE REQUIREMENTS

70.5.00

These Guidelines include specified dimensions, areas, Room Data Sheets and Room Layout Sheets covering these Guidelines only. No undertaking is given or implied that these Guidelines or any of these attachments demonstrate compliance with other legislative or statutory requirements. It remains the responsibility of designers and users of these Guidelines to determine compliance with the full range of legislative and statutory requirements, independent of these Guidelines.

Building Materials

- 70.6.00 All building materials used in the construction of a Hospital shall be new and of a type suitable for use in the particular element of construction. Installation shall be to the manufacturers' recommendations, or as dictated by codes. The exceptions to this rule are renovated or restored historical elements, such as door units and leadlight glazing and elements suitable for reuse in a facility redevelopment, such as existing doors and windows.

Experimental materials or components are not acceptable for inclusion, although small sample areas for evaluation purposes are allowed. This clause does not prohibit the first time use in Victoria of new materials that comply with all the relevant codes and requirements of these guidelines.

Roof Construction

- 70.7.00 Low pitch metal decking should be avoided if possible. Where low pitch metal decking is necessary and unavoidable, the minimum recommended pitch is 3°, but 5° is preferred.
- 70.8.00 It is recommended that flashing on the high side of the major roof penetrations (mechanical) extends back to the ridgeline.
- 70.9.00 Box gutters are best avoided. The design of box gutters, if absolutely necessary, should be capable of handling the most extreme downpour. Overflow pops of substantial capacity are essential. Vortex breakers at the head of downpipes are also recommended. Box gutters should not pass over internal spaces, but where there is no option, special arrangements should be made for water leakage protection. Box gutters should never pass over areas such as main electrical switchboards, operating rooms, critical care areas, lift machine rooms and shafts.
- 70.10.00 Consideration should be given to box gutter expansion joints, for example, the maximum spacing recommended are:
- P.G.I./Zincalume 18 m
 - S.S./Aluminium 12 m
 - Copper/Zinc 7 m
- 70.11.00 Box gutters, where wide enough, should also be made trafficable.
Note: In this context, wide means equal or more than 450 mm.
- 70.12.00 Adequate access to all plant must be provided in accordance with relevant Occupational Health and Safety Regulations/ Standards. Where access is required to a roof, consideration must be given to appropriate methods of preventing falls, i.e. the provision of handrails or permanent anchorage points for individual fall arrest systems and safety harnesses.

This requirement also applies to trafficable box gutters.

80 GENERAL REQUIREMENTS

Planning

80 .1.00 The planning of Hospitals and Day Procedure Centres requires general knowledge of the appropriate relationships between the various components. Certain components (also referred to as Hospital Planning Units or HPUs) need to be adjacent or close to other components. Most components must be accessible independently without having to go through other components. In short, the planning of a Health Facility requires a certain logic which is derived from the way the facility functions.

80 .2.00 Good planning relationships:

- Increase the efficiency of operation
- Promote good practice and safe health care delivery
- Minimise recurrent costs
- Improve privacy, dignity and comfort
- Minimise travel distances
- Support a variety of good operational policy models
- Allow for growth and change over time.

Inappropriate planning relationships:

- Result in duplication and inefficiency
- May result in unsafe practices
- Increase running costs
- May result in reduced privacy, dignity and comfort
- Increases travel distance or force un-necessary travel
- Result in lack of flexibility to respond to future growth and change
- May limit the range of operational possibilities.

Planning Models

80 .3.00 Planning of a complex Hospital of Day Procedure Centre depends on commonly recognised "good relationships" as well as site constraints and conformity with various codes and guidelines.

In theory it is possible to go back to the basics every time. In practice, however, designers soon discover that this is an inefficient way of arriving at appropriate planning solutions.

Just as in other buildings types eg Hotels and Shopping Centres, Hospitals and Day Procedure Centres have overtime evolved around a number of workable Planning Models. These can be seen as templates, modules, prototypes or patterns for the design of new facilities. Typically each model will best suit a certain facility size and site condition.

80 .4.00 These Guidelines include a number of flow diagrams which represent Planning Models for various Hospital Planning Units (HPUs). The diagrams are included in the enclosures.

The flow diagrams are referred to in the appropriate sections of these Guidelines. They may cover not only internal planning of HPUs, but also relationships between HPUs. Designers may use these diagrams to set out the various components and then manipulate them into the appropriate shapes to suit the site constraints.

80 .5.00 Designers are encouraged to see the overall design as a model. A good Health Facility Plan is usually reducible to a flow diagram. If the diagram has clarity, simplicity and logic, as demonstrated in the enclosures to these Guidelines, it probably has good potential for development.

If on the other hand the model is too hard to reduce to a simple, clear and logical flow diagram, it should be critically examined.

It is not sufficient to satisfy immediate or on-off relationships. Similarly, it may not be sufficient to satisfy only a limited, odd or temporary operational policy. It is more important to incorporate planning relationships that can satisfy multiple operational policies due to their inherent simplicity and logic.

Some of the typical planning policies which may be adopted to achieve these goals are covered under Planning Policies in these Guidelines.

Masterplanning

80 .6.00 MASTERPLAN

In the health care industry, Masterplan has different meanings in different contexts. The most common use of the term Masterplan refers to words, diagrams and drawings describing the "global arrangement of activities" in a health facility with particular emphasis on land use, indicating growth and change over time.

Under the above definition, a Masterplan is a fundamental planning tool to identify options for the current needs as well as projected future needs. Its purpose is to guide decision making for clients and designers,

Health facility owners and designers are encouraged to prepare a Masterplan before any detailed design. A Masterplan can be prepared in parallel with detailed briefing, so that valuable feedback can be obtained regarding real-world opportunities and constraints. Ideally, a successful Masterplan will avoid wrong long term strategic decisions, minimise abortive work, prevent future bottlenecks and minimise expectations that can not be met in the given circumstances.

A Masterplan diagram or drawings is typically a simplified plan showing the following:

- The overall site or section of site relating to the development
- Departmental boundaries for each level related to the development
- Major entry and exit points to the site and the relevant departments
- Vertical transport including stairs and lifts
- Main inter-departmental corridors (arterial corridors)
- Location of critical activity zones within departments but without full detail
- Likely future site development
- Areas (if any) set aside for future growth and change
- Arrows and notes indicating major paths of travel for vehicles, pedestrians, goods and beds
- Services masterplan showing the engineering impact, plant locations, availability of services and future demand.

Refer also to Department of Human Services Capital Management Guidelines.

80 .7.00 Masterplan diagrams and drawings should be prepared for all logical options (typically 3) to an equal level of resolution and presentation so that each option reaches its maximum potential. Only then a decision maker is in a position to compare options on equal terms. The above diagrams and drawings are typically accompanied by a report covering the following headings as a minimum:

- Project description
- Outline brief
- Opportunities and constraints

Part B - Health Facility Briefing and Planning

- Options considered
- Evaluation criteria
- Evaluation of the options including cost impact (if any)
- Recommended option
- Executive summary and recommendation

- 80 . 8.00 Depending on the nature of the project, the exact deliverables for a Masterplan can be fine tuned. The most typical additional deliverables are listed so that clients may refer to them by name and by reference to these Guidelines.

Stacking Plans- This is typically used for locating departments in major multi-storey developments where the shell is already well defined

Master Concept plan - This is typically used as a further development of the preferred masterplan option so that the design implications can be further tested and costed

Staging Plan - A staging plan shows a complete Masterplan defined for each stage of the development rather than simply a zone allocation for future works

Strategic Plan - A Strategic Plan refers to higher level "what if" studies, providing a range of development scenarios. These may include the use of alternate sites, private-public collocation, purchase vs lease, alternate operational policies etc.

Planning Policies

- 80 . 9.00 Planning Policies refer to a collection of non-mandatory guidelines that may be adopted by Health Facility designers or owners. These policies generally promote good planning, efficiency and flexibility.

The planning policies are included in these Guidelines so that in the process of briefing, designers or clients can simply refer to them by name or require compliance from others.

- 80 . 10.00 LOOSE FIT

Loose Fit is the opposite of Tight Fit. This policy refers to a type of plan which is not so tightly configured around only one operational policy that it is incapable of adapting to another.

In Health Care, operational policies change frequently. The average cycle seems to be around 5 years. It may be a result of management change, Government policy change, turn-over of key staff or change in the market place. On the other hand, major health facilities are typically designed for 30 years but tend to last more than 50 years.

This immediately presents a conflict. If, for example, a major hospital is designed very tightly around the operational policies of the day or the opinion of a few individuals (who may leave at any time), then a significant investment may be at risk of early obsolescence.

The Loose Fit Planning Policy refers to planning models which can not only adequately respond to today's operational policy but have the inherent flexibility to adapt to a range of alternative, proven and forward looking policies.

At the Macro Level, many of the commonly adopted Hospital Planning Models, including those in the enclosures to these Guidelines, have proved flexible in dealing with multiple operational policies.

Part B - Health Facility Briefing and Planning

At the micro level, designers should consider simple, well proportioned, rectangular rooms with good access to simple circulation networks that are uncomplicated by a desire to create interest. Interior features should not be achieved by creating unnecessary complexity.

80.11.00 CHANGE BY MANAGEMENT

This concept refers to plans which allow for changes in operating mode as a function of management rather than physical building change. For example, two Inpatient Units can be designed back to back so that a range of rooms can be shared. The shared section may be capable of isolation from one or the other Inpatient Unit by a set of doors. This type of sharing is commonly referred to as Swing Beds. It represents a change to the size of one Inpatient Unit without any need to expand the unit or make any physical changes.

The same concept can be applied to a range of planning models to achieve greater flexibility for the management. Also see other planning policies in this section.

80.12.00 OVERFLOW DESIGN

Some functions can be designed to serve as overflow for other areas that are subject to fluctuating demand. For example, a waiting area for an Emergency Unit may be designed so that it can overflow into the hospital main entrance waiting area.

An Emergency Unit Procedure Room or a Birthing Room may be designed specifically to provide an emergency operating room for caesarean sections in case the standard allocated operating room is not available.

Any area that includes bed bays such as an Emergency Unit may be designed to absorb the available open space and provide room for additional beds in case of natural disasters.

80.13.00 PROGRESSIVE SHUTDOWN

Even large facilities may be subject to fluctuating demand. It is desirable to implement a Progressive Shutdown policy to close off certain sections when they are not in use. This allows for savings in energy, maintenance and staff costs. It also concentrates the staff around patients and improves communication security. In designing for progressive shutdown, designers must ensure:

- None of the requirements of these Guidelines are compromised in the remaining open sections
- The open sections comply with other statutory requirements such as fire egress
- The open patient care sections maintain the level of observation required by these guidelines
- In the closed sections, lights and air-conditioning can be shut off independently of other areas
- The closed sections are not required as a thoroughfare for access to other functions
- Nurse Call and other communication systems can adapt to the shut-down mode appropriately
- The shut-down strategy allows access to items requiring routine maintenance.

80.14.00 OPEN ENDED PLANNING

A hospital facility designed within a 'finite' shape, where various departments

Part B - Health Facility Briefing and Planning

and functions are located with correct internal relationships, may look and function very well at first; however, any expansion will be difficult. Some expansion requirements can be accommodated in new external buildings with covered links; but over time the site will become complicated with random buildings and long walkways.

The opposite of this scenario is to use planning models and Architectural shapes that have the capability to grow, change and develop additional wings (horizontally or vertically) in a controlled way. Here are some of the concepts involved in Open Ended Planning Policies:

- Major corridors should be located so that they can be extended outside the building.
- As far as possible, HPUs should have one side exposed to the outside to permit possible expansion.
- If a critical HPU must be internal, it should be adjacent to other areas that can be relocated, such as large stores or administration areas.
- External shapes, should not be finite.
- External shapes should be capable of expansion.
- Finite shapes may be reserved for one-off feature elements such as a Main Entrance Foyer.
- Roof design should consider expansion in a variety of directions.
- Avoid HPUs that are totally land-locked between major corridors.
- Stairs should not be designed to block the end of major corridors.
- The overall facility flow diagram should be capable of linear or radial expansion whilst keeping all the desirable relationships intact.
- Fixed internal services such as plant rooms, risers, service cupboards should be placed along major corridors rather than in the centre of HPUs.

Open Ended Planning Policies can be applied to entire facilities as well as individual HPUs.

Note: Also refer to Enclosure-B21 for an example of a Hospital Flow Diagram which promotes open ended planning.

80.15.00 MODULAR DESIGN

This is the concept of designing a facility by combining perfectly designed standard components. For example a designer may create a range of Patient Bedrooms, a range of utility rooms and other common rooms that are based on a regular grid such as 600mm. These rooms can then be combined to create larger planning units such as an Inpatient Unit. The Inpatient Unit can then be used as a module and repeated a number of times as required.

This approach, in the hands of a skilled designer has many benefits. Modules can be designed only once, to work very well. No redesign is necessary to adjust to different planning configurations. Instead the plan is assembled to adapt to the modules. Errors in both design and construction can therefore be minimised.

The opposite to this approach is to start from a different Architectural shape for each HPU, divide it into various shapes for the rooms, then design the interior of each room independently. This approach, in the hands of a skilled designer can also result in satisfactory solutions, but at a higher risk of errors and at a greater cost. For example, in a typical hospital, one might find 10 Dirty Utility Rooms which are entirely different.

Modular Design should not necessarily be seen as a limitation to the designer's creativity, but a tool to achieve better results. Designers are encouraged to consult with clients and user groups to agree on perfect modules, then adopt them across all HPUs.

Planning Policies

80.16.00 UNIVERSAL DESIGN

This concept is similar to Modular Design. Universal Design refers to Modules (or standard components) designed to perform multiple functions by management choice.

For example, a typical patient single bedroom can be designed to suit a variety of disciplines including Medical/ Surgical/ Maternity and Orthopaedics. Such a room can be standardised across all compatible Inpatient Units. This will permit a change of use between departments if the need arises. Such Universal Design must take into account the requirements of all compatible uses and allow for all of them. The opposite of this policy is to "specialise" the design of each component to the point of inflexibility.

Other examples of Universal Design are as follows:

- Universal Operating Rooms which suit a range of operations
- Bed cubicles in Day Surgery which suit both Pre-op and Post-op
- Offices which are standardised into only a limited number of types for example 9 m2 and 12 m2
- Toilets may all be designed for disabled access or as unisex.

The main point of Universal Design is to resist unnecessary variation in similar components, where the change in functionality can be accommodated in one standard design.

80.17.00 SINGLE HANDING

It is common design practice to design identical and adjoining planning modules in mirror image. This is most common in the assembly of Patient Bedrooms with Ensuites. It is commonly believed that this is also more economical.

The concept of Single Handing is the exact opposite. Single Handing refers to situations where mirror image (Handing) may not be necessary.

In areas requiring a high level of staff training, such as in operating suites, it may be more appropriate to "hand" all key rooms in identical manner. This makes the task of staff training easier and may also reduce the possibility of mistakes.

In a hypothetical example, a staff member entering any operating room, regardless of its location and approach from corridor will find the service panel on the left, X-ray viewer on the right and the door to the Sterile Stock Room in the front.

In another example, at micro level, medical gases may always be located to the left side of patients bedhead regardless of the direction of approach.

Note: Single Handing is a matter of individual choice and may not suit all conditions.

Natural Disaster

- 80.18.00 All hospital facilities should be capable of continued operation during and after a natural disaster, except in instances where a facility sustains primary impact. This means that special design consideration is needed to protect essential services such as emergency power generation, heating systems, water (if applicable), etc. Typical problems such as disruption to public utilities such as water or sewer mains and energy supplies, may affect the operation of onsite services.

Part B - Health Facility Briefing and Planning

Appropriate construction detailing and structural provision shall be made to protect occupants and to ensure continuity of essential services in areas where there is a history of earthquakes, cyclones, flooding, bushfires or other natural disasters.

- 80 .19.00 Consideration shall be given to possible flood effects when selecting and developing a site. Where possible, facilities shall NOT be located on designated flood plains. Where this is unavoidable, take extra care when selecting structural and construction methodology, and incorporate protective measures against flooding into the design.

- 80 .20.00 Facilities shall be designed and constructed to withstand the force assumptions of AS1170 Part 4 - Minimum design loads on structures - Earthquake loads.

In cyclonic areas, special attention shall be given, not only to protection against the effects of the direct force of wind (structural detailing, special cladding fixings, cyclonic glazing etc.), but also against such things as wind generated projectiles (trees, cladding, fencing etc.) and localised flooding.

- 80 .21.00 Facilities shall be designed and constructed to conform with AS3959 - Construction of buildings in bushfire prone areas.

Protection against bushfires shall be addressed in site selection, creation of firebreaks, fire resistant construction, sufficient water supply and building sprinkler systems (external).

- 80 .22.00 In all cases, effective long range communications systems, which do not rely on ground lines to function, are essential.

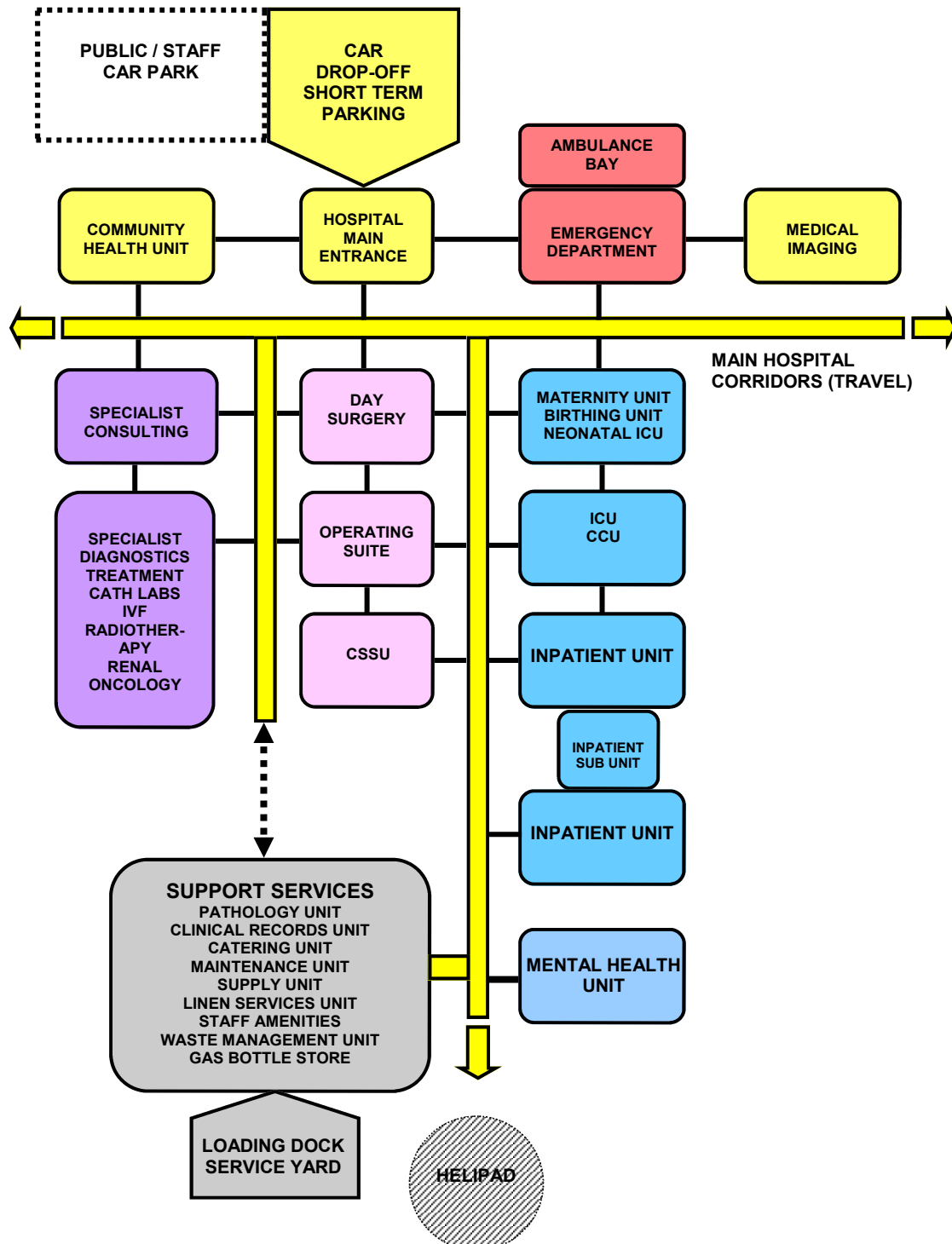
Consultation with the State Emergency Service is recommended to ensure arrangements are in place for emergency long range communications assistance in the event of emergency situations or a major disaster.

Functional Relationships Diagram/s

- 80 .23.00 Refer to attached Enclosures for the Functional Relationships Diagram for a typical Hospital.

FUNCTIONAL RELATIONSHIPS DIAGRAM - TYPICAL HOSPITAL

NOTE: ALL FACILITIES MAY NOT BE PRESENT IN EVERY HOSPITAL



Part B - Health Facility Briefing and Planning

90 STANDARD COMPONENTS

INDEX

General

- 90.1.01 This section describes a range of standard rooms that fulfil the same or similar purpose across many Health Planning Units. Key planning considerations only are addressed for each. For further detail with respect to fittings, equipment and services, refer to the Room Data Sheets and Room Layout Sheets attached to these Guidelines

Floor areas given are recommended spaces and increases or decreases must be justified.

Refer to Part B Construction Standards - Legislative Requirements for the relationship between requirements of these Guidelines and other legislative or statutory requirements.

Rooms List

90.1.02

ROOM NAME	Area M2 minimum	Room Data Sheet Code	Room Layout Sheet Dwg No
1 BED ROOM (INBOARD ENSUITE)	15	1BR-A	1BR-A
1 BED ROOM (OUTBOARD ENSUITE)	15	1BR-A	1BR-B
1 BED ROOM (SHARED ENSUITE)	15	1BR-A	1BR-D
1 BED ROOM - CRITICAL CARE	22	1BR-CC	1BR-CC
1 BED BAY - CRITICAL CARE	20	1BB-CC	1BB-CC
1 BED ROOM - ISOLATION (STANDARD)	15	1BRI-S	1BRI-S
1 BED ROOM - ISOLATION (POSITIVE PRESSURE)	15	1BRI-S	1BRI-P
1 BED ROOM - ISOLATION (NEGATIVE PRESSURE)	15	1BRI-S	1BRI-N
1 BED ROOM - MENTAL HEALTH (BACK TO BACK ENSUITES)	15	1BR-C	1BR-C
1 BED ROOM - MENTAL HEALTH (SHARED ENSUITES)	15	1BR-C	1BR-E
1 BED ROOM - MENTAL HEALTH (INBOARD ENSUITE)	15	1BR-C	1BR-F
1 BED ROOM - SPECIAL	18	1BR-S	1BR-S
1 BED ROOM - SPECIAL CCU	18	1BRS-CCU	1BRS-CCU
2 BED ROOM (INBOARD ENSUITE)	25	2BR-A	2BR-A
2 BED ROOM (OUTBOARD ENSUITE)	25	2BR-A	2BR-B
2 BED ROOM (SHARED ENSUITE)	25	2BR-A	2BR-D

Part B - Health Facility Briefing and Planning

2 BED ROOM - MENTAL HEALTH (BACK TO BACK ENSUITE)	25	2BR-C	2BR-C
2 BED ROOM - MENTAL HEALTH (INBOARD ENSUITE)	25	2BR-C	2BR-E
4 BED ROM (INBOARD ENSUITE)	42	4BR-A	4BR-A
4 BED ROM (OUTBOARD ENSUITE)	42	4BR-A	BR-B
4 BED ROM (IN/OUTBOARD ENSUITE)	42	4BR-A	BR-C
ADL BATHROOM	10	ADLB	ADLB
ADL KITCHEN	12	ADLK	ADLK
ADL LAUNDRY	8	ADLL	ADLL
ANAESTHETIC INDUCTION ROOM	15	ANIN	ANIN
ANTEROOM	8	ANRM	ANRM
BATHROOM	10, 12	BATH	BATH
BAY - BEVERAGE	3	BBEV	BBEV
BAY - FLOWERS	2	BFLW	BFLW
BAY - HANDWASHING	1	BHWS	BHWS
BAY - LINEN	2	BLIN	BLIN
BAY - MOBILE EQUIPMENT	4	BMEQ	BMEQ
BAY - PERSONAL PROTECTIVE EQUIPMENT	2	BPPE	BPPE
BAY - RESUSCITATION TROLLEY	2	BREST	BREST
BIRTHING ROOM - LDR	28	BIRM	BIRM
CATHETER LABORATORY	38	CLAB	CLAB
CATHETER LABORATORY CONTROL- REPORTING ROOM	10	CORT	CORT
CHANGE CUBICLE - PATIENT	2	CHPT	CHPT
CHANGE - STAFF	8	CHST	CHST
CLEANER'S ROOM	4	CLRM	CLRM
CLEAN-UP ROOM	7	CLUP	CLUP
CLEAN UTILITY	12, 14	CLUR	CLUR
CLEAN UTILITY - SUB	8	CLUR-S	CLUR-S
CONSULT ROOM	12	CONS	CONS
DENTAL SURGERY	14	DSUR	DSUR
DIRTY UTILITY	10, 12, 14	DTUR	DTUR

Part B - Health Facility Briefing and Planning

DIRTY UTILITY - SUB	8	DTUR-S	DTUR-S
DISPOSAL ROOM	8	DISP	DISP
ENSUITE (INBOARD)	5	ENS-A	ENS-A
ENSUITE (INBOARD ALTERNATIVE)	5	ENS-A	ENS-F
ENSUITE (OUTBOARD)	5	ENS-A	ENS-B
ENSUITE (SHARED)	6	ENS-A	ENS-C
ENSUITE (SHARED ALTERNATIVE)	7	ENS-A	ENS-G
ENSUITE (SPECIAL)	7	ENS-A	ENS-D
ENSUITE - MENTAL HEALTH	5	ENS-E	ENS-E
ENSUITE - MENTAL HEALTH (OUTBOARD)	5	ENS-E	ENS-H
ENSUITE - MENTAL HEALTH (OUTBOARD FOR 2 BED)	5	ENS-E	ENS-I
ENSUITE - MENTAL HEALTH (OUTBOARD FOR 1 BED)	5	ENS-E	ENS-J
FORMULA ROOM	9	FORM	FORM
GYMNASIUM	45	GYAH	GYAH
INTERVIEW ROOM	9	INT	INT
INTERVIEW ROOM - FAMILY/ LARGE	12	INTF	INTF
LOUNGE - PATIENT	15	LNPT	LNPT
MEETING ROOM - SMALL	9, 12	MEET-S	MEET-S
MEETING ROOM - MEDIUM/ LARGE	15, 20, 25, 30	MEET-L	MEET-L
NEONATAL BAY - GENERAL CARE	5	NBGC	NBGC
NEONATAL BAY - INTENSIVE CARE	12	NBICU	NBICU
NEONATAL BAY - SPECIAL CARE	10	NBSC	NBSC
OFFICE - 2 PERSON SHARED	12	OFF-2P	OFF-2P
OFFICE - 3 PERSON SHARED	16	OFF-3P	OFF-3P
OFFICE - 4 PERSON SHARED	20	OFF-4P	OFF-4P
OFFICE - CEO	15	OFF-CEO	OFF-CEO
OFFICE - CLINICAL/ HANDOVER	12	OFF-CLN	OFF-CLN
OFFICE - CONSULT	12	OFF-CON	OFF-CON
OFFICE - SINGLE PERSON 9 M2	9	OFF-S9	OFF-S9
OFFICE - SINGLE PERSON 12 M2	12	OFF-S12	OFF-S12

Part B - Health Facility Briefing and Planning

OFFICE - WORKSTATION TYPICAL	6	OFF-WS	OFF-WS
OFFICE - WRITE-UP BAY	2	OFF-WI	OFF-WI
OPERATING ROOM - GENERAL	42	ORGN	ORGN
OPERATING ROOM - LARGE	50	ORLA	ORLA
OPERATING ROOM - MINOR	36	ORMS	ORMS
OVERNIGHT STAY - BEDROOM	10	OVBR	OVBR
OVERNIGHT STAY - ENSUITE	4	OVES	OVES
PANTRY	8	PTRY	PTRY
PATIENT BAY (HOLDING)	9	PBTR-H	PBTR-H
PATIENT BAY (TRAUMA)	12	PBTR-T	PBTR-T
PATIENT BAY (CRITICAL)	25	PBTR-C	PBTR-C
PLASTER ROOM	14	PLST	PLST
PROPERTY BAY - STAFF	6	PROP	PROP
RECEPTION	10 nominal	RECW	RECW
SCRUB-UP/ GOWNING	6	SCRB	SCRB
SECLUSION ROOM	14	SECL	SECL
SHOWER - PATIENT	4	SHPT	SHPT
SHOWER - STAFF	2	SHST	SHST
STAFF ROOM	15	SRM	SRM
STAFF STATION	14	SSTN	SSTN
STORE - CLEANER'S	12	STCL	STCL
STORE - EQUIPMENT	20 nominal	STEQ	STEQ
STORE - FILES	10	STFS	STFS
STORE - GENERAL	9	STGN	STGN
STORE - PHOTOCOPY/ STATIONERY	8	STPS	STPS
STORE - STERILE STOCK	10	STSS	STSS
TOILET - DISABLED	5	WCDS	WCDS
TOILET - PATIENT	4	WCPT	WCPT
TOILET - PUBLIC	3, 4	WCPU	WCPU
TOILET - STAFF	2	WCST	WCST

Part B - Health Facility Briefing and Planning

TREATMENT ROOM	15	TRMT	TRMT
ULTRA-ISOLATION AIRLOCKS	4	UIF-CU UIF-AL	UIF-CU UIF-AL
ULTRA-ISOLATION CLEAN UTILITY	11	UIF-CU	UIF-CU
ULTRA-ISOLATION DIRTY UTILITY	9	UIF-DU	UIF--DU
ULTRA-ISOLATION ENSUITE	6	UIF-ENS	UIF-ENS
ULTRA-ISOLATION PATIENT BED ROOM	25	UIF-BR	UIF-BR
ULTRA-ISOLATION STAFF CHANGE	5	UIF-SC	UIF-SC
WAITING	10	WAITG	WAITG
X-RAY VIEWING AND REPORTING	12	XRRR	XRRR

COMPONENTS OF THE UNIT

1 Bed Room

90.1.10 DESCRIPTION AND FUNCTION

A 1 Bed Room will accommodate one patient for the delivery of nursing and medical care and treatment.

A 1 Bed Room shall be a minimum of 15 m2.

90.1.20 LOCATION AND RELATIONSHIPS

Bedrooms should be located close to, and visible from a Staff Station.

Ensuites shall be dedicated to each room and directly accessible from the bedroom.

90.1.30 CONSIDERATIONS

External windows should be provided in accordance with BCA requirements.

Each Patient Bedroom shall include a clinical handwashing basin within the room.

For additional room considerations and details refer to Room Data Sheets.

1 Bed Room - Critical Care

90.2.10 DESCRIPTION AND FUNCTION

A 1 Bed Room for patients requiring critical care nursing and medical treatment.

A 1 Bed Room - Critical Care shall be a minimum of 22 m2.

90.2.20 LOCATION AND RELATIONSHIPS

The Critical Care Bedrooms should be visible from a Staff Station. Patient Showers and Patient Toilets may be shared.

90.2.30 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

90 .3.20

Bedside monitoring equipment should be located to permit easy access and viewing and should not interfere with the visualisation of, or access to the patient.

External windows should be provided in accordance with BCA requirements. Glazed walls and doors are recommended to maintain visual access to Staff Station.

For additional room considerations refer to Part B - Intensive Care - General, Room Data Sheets and Room Layout Sheets.

1 Bed Bay - Critical Care

90 .3.10 DESCRIPTION AND FUNCTION

A 1 Bed Bay for patients requiring critical care nursing and medical treatment.

A 1 Bed Bay Critical Care shall be a minimum of 20 m2.

90 .3.20 LOCATION AND RELATIONSHIPS

The Critical Care Bed Bays should be visible from a Staff Station. Patient Showers and Patient Toilets may be shared.

90 .3.30 CONSIDERATIONS

Bedside monitoring equipment should be located to permit easy access and viewing and should not interfere with the visualisation of, or access to the patient.

External windows should be provided in accordance with BCA requirements.

For additional room considerations refer to Part B - Intensive Care - General and Room Data Sheets.

1 Bed Room - Isolation

90 .4.10 DESCRIPTION AND FUNCTION

Isolation Rooms are used to isolate patients with known infectious conditions, or to protect patients from infection. They may be positive pressure or negative pressure but not both.

A 1 Bed Isolation Room must be a minimum of 15 m2.

90 .4.20 LOCATION AND RELATIONSHIPS

The Isolation Room requires direct access to an Ensuite, comprising shower, toilet and handbasin.

Where an Isolation Room is pressurised an Anteroom or Airlock will be required for pressure stabilisation. Refer to the DHS Isolation Guidelines.

90 .4.30 CONSIDERATIONS

Each Isolation Room shall include a clinical handwashing basin within the room.

All surfaces including the ceiling must be impervious and designed for easy cleaning.

Refer to Part D - Infection Control in these Guidelines for other aspects of

Part B - Health Facility Briefing and Planning

Isolation Rooms. For additional room considerations refer to Room Data Sheets and Room Layout Sheets.

1 Bed Room - Mental Health

90 .5.10 DESCRIPTION AND FUNCTION

A Single Bedroom for a general mental health patient.

A 1 Bed Room - Mental Health shall be a minimum of 15 m2.

90 .5.20 LOCATION AND RELATIONSHIPS

The 1 bed Room Mental Health shall have an adjoining Ensuite and be located with ready access to Lounge, Dining and patient activities area.

The Bedrooms should be observable from the Staff Station

90 .5.30 CONSIDERATIONS

An observation panel in the door or a window is required for discrete observation. There should be no blind spots in the room.

The room should be capable of locking for patient privacy and security.

Fittings, fixtures and furniture must meet the safety and security needs of both patients and staff.

For additional room considerations refer to Room Data Sheets and Room Layout Sheets.

1 Bed Room - Special

90 .6.10 DESCRIPTION AND FUNCTION

A 1 Bed Room - Special will accommodate one patient for the delivery of nursing and medical care and treatment. It will be a larger room to accommodate special needs patients, Sub-acute Care, Rehabilitation and High Dependency. The additional floor area allows for larger or additional furniture and equipment. It also permits overnight stay by relatives.

Natural light and outlook is essential. The room requires the ability to view out of the window from either chair or bed. Bedrooms for Palliative Care may also include a beverage making area with a small refrigerator.

A 1 Bed Room - Special shall be a minimum of 18 m2.

90 .6.20 LOCATION AND RELATIONSHIPS

Each 1 Bed Room - Special will have direct access to an Ensuite - Special.

90 .6.30 CONSIDERATIONS

Each Bed Room - Special shall include a clinical handwashing basin within the room.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets

1 Bed Room - Special Coronary Care

Part B - Health Facility Briefing and Planning

90 .7.10 DESCRIPTION AND FUNCTION

One Bed Room for patient requiring cardiac care treatment. Glazed doors and partition walls are recommended for patient visibility and privacy.

A 1 Bed Room - Special Coronary Care shall be a minimum of 18m².

90 .7.20 LOCATION AND RELATIONSHIPS

The Coronary Care Bed Rooms should be visible from a Staff Station. Each Coronary Care Room should have a dedicated Ensuite, directly accessible from the bedroom.

90 .7.30 CONSIDERATIONS

Each Bed Room - Special Coronary Care shall include a clinical handwashing basin within the room.

Provisions are required for patient monitoring which may be hard wired or telemetry.

Bedside monitoring equipment should be located to permit easy access and viewing, and should not interfere with the visualisation of or access to the patient.

For additional considerations and details refer to Room Data Sheets and Room Layout Sheets

2 Bed Room

90 .8.10 DESCRIPTION AND FUNCTION

A 2 Bed Room will accommodate two patients with similar nursing needs for delivery of nursing and medical care and treatments.

The room may also be used for obstetric care, either pre or post natal, and may include bassinets.

A 2 Bed Room shall be a minimum of 25 m² (not including an Ensuite).

90 .8.20 LOCATION AND RELATIONSHIPS

Bed Rooms should be located close to, and visible from, a Staff Station, and have natural light and outlook. Ensuities shall be directly accessible from the Bed Room, or from directly adjacent to the entry door.

90 .8.30 CONSIDERATIONS

Each 2 Bed Room shall include a clinical handwashing basin within the room.

For additional room considerations and room details refer to Room Data Sheets.

2 Bed Room - Mental Health

90 .9.10 DESCRIPTION AND FUNCTION

A two Bed Room for general mental health patients.

A 2 Bed Room - Mental Health shall be a minimum of 25 m².

2 Bed Room - Mental Health

90.9.20 LOCATION AND RELATIONSHIPS

The 2 Bed Room Mental Health shall have an adjoining Ensuite and be located with ready access to Lounge, Dining and patient activities area.

The Bedrooms should be observable from the Staff Station

90.9.30 CONSIDERATIONS

An observation panel in the door or a window is required for discrete observation. There should be no blind spots in the room.

The room should be capable of locking for patient privacy and security.

Fittings, fixtures and furniture must meet the safety and security needs of both patients and staff.

For additional room considerations refer to Room Data Sheets and Room Layout Sheets.

4 Bed Room

90.10.10 DESCRIPTION AND FUNCTION

A 4 Bed Room will accommodate four patients with similar nursing needs for the delivery of nursing and medical care and treatment

A 4 Bed Room shall be a minimum of 42 m2 (not including an Ensuite).

90.10.20 LOCATION AND RELATIONSHIPS

Bed Rooms should be located close to, and visible from, a Staff Station, and have natural light and outlook

Visual privacy from casual observation by other patients and visitors shall be provided for each patient. The design for privacy shall not restrict patient access to the room entrance, the patient toilet or shower.

90.10.30 CONSIDERATIONS

Each 4 Bed Room shall include a clinical handwashing basin within the room.

For additional room considerations and details refer to Room Data Sheets.

ADL Bathroom

90.11.10 DESCRIPTION AND FUNCTION

Domestic style Bathroom for patient Activities of Daily Living assessment and training.

The ADL Bathroom shall be a minimum of 10 m2.

90.11.20 LOCATION AND RELATIONSHIPS

The ADL Bathroom should have ready access to patient dining / lounge areas with direct access to the Unit corridor.

90.11.30 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

The shower must not have a raised hob or steps.

For additional room considerations and details refer to Room Data Sheets.

ADL Kitchen

90.12.10 DESCRIPTION AND FUNCTION

Domestic style kitchen for patient Activities of Daily Living assessment and training.

The ADL Kitchen shall be a minimum of 12 m².

90.12.20 LOCATION AND RELATIONSHIPS

The ADL Kitchen should have ready access to patient dining / lounge areas with direct access to the Unit corridor.

90.12.30 CONSIDERATIONS

Benches and cupboards should be wheelchair accessible.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

ADL Laundry

90.13.10 DESCRIPTION AND FUNCTION

Domestic style laundry for patient Activities of Daily Living assessment and training.

The ADL Laundry shall be eight m².

90.13.20 LOCATION AND RELATIONSHIPS

The ADL Laundry should have direct access to the Unit corridor with ready access to patient therapy and dining/ lounge areas.

90.13.30 CONSIDERATIONS

The ADL laundry and equipment should be wheelchair accessible.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Anaesthetic Induction

90.14.10 DESCRIPTION AND FUNCTION

The Anaesthetic Induction Room is for holding patients on mobile beds or trolleys prior to operative procedures at times when the Operating Room is not available. Local, regional or general anaesthesia may be administered in this area.

The Anaesthetic Induction Room shall be a minimum of 15 m².

90.14.20 LOCATION AND RELATIONSHIPS

The Anaesthetic Induction Room may be directly connected to the Operating/

Part B - Health Facility Briefing and Planning

Procedure Room.

The Anaesthetic Induction Room may be shared between two Operating / Procedures Rooms. It should be located enroute from the entrance of the Unit to the Operating Room.

90.14.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Anteroom

90.15.10 DESCRIPTION AND FUNCTION

Anterooms are required to ensure pressure stabilisation and for staff and visitors to change and dispose of personal protective gear used on entering or exit of an Isolation Room.

The Anteroom shall be a minimum of eight m².

90.15.20 LOCATION AND RELATIONSHIPS

The Anteroom must be located adjacent to an Isolation Room; staff must pass through the Anteroom to enter the Isolation Room. The Anteroom shall not be shared between Isolation Rooms.

90.15.30 CONSIDERATIONS

For additional information refer to Part D - Infection Control.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Bathroom

90.16.10 DESCRIPTION AND FUNCTION

The Bathroom provides for assisted bathing of patients, patient dressing, undressing, grooming and handwashing. It is also used for bathing of patients for treatment and aromatherapy.

The Bathroom should allow for independent disabled access as well as the manoeuvring of a patient on a lifting device, wheelchair or assisted chair. Space may be required to enable transfer of a patient to a bath from both sides. A low height adjustable shower is required. The placement of the toilet should also allow assistance from both sides.

The minimum Bathroom size is 10 m². If a separate shower is provided, the room size should be increased by two m² accordingly.

Note: The size of the room will be determined by the space required for fixed and mobile fittings and equipment, as well as the free floor areas required to ensure adequate circulation space for semi and non-ambulant patients.

90.16.20 LOCATION AND RELATIONSHIPS

The Bathroom should be central to all bedroom areas and placed in a low traffic area.

The entrance to the Bathroom is to be flush with the adjoining corridor.

90.16.30 CONSIDERATIONS

Finishes: Floors are to be slip resistant and impervious to water; walls to wet areas are to have water resistant finish with no gaps and the ceiling is to be water resistant.

Hydraulic lift baths may be considered for occupational health and safety purposes, depending on the patient requirements.

If the bathroom is for use by children, the height, scale and type of fittings / fixtures should be suitable.

For additional room considerations and details refer to Room Data Sheets.

Bay - Beverage

90.17.10 DESCRIPTION AND FUNCTION

The Beverage Room/ Bay is for preparing and/or heating refreshments, snacks and some meals for patients, washing some utensils, storing food and drink and disposing of food waste.

The Beverage Bay shall be a minimum of three m2. If an enclosed room is provided, the floor area may be increased to six m2. If food rethermalisation trolleys are to be located in the room during meal times, an additional four m2 should be added to the total area.

90.17.20 LOCATION AND RELATIONSHIPS

The Beverage Room / Bay should have ready access to patient areas, Unit corridor, staff or patient lounges and conference/ meeting rooms as required.

90.17.30 CONSIDERATIONS

If located in a corridor, the space is to be adequately recessed.

For additional room considerations and details refer to Room Data Sheets.

Bay - Flowers

90.18.10 DESCRIPTION AND FUNCTION

An area with bench and sink for use by staff, relatives, visitors and volunteers to maintain patients' flowers.

The Flower Bay shall be a minimum of two m2.

90.18.20 LOCATION AND RELATIONSHIPS

The Flower Bay should have direct access to the Unit corridor with ready access to patient areas.

90.18.30 CONSIDERATIONS

It is recommended that a Flower Bay be excluded in Oncology/ Haematology Units.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Bay - Handwashing

90.19.10 DESCRIPTION AND FUNCTION

Handwashing bays are provided for staff to cleanse their hands before and after every patient contact.

Hand-washing Bays shall be a minimum of one m2.

90.19.20 LOCATION AND RELATIONSHIPS

Handwashing Bays should have direct access to the Unit corridor and ready access to patient bedrooms.

90.19.30 CONSIDERATIONS

For a description of Handbasin Types refer to Part D - Infection Control - Staff Hand-washing.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Bay - Linen

90.20.10 DESCRIPTION AND FUNCTION

The Linen Bay is a recessed space or alcove to accommodate a linen supply or exchange trolley. Blankets and pillows may also be stored.

A Linen Bay shall be a minimum of two m2.

90.20.20 LOCATION AND RELATIONSHIPS

The Linen Bay shall have ready access to patient areas and direct access to the Unit corridor.

90.20.30 CONSIDERATIONS

If the bay is enclosed, the doors must not impede trolley access. Wall protection and corner guards may be required to protect against trolley impact. If a blanket warming cabinet is to be included in the linen bay area add 1 m2.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Bay - Mobile Equipment

90.21.10 DESCRIPTION AND FUNCTION

The Mobile Equipment Bay is an open storage bay for one or more items of mobile equipment in frequent use which may include wheelchairs, mobile scales, commode chairs, chair scales, shower chairs, patient lifting devices, other equipment or X-ray equipment.

A Mobile Equipment Bay shall be a minimum of four m2. If X-ray equipment is to be stored, the bay shall be six m2. Floor area and depth of the bay may vary to suit the type of equipment stored.

Part B - Health Facility Briefing and Planning

Bay - Mobile Equipment

90 .21.20 LOCATION AND RELATIONSHIPS

The Mobile Equipment Bay should be located in a low traffic area, close to areas of use.

90 .21.30 CONSIDERATIONS

Mobile Equipment Bays should be deep enough to allow storage of equipment without projection into the corridor.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Bay - Personal Protective Equipment

90 .22.10 DESCRIPTION AND FUNCTION

An open storage bay for location of personal protective equipment such as gloves, gowns, overshoes and masks.

The Personal Protective Equipment Bay shall be a minimum of two m2.

90 .22.20 LOCATION AND RELATIONSHIPS

The Bay should be located immediately outside Isolation Rooms of all types, unless an Anteroom is provided. It should have direct access to the Unit corridor.

90 .22.30 CONSIDERATIONS

Refer to Part D - Infection Control for further information.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Bay - Resuscitation Trolley

90 .23.10 DESCRIPTION AND FUNCTION

The Resuscitation Trolley Bay is for the supervised holding of the resuscitation trolley and equipment.

The Resuscitation Trolley Bay shall be a minimum of two m2.

90 .23.20 LOCATION AND RELATIONSHIPS

The Resuscitation Trolley Bay must be located adjacent to a Staff Station and elsewhere as required, with direct access to the Unit corridor.

Rapid emergency access to the trolley from this area to patient areas is essential.

90 .23.30 CONSIDERATIONS

The Resuscitation Trolley Bay may be incorporated in the Clean Utility in an Inpatient Unit.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Part B - Health Facility Briefing and Planning

Birthing Room - LDR

90 .24.10 DESCRIPTION AND FUNCTION

Birthing Rooms provide for the entire process of preparation and delivery, including the following functions:

- patient preparation, relaxation and analgesia during labour
- delivery
- infant resuscitation
- post-natal recovery and observation

A Birthing Room (LDR) shall be a minimum of 28 m2.

90 .24.20 LOCATION AND RELATIONSHIPS

Birthing Rooms should be located with ready access to the Unit entry and Staff Station. Each Birthing Room should have a dedicated Ensuite or Bathroom, a scrub basin and access to a storage area for mobile equipment.

90 .24.30 CONSIDERATIONS

The décor and finishes for a Birthing Room should be in a domestic style. Clinical items such as medical gases and equipment should be concealed but within easy reach.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Catheter Laboratory

90 .25.10 DESCRIPTION AND FUNCTION

Procedure room where cardiac catheter procedures and electrophysiology studies are undertaken in a controlled environment. A clinical scrub basin should be located immediately adjacent to the room entry.

The Catheter Laboratory shall be a minimum of 38 m2.

90 .25.20 LOCATION AND RELATIONSHIPS

The Catheter Laboratory shall be located adjacent to a Control/ Reporting room and Computer Equipment Room. It should have ready access to the Unit corridor and Patient Holding / Recovery area.

90 .25.30 CONSIDERATIONS

Radiation shielding shall be assessed by a certified Radiation Consultant or authority.

For additional considerations and details refer to Cardiac Catheterisation Unit in these Guidelines and Room Data Sheets.

Catheter Lab Control/ Reporting

90 .26.10 DESCRIPTION AND FUNCTION

A room adjacent to Cardiac Catheter Room/s with direct visibility to the patient for remote control of equipment and review and reporting of procedure images. The Control/ Reporting room may serve two procedure rooms.

The Control/ Reporting Room shall be a minimum of 10 m2 for a single procedure room.

Part B - Health Facility Briefing and Planning

90 .26.20 LOCATION AND RELATIONSHIPS

The Control/Reporting Room shall be located adjacent to the Catheter laboratory with direct access to the procedure room and the circulation corridor.

90 .26.30 CONSIDERATIONS

Radiation shielding shall be assessed by a certified Radiation Consultant or authority.

For additional considerations and details refer to Cardiac Catheterisation Unit in these Guidelines and Room Data Sheets.

Change Cubicle - Patient

90 .27.10 DESCRIPTION AND FUNCTION

The Change Cubicle - Patient is a screened area for ambulant patients to undress from street clothes into a hospital gown, as appropriate, prior to examination or treatment. Following examination or treatment, the patient will re-dress in street clothes.

The Change Cubicle should provide hanging facilities for clothes, and a bench for the patient to sit on whilst changing.

The Change Cubicle - Patient shall be a minimum of two m2 and five m2 for disabled access.

90 .27.20 LOCATION AND RELATIONSHIPS

The Change Cubicle - Patient should be located near or directly adjacent to Treatment areas with ready access to Waiting areas and Public Amenities

90 .27.30 CONSIDERATIONS

Security of patient belongings should be ensured. Privacy and accessibility from Waiting areas should be considered.

For additional room considerations and details refer to Room Data Sheets and Room layout Sheets.

Change - Staff

90 .28.10 DESCRIPTION AND FUNCTION

Staff Change areas are provided for staff to change into appropriate work clothing or gowns, to store their street clothing and to perform personal ablutions.

The staff change shall be a minimum of eight m2 for a single person at any one time. Increase the space by one m2 for each additional person.

The total area for Staff Change will depend on the size of the Unit but should also be divided into male and female areas on a proportional basis to meet the specific requirements of the project brief.

90 .28.20 LOCATION AND RELATIONSHIPS

In Operating Units, for security and control purposes it is desirable that the traffic pattern to and from the Staff Change can be overviewed from the

Part B - Health Facility Briefing and Planning

Reception/ Entry Area.

In other areas, Staff Change Areas should be located in a convenient position, generally near the entry.

Access may be required to showers, toilets and decontamination facilities depending on the nature of the Unit.

90 .28.30 CONSIDERATIONS

Provision should generally be made for two Staff Change areas - separate male and female change rooms. If staff numbers are small and predominantly of one sex, unisex facilities may be considered. Secure storage for personnel property will be required.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Cleaner's Room

90 .29.10 DESCRIPTION AND FUNCTION

A secure room for the storage and decanting of cleaning materials and agents, storage of cleaning equipment and trolley, washing and storage of mops, buckets, brooms etc and for waste disposal.

The Cleaner's Room shall be a minimum of four m2.

90 .29.20 LOCATION AND RELATIONSHIPS

The Cleaner's Room should be central to the area it serves, with direct access to the Unit corridor

90 .29.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets.

Clean-Up Room

90 .30.10 DESCRIPTION AND FUNCTION

The Clean-Up Room is used for holding of used trolleys and articles from Operating Rooms or Procedure Rooms. Items may be sorted, rinsed and despatched to Waste Holding / CSSU areas as appropriate. One Clean-Up room may be shared between two Operating Rooms.

The Clean-Up Room shall be a minimum of 7 m2; where the Clean-Up room is shared by more than one Operating Room it should be 10 m2.

90 .30.20 LOCATION AND RELATIONSHIPS

The Clean-Up Room should be located adjacent to its associated Operating Room or Procedure Room, with direct access to the Exit area or circulation corridor.

90 .30.30 CONSIDERATIONS

If Glutaraldehyde is to be used in this space, refer to 'Guidelines for the Use of Glutaraldehyde in the Health Industry' - Department of Human Services, Victoria, for detailed design and ventilation requirements. Refer also to Part E

Part B - Health Facility Briefing and Planning

Building Services of these Guidelines.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Clean Utility

90 .31.10 DESCRIPTION AND FUNCTION

The Clean Utility is for the storage and preparation of clean and sterile consumables and equipment for patient treatment, secure storage and preparation of medications, including intravenous fluids. It may also function as an alternative storage area for the medication trolley.

The room may also provide storage for dangerous drugs in accordance with relevant legislation.

The Clean Utility shall be a minimum of 12 m² or 14 m² when access is required from two sides of the room.

90 .31.20 LOCATION AND RELATIONSHIPS

The Clean Utility is to have direct access from the Unit corridor, with close proximity to the Staff Station and ready access to patient areas.

Depending on the configuration of the Unit, access may be from two sides.

90 .31.30 CONSIDERATIONS

Doors to the Clean Utility should be lockable.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Clean Utility - Sub

90 .32.10 DESCRIPTION AND FUNCTION

The Clean Utility - Sub room is a small Clean Utility for the storage and preparation of clean and sterile stock, patient care items and secure storage of medications. The Clean Utility - Sub shall not be provided in Inpatient Units used for overnight accommodation; in these units a full sized Clean Utility is required.

The Clean Utility - Sub shall be a minimum of eight m².

90 .32.20 LOCATION AND RELATIONSHIPS

The Clean Utility - Sub should be located within ready access of the Staff Station and treatment areas.

90 .32.30 CONSIDERATIONS

The doors to the Clean Utility - Sub should be lockable.

For additional room considerations refer to Room Data Sheets and Room Layout Sheets.

Consult Room

Part B - Health Facility Briefing and Planning

90 .33.10 DESCRIPTION AND FUNCTION

The Consult Room will provide for private consultation and examination of patients with or without support persons present.

The Consult Room must be a minimum of 12 m2.

90 .33.20 LOCATION AND RELATIONSHIPS

The Consult Room should be easily accessible from Entry and Waiting areas and where possible, close to Clean and Dirty Utility rooms.

The Consult Room may be grouped with other Consult Rooms.

Two doors may be required into the room in certain situations - refer to Part C of these Guidelines for further information.

90 .33.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Dental Surgery

90 .34.10 DESCRIPTION AND FUNCTION

The Dental Surgery Room provides for dental consultation, examination and treatments for patients.

The Dental Surgery shall be a minimum of 14 m2.

90 .34.20 LOCATION AND RELATIONSHIPS

The Dental Surgery may be provided as a discrete Unit in located in an outpatient area or as a room located within an acute Unit such as an Emergency Unit. It should have ready access to waiting areas and public amenities.

90 .34.30 CONSIDERATIONS

The Dental Surgery will require provisions and services for a dental chair, examination light, dental X-ray unit, preparation and work benches.

A clinical handbasin shall be provided within the room.

For additional room considerations and room details refer to Room Data Sheets and Room layout Sheets

Dirty Utility

90 .35.10 DESCRIPTION AND FUNCTION

The Dirty Utility provides for the following functions;

- Cleaning and holding of used equipment for collection and sterilisation elsewhere
- Disposal of clinical and other wastes and soiled linen
- Testing and disposing of patient specimens
- Decontamination and storage of patient utensils such as pans, urinals and bowls

In smaller Units, the Dirty Utility Room may be combined with a Disposal Room for space efficiency.

Part B - Health Facility Briefing and Planning

The Dirty Utility shall be a minimum of 10 m² or 12 m² when access is required from two sides of the room. If combined with Disposal Room, the combined Dirty Utility/ Disposal shall be minimum of 14 m².

90 .35.20 LOCATION AND RELATIONSHIPS

The Dirty Utility requires a central position to allow for ready access from the patient areas served and have easy access to handwashing facilities.

The Dirty Utility will have direct access to the Unit corridor and close proximity to the Clean Utility.

90 .35.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Dirty Utility - Sub

90 .36.10 DESCRIPTION AND FUNCTION

The Sub-Dirty Utility is a small Dirty Utility Room providing for cleaning and holding of used equipment for collection, disposal of clinical and other wastes and soiled linen, testing and disposal of patient specimens; decontamination and storage of patient bedpans, urinals and bowls is optional in the Dirty Utility - Sub.

The Dirty Utility - Sub shall not be provided in Inpatient Units used for overnight accommodation; in these units a full sized Dirty Utility is required.

The Dirty Utility - Sub shall be a minimum of eight m².

90 .36.20 LOCATION AND RELATIONSHIPS

The Dirty Utility - Sub should have ready access to patient areas and Unit corridor.

90 .36.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layouts.

Disposal Room

90 .37.10 DESCRIPTION AND FUNCTION

The Disposal Room provides for the temporary storage of contaminated waste, sharps, soiled linen and recyclables prior to removal.

In smaller Units the Disposal Room may be combined with the Dirty Utility Room, for space efficiency.

The Disposal Room shall be a minimum of eight m².

90 .37.20 LOCATION AND RELATIONSHIPS

The Disposal Room should have direct access to the Unit corridor and ready access to service lifts.

Part B - Health Facility Briefing and Planning

Disposal Room

90 .37.30 CONSIDERATIONS

The Disposal Room shall be lockable.
The room may be shared by two or more Units.
In some Units, space may be required for cytotoxic waste bins.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Ensuite

90 .38.10 DESCRIPTION AND FUNCTION

An Ensuite is for a patient to wash, shave, groom themselves, shower and use the toilet, either independently or with assistance. The area and layout must accommodate an assisting nurse, patient lifter and wheelchair access.

A number of alternatives have been provided in Room Layout Sheets showing different configurations that may suit different patient types. The actual choice should depend on the patient type and the Operational Policy.

An Ensuite - Standard shall be a minimum of five m²; an Ensuite - Shared shall be a minimum of six m² and an Ensuite - Special shall be a minimum of seven m².

90 .38.20 LOCATION AND RELATIONSHIPS

The Ensuite must be adjacent to the Bed Room entry door or directly accessible from each Bed Room. Individual shower and toilet compartments may be used for patients in shared bedrooms; refer to Shower - Patient and Toilet - Patient.

90 .38.30 CONSIDERATIONS

Doors must open outwards and be fitted with emergency release function.

Fittings including grab rails and shower must comply with AS 1428.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Ensuite - Mental Health

90 .39.10 DESCRIPTION AND FUNCTION

The Ensuite - Mental Health will provide a shower, toilet and handbasin for use by mental health patients. The Ensuite will be lockable from the outside with a privacy latch on the inside.

The Ensuite - Mental Health shall be a minimum of five m².

90 .39.20 LOCATION AND RELATIONSHIPS

The Ensuite - Mental health should be located adjacent to the Patient Bedroom entry door or have direct access from the Patient Bedroom.

90 .39.30 CONSIDERATIONS

All fittings and fixtures shall be suitable for mental health patients.

Part B - Health Facility Briefing and Planning

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Formula Room

90.40.10 DESCRIPTION AND FUNCTION

The Formula Room provides space for the preparation, distribution and storage of baby feeds. All prepacked feeds will be stored in this area. The room will accommodate the following functions:

- Washing, sterilisation and storage of baby bottles, teats and equipment
- Preparation of baby formulas
- Refrigerated storage of baby feeds
- Demonstration to mothers on formula preparation.

A Formula Room shall be a minimum of nine m2.

90.40.20 LOCATION AND RELATIONSHIPS

The Formula Room should be located with direct access to a circulation corridor with ready access to Nursery areas. It should be located separately from the Nursery

90.40.30 CONSIDERATIONS

A clinical handwashing basin shall be located within the room.

For additional room considerations and details refer to Room Data Sheets and Room Layout sheets.

Gymnasium

90.41.10 DESCRIPTION AND FUNCTION

A room for patient evaluation, rehabilitation exercise activities, therapy and ambulation training.

The Gymnasium shall be a minimum of 45 m2.

90.41.20 LOCATION AND RELATIONSHIPS

The Gymnasium shall be located close to patient therapy areas with ready access to the circulation corridor, the Unit entry, waiting areas and amenities areas.

90.41.30 CONSIDERATIONS

For additional considerations, refer to Allied Health Unit in these Guidelines and Room Data Sheets.

Interview Room

90.42.10 DESCRIPTION AND FUNCTION

A room to undertake confidential discussion and/ or counselling between staff, patients and family members where required. This room may also be used as a multipurpose room for small staff groups or discussions. The room may also be used as a family/ relatives room.

The Interview Room shall be a minimum of 9 m2. If the room is required for

Part B - Health Facility Briefing and Planning

family or group discussions the minimum area shall be 12 m2.

90.42.20 LOCATION AND RELATIONSHIPS

The Interview Room should be located close to waiting and reception areas, with ready access to a Beverage Bay

90.42.30 CONSIDERATIONS

A second exit door may be considered where an additional staff escape route is required.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Lounge - Patient

90.43.10 DESCRIPTION AND FUNCTION

The Patient Lounge provides for a change of environment away from clinical areas for patients and visitors. It is an area where family groups can visit and patients can socialise.

The Patient Lounge shall have a minimum floor area of 15 m2. Depending on the patient population, number of single rooms and access to other sitting areas, a ratio of 0.8 m2 per patient may be used to calculate the area of a Patient Lounge.

90.43.20 LOCATION AND RELATIONSHIPS

The Patient Lounge should be on an external wall to take advantage of natural light and outlook. The Patient Lounge should be located away from patient bedrooms but staff should be able to observe and monitor its use by patients, with direct access to the Unit corridor.

Where possible, direct access to a secure landscaped area offering partial covering against sun, wind and rain should be provided.

90.43.30 CONSIDERATIONS

Low window sill heights promote access to a view from a seated position.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets

Meeting Room - Small

90.44.10 DESCRIPTION AND FUNCTION

A multipurpose room for interviews, consultation, staff meetings, teaching and training activities. The small meeting room may also function as a distressed relatives room for grieving family/visitors.

A Meeting Room - Small shall be nine m2 or 12 m2.

90.44.20 LOCATION AND RELATIONSHIPS

The Meeting Room should be located near the main Waiting area or Unit entry and away from Treatment areas with ready access to public / staff amenities.

Where used for accommodation of distressed relatives, it should be located in

Part B - Health Facility Briefing and Planning

a quiet, low traffic area.

90.44.30 CONSIDERATIONS

Where used for accommodation of distressed relatives, a Beverage Bay may be located in close proximity.

For additional room considerations and details refer to Room Data Sheets.

Meeting Room - Medium/Large

90.45.10 DESCRIPTION AND FUNCTION

The Medium and Large Meeting Rooms will accommodate staff and other meetings such as those held with the Mental Health Review Board in a Mental Health Unit. It is a multi-purpose room also used for staff meetings, training or educational purposes.

A Meeting Room for Seminar/ Training shall be a minimum of 15 m² (5 to 10 people). A Meeting Room - Medium shall be a minimum of 20 m² (12 to 15 people) and a Meeting Room - Large shall be 25 - 30 m² (15 to 25 people).

90.45.20 LOCATION AND RELATIONSHIPS

Meeting Rooms used for seminars or training may be located in a low traffic area on the periphery of a Unit or between a number of Units.

Medium and Large Meeting Rooms should be located close to the entry point for a Unit to enable ready access for people from outside the Unit and shared use by adjacent Units.

In a Mental Health Unit, the Magistrates Meeting Room should be accessible from the Entry/ Reception areas as well as from Inpatient Areas, with discreet access from the Secure Unit.

90.45.30 CONSIDERATIONS

When used as part of a Mental Health Unit, two points of exit should be provided. Duress alarms will be required and more than one telephone outlet provided. Video and teleconferencing facilities may be required.

For additional room considerations and details refer to Room Data Sheets.

Neonatal Bay - General Care

90.46.10 DESCRIPTION AND FUNCTION

A single Bay for the care of well babies away from their mother's bed area which may include treatments such as phototherapy.

The Neonatal Bay shall be a minimum of 5 m², which includes a circulation area of one metre between Bays.

90.46.20 LOCATION AND RELATIONSHIPS

The Neonatal Bay - General Care will be located within the Neonatal Nursery. The Neonatal Nursery will be located with ready access to Maternity inpatient bedrooms used for post-natal care.

90.46.30 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

90 .46.30

A staff handwash basin (type A or B) should be provided for each four Neonatal Bays - General Care.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Neonatal Bay - Intensive Care

90 .47.10 DESCRIPTION AND FUNCTION

A single Bay or Room for neonates requiring Intensive Care nursing and medical treatment. The Bay (or room) will include provisions for charting and storage.

The Neonatal Bay/ Room - ICU shall be a minimum of 12m². In multi-bed rooms a minimum of 2.4 metres is required between infants' beds, with an aisle of 1.2 metres between beds facing each other.

90 .47.20 LOCATION AND RELATIONSHIPS

The Neonatal Bay - ICU will be located within the Intensive Care Unit - Neonatal/ Special Care, which will have ready access to the Maternity Inpatient Unit, Obstetric Unit, Operating Unit, Emergency Unit and Pathology Unit.

90 .47.30 CONSIDERATIONS

A staff clinical handwash basin (Type A) is required in close proximity to each Neonatal Bay - ICU. Each Bay shall be within six metres of a handwash basin. If a room is provided, the handbasin shall be located within the room.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Neonatal Bay - Special Care

90 .48.10 DESCRIPTION AND FUNCTION

A single Bay for neonates requiring Special Care nursing and medical treatment. The Bay will include provisions for charting and storage.

The Neonatal Bay/ Room - ICU shall be a minimum of 10 m². In multi-bed rooms a minimum of 1.2 metres is required between infants' beds, with an aisle of 1.5 metres between beds facing each other.

90 .48.20 LOCATION AND RELATIONSHIPS

The Neonatal Bay - Special Care will be located within the Intensive Care Unit - Neonatal/ Special Care, which will have ready access to the Maternity Inpatient Unit, Obstetric Unit, Operating Unit, Emergency Unit and Pathology Unit.

90 .48.30 CONSIDERATIONS

A staff clinical handwash basin (type A) is required in close proximity to each Neonatal Bay - Special Care.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Office - 2 Person Shared

90.49.10 DESCRIPTION AND FUNCTION

An Office for two persons to carry out administrative functions in a degree of privacy. This may include preparing rosters, reports, counselling, interviewing staff and patients.

The 2 Person Shared Office shall be a minimum of 12 m2.

90.49.20 LOCATION AND RELATIONSHIPS

The Office should be located close to the Staff Station with ready access to the Unit corridor.

90.49.30 CONSIDERATIONS

The Office should be lockable.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Office - 3 Person Shared

90.50.10 DESCRIPTION AND FUNCTION

A Shared Office for three persons to carry out administrative functions in a degree of privacy. This may include patient care coordination and preparation of reports.

A 3 Person Shared Office shall be a minimum of 16 m2.

90.50.20 LOCATION AND RELATIONSHIPS

The 3 Person shared office should be located away from the clinical area.

90.50.30 CONSIDERATIONS

The Office should be lockable.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Office - 4 Person Shared

90.51.10 DESCRIPTION AND FUNCTION

Office space to be shared by four persons for carrying out administrative functions in a degree of privacy.

A 4 Person Shared Office shall be a minimum of 20 m2.

90.51.20 LOCATION AND RELATIONSHIPS

The 4 Person Shared Office should be located away from clinical areas.

90.51.30 CONSIDERATIONS

The Office should be lockable.

Part B - Health Facility Briefing and Planning

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Office - CEO

90 .52.10 DESCRIPTION AND FUNCTION

An Office to be used by the CEO/ General Manager to perform administrative duties and allows for confidential discussion in a degree of privacy.

The Office - CEO/DCO shall be 15 m2.

90 .52.20 LOCATION AND RELATIONSHIPS

The CEO/DCO Office should be located in an administrative zone away from clinical areas.

90 .52.30 CONSIDERATIONS

The room area allows for a small meeting area incorporated into the office. Inclusions for this room shall assume a 'Clean Office Policy'.

For additional room considerations and details refer to Room Data Sheets.

Office - Clinical/Handover

90 .53.10 DESCRIPTION AND FUNCTION

An Office for staff to write up notes, view digital imaging, hold confidential discussions, store records and have handovers.

The Office Clinical/ Handover shall be nominally 12 m2; the actual size will be dependant on the number of staff using the space at any one time.

90 .53.20 LOCATION AND RELATIONSHIPS

The Office - Clinical / Handover should be located adjacent to the Staff Station.

90 .53.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Office - Consult

90 .54.10 DESCRIPTION AND FUNCTION

A room where clinical consultation and administrative functions are combined, and may be used by medical, nursing and allied health staff.

The Office/Consult Room shall be 12 m2.

90 .54.20 LOCATION AND RELATIONSHIPS

The Office / Consult should be located near patient treatment areas with close access to patient waiting areas.

90 .54.30 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

For additional room considerations and details refer to Room Data Sheets.

Office - Single Person 9 m2

90 .55.10 DESCRIPTION AND FUNCTION

A Single Person Office where Unit Managers can carry out administrative functions in a degree of privacy. This includes preparing rosters, reports, counselling, interviewing staff and patients.

A Single Person Office shall be a minimum of nine m2.

90 .55.20 LOCATION AND RELATIONSHIPS

The Office - Single Person should be located close to the Staff Station, in a quieter traffic area.

90 .55.30 CONSIDERATIONS

Inclusions in this room shall assume a 'Clean Office Policy'.
The Office should be lockable.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Office - Single Person 12 m2

90 .56.10 DESCRIPTION AND FUNCTION

A Single Person Office 12m2 is provided for a Director or other senior manager to carry out administrative functions in a degree of privacy. This includes preparing reports, counselling and interviewing. The room size allows for a small meeting area within the room.

A Single Person Office shall be a minimum of 12 m2.

90 .56.20 LOCATION AND RELATIONSHIPS

The Office - Single Person 12m2 should be located away from clinical areas, preferably located with other office areas.

90 .56.30 CONSIDERATIONS

Inclusions in this room shall assume a 'Clean Office Policy'.
The Office should be lockable.

For additional room considerations and details refer to Room Data Sheets and Room layout Sheets.

Office - Workstation Typical

90 .57.10 DESCRIPTION AND FUNCTION

A workstation within an open plan arrangement for staff to carry out administrative functions.

A Typical Workstation in a shared open-plan area or office shall be a minimum of six m2.

90 .57.20 LOCATION AND RELATIONSHIPS

Part B - Health Facility Briefing and Planning

90 .57.20

The Typical Workstation should be located within a shared open plan office area away from clinical areas.

90 .57.30 CONSIDERATIONS

Inclusions for this room shall assume a 'Clean Office Policy'. Refer to Part C - Access, Mobility, OH & S in these Guidelines for workstation requirements with respect to OH&S and ergonomic aspects.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Office - Write-up Bay

90 .58.10 DESCRIPTION AND FUNCTION

This bay provides a write-up bench for use by members of the patient care team. In this space the user may review and write-up patient records, enter patient data on computer and make telephone calls.

The Write-up Bay shall be a minimum of two m2.

90 .58.20 LOCATION AND RELATIONSHIPS

The Write-up Bay should be located in a corridor near patient care areas.

90 .58.30 CONSIDERATIONS

The Write-up Bay should be recessed sufficiently to not create a protrusion into the corridor.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Operating Room - General

90 .59.10 DESCRIPTION AND FUNCTION

The Operating Room - General provides an aseptic environment in which to carry out surgical procedures under local, regional or general anaesthetic.

The General Operating Room may be used for general surgery and specialties including ENT, Urology, Gynaecology, Ophthalmology, Plastic Surgery and any other procedures that do not require bulky equipment.

The Operating Room - General shall be 42 m2.

90 .59.20 LOCATION AND RELATIONSHIPS

The Operating Room is located within the Operating Unit and away from through traffic.

Direct access is required to the Holding Bay/ Anaesthetic Room, Scrub Room and Exit Bay/ circulation corridor.

Ready access is required to Recovery, Clean-up areas, Sterilising Bay, Sterile Store and CSSD.

90 .59.30 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

90 .59.30

It is essential that at least one wall be not only free from door openings but also free from those services which require frequent attention. This provides an area for sterile equipment and scrubbed personnel, which is not compromised by traffic in and out of the Operating Room or to and from serviced item. It is preferable for the adjacent wall to be free, or impinged upon only for exit from the Operating Room.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Operating Room - Large

90 .60.10 DESCRIPTION AND FUNCTION

The Operating Room - Large provides an aseptic environment in which to carry out surgical procedures under local, regional or general anaesthetic.

The Operating Room - Large may be used for surgical procedures that require large and bulky equipment, including neurosurgery, orthopaedics and cardiac surgery.

The Operating Room - Large shall be a minimum of 50 m².

90 .60.20 LOCATION AND RELATIONSHIPS

The Operating Room is located within the Operating Unit and away from through traffic.

Direct access is required to the Holding Bay/ Anaesthetic Room, Scrub Room and Exit Bay/ circulation corridor.

Ready access is required to Recovery, Clean-up areas, Sterilising Bay, Sterile Store and CSSD.

90 .60.30 CONSIDERATIONS

It is essential that at least one wall be not only free from door openings but also free from those services which require frequent attention. This provides an area for sterile equipment and scrubbed personnel, which is not compromised by traffic in and out of the Operating Room or to and from serviced item. It is preferable for the adjacent wall to be free, or impinged upon only for exit from the Operating Room.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Operating Room - Minor

90 .61.10 DESCRIPTION AND FUNCTION

The Operating Room - Minor provides a clean and/or aseptic environment in which to carry out endoscopic and/or minor surgical procedures under local, regional or general anaesthetic.

The Operating Room - Minor shall be 36 m².

90 .61.20 LOCATION AND RELATIONSHIPS

The Operating Room is located within the Operating Unit and away from

Part B - Health Facility Briefing and Planning

through traffic.

Direct access is required to the Holding Bay/ Anaesthetic Room, Scrub Room and Exit Bay/ circulation corridor.

Ready access is required to Recovery, Clean-up areas, Sterilising Bay, Sterile Store and CSSD.

90.61.30 CONSIDERATIONS

It is essential that at least one wall be not only free from door openings but also free from those services which require frequent attention. This provides an area for sterile equipment and scrubbed personnel, which is not compromised by traffic in and out of the Operating Room or to and from serviced item. It is preferable for the adjacent wall to be free, or impinged upon only for exit from the Operating Room.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Overnight Stay - Bedroom

90.62.10 DESCRIPTION AND FUNCTION

Single Bedroom with an adjoining Ensuite for clinical staff or parents needing to remain on close call overnight.

The Overnight Stay Bedroom shall be a minimum of 10 m2.

90.62.20 LOCATION AND RELATIONSHIPS

The Overnight Stay Bedroom shall be located in a discrete area with ready access to the critical care areas.

90.62.30 CONSIDERATIONS

The Bedroom should be lockable and requires acoustic privacy.

Staff or parents using the Overnight Stay facilities need to be contactable using a telephone or paging system.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Overnight Stay - Ensuite

90.63.10 DESCRIPTION AND FUNCTION

Ensuite adjoining an Overnight Stay Bedroom for use by staff or parents.

90.63.20 LOCATION AND RELATIONSHIPS

The Ensuite shall be located adjacent to the Overnight Stay Bedroom. Access to the Ensuite will be from the Bedroom.

90.63.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Pantry

90.64.10 DESCRIPTION AND FUNCTION

The Pantry is for preparing and/or heating refreshments, snacks and some meals for patients, washing some utensils, storing food and drink and disposing of food waste. It may also provide space for a meal tray collection trolley.

The Pantry shall be a minimum of eight m². If food rethermalisation trolleys are to be located in the room during meal times, up to an additional four m² should be added to the total area.

90.64.20 LOCATION AND RELATIONSHIPS

The Pantry should have ready access to patient areas and the Unit corridor.

90.64.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets.

Patient Bay

90.65.10 DESCRIPTION AND FUNCTION

A Patient Bed Bay may be used for the treatment or management of patients in various types of treatment or holding spaces. Depending on the type of space, the patient will receive clinical intervention ranging from resuscitation, through clinical, acute, non-acute treatment to observation or holding.

The Patient Bed Bay will vary in size, depending on the function and type of patient to be accommodated. Three alternatives have been provided in Room Data Sheets and Room Layout sheets showing different sizes that may suit different patient types including:

- Patient Bay - Trauma (12 m²)
- Patient Bay - Critical (Resuscitation) (25 m²)
- Patient Bay - Holding or Non-Acute (9 m²)

Patient Bed Bays may be closed or open; this will affect the space required. The actual choice of Bay type should depend on the patient type and the Operational Policy.

90.65.20 LOCATION AND RELATIONSHIPS

Patient Bed Bays should be generally located with other patient treatment areas and near the Staff Station.

90.65.30 CONSIDERATIONS

For additional considerations and details refer to Room Data Sheets and Room Layout Sheets.

Plaster Room

90.66.10 DESCRIPTION AND FUNCTION

The Plaster Room allows for the application of Plaster of Paris, or other splints and for the closed reduction of displaced fractures or dislocations under sedative or regional anaesthesia.

The Plaster Room shall be a minimum of 14 m².

Part B - Health Facility Briefing and Planning

Plaster Room

90 .66.20 LOCATION AND RELATIONSHIPS

The Plaster Room should be located close to Treatment Areas with ready access from Waiting Areas.

90 .66.30 CONSIDERATIONS

A Splint and Crutch Store will be accessible to the Plaster Room.

Clear access to the plaster trap is required for maintenance purposes.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Property Bay - Staff

90 .67.10 DESCRIPTION AND FUNCTION

A bay containing lockers for the secure storage of staff property including clothing, handbags and personal effects.

The Property Bay - Staff shall be six m2, although final calculation of floor area will depend on the number of lockers required for staff numbers working in the Unit.

90 .67.20 LOCATION AND RELATIONSHIPS

Staff Property Bays shall be located adjacent to Staff Stations or main Work Areas for security. The Bay should have discreet access from the Unit corridor and ready access to the Staff Lounge.

90 .67.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Reception

90 .68.10 DESCRIPTION AND FUNCTION

An area where visitors to the Unit or facility can be received and either immediately directed to their destination or to a Waiting Area.

A Reception Area should be a minimum of 10 m2, although this will vary according to the Unit and number of staff.

90 .68.20 LOCATION AND RELATIONSHIPS

The Reception should be located near the entry point to the Unit or facility and adjacent to the Waiting Area.

90 .68.30 CONSIDERATIONS

Refer to Part C - Access, Mobility, OH&S for information regarding counter heights and access requirements.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Scrub-Up / Gowning

90.69.10 DESCRIPTION AND FUNCTION

The Scrub-up / Gowning room provides an enclosed area for pre-operative scrubbing, gowning and gloving.

The Scrub-up/ Gowning area shall be a minimum of six m2 per Operating Room, or eight m2 where one Scrub-up bay is shared between two Operating Rooms. A minimum of 800 mm is required between scrub stations.

90.69.20 LOCATION AND RELATIONSHIPS

The Scrub-up area should be directly accessible from the Operating Unit corridor and from the associated Operating or Procedure Room.

Access should also be available from the staff Change and Staff Lounge.

90.69.30 CONSIDERATIONS

The activities of scrubbing and gowning/ gloving should be separate within the space. Taps should be non-touch - automatically operated or foot operated.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Seclusion Room

90.70.10 DESCRIPTION AND FUNCTION

A Seclusion Room provides for the sole confinement of a distressed or agitated person requiring separation for short periods at any hour of the day or night on an involuntary basis. The door and windows of the room are locked from the outside.

Note: A person receiving treatment for a mental disorder in an approved mental health service may be kept in seclusion only:

- If it is necessary to protect the person or any other person from an immediate or imminent risk to his or her health or safety or to prevent the person from absconding
- If the use of seclusion has been approved by the authorised psychiatrist, or in the case of an emergency, authorized by the senior registered nurse on duty and notified to a registered medical practitioner without delay
- for the period of time specified in the approval or authorization under the second paragraph

It is not necessary to obtain a person's consent to keep him or her in seclusion. Where a seclusion room is required for an involuntary patient it should be designed as part of a designated High Dependency Suite within the Unit. A High Dependency suite also includes a Secure Courtyard, a small Lounge and Ensuite. A toilet with a door that can be locked open or shut should be directly accessible from the room.

The Seclusion room shall be a minimum of 14 m2.

90.70.20 LOCATION AND RELATIONSHIPS

The Seclusion Room should be adjacent to the Staff Station and High Dependency and have no 'blind spots'.

90.70.30 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

The Seclusion Room will require a door with an external swing and a viewing panel and be secure in construction with specific locks. The door shall be wide enough for three staff abreast and can be lockable inside and outside with a key.

The door to the seclusion room and walls must be capable of withstanding extreme force from inside the room in the event that the patient tries to force their way out.

The ceiling height is to be three metres.

Finishes, furniture fittings and fixtures must be robust and not provide an opportunity for self harm. The room must meet OH&S Guidelines for staff safety.

For additional room considerations and details refer to the Room Data Sheets

Shower - Patient

90.71.10 DESCRIPTION AND FUNCTION

The Shower - Patient is a room containing a shower and handbasin for patients in multi-bed rooms to shower or wash, either independently or with nurse assistance. Commode access is required.

A Patient Shower shall be a minimum of four m2 .

90.71.20 LOCATION AND RELATIONSHIPS

The Shower - Patient shall be located immediately adjacent to or directly accessible from Bed Rooms or the Unit corridor.

90.71.30 CONSIDERATIONS

The door must be fitted with escape hardware to allow staff access in an emergency.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Shower - Staff

90.72.10 DESCRIPTION AND FUNCTION

A shower for staff use; it may be gender specific or unisex.

The Staff Shower shall be two m2

90.72.20 LOCATION AND RELATIONSHIPS

The Staff Shower should be located near the Staff Toilet, Staff Change Area and Staff Lounge areas.

90.72.30 CONSIDERATIONS

A privacy latch is required.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Part B - Health Facility Briefing and Planning

Staff Room

90.73.10 DESCRIPTION AND FUNCTION

The Staff Room is used by staff for respite, rest and relaxation during tea and meal breaks, especially where it is difficult for staff to use centrally located facilities including at night. It may also be used for small meetings or tutorials and for the storage of staff resources or library materials.

The Staff Room shall be a minimum of 15 m²; size will be dependant on the number of persons using the space at any one time; allow 1.5 m² per person.

90.73.20 LOCATION AND RELATIONSHIPS

The Staff Room should be located away from Patient, Treatment and Visitor areas. Where possible, the Staff Room may be shared between two Inpatient Units, or one per floor provided in larger facilities.

90.73.30 CONSIDERATIONS

Facilities for food and beverage preparation and storage should be provided.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Staff Station

90.74.10 DESCRIPTION AND FUNCTION

The Staff Station is the administrative base for the Unit and enquiry point for patients and visitors. It provides for the coordination of patient care, observation, writing up of clinical notes, entering data into computers, making and receiving telephone calls. The Staff Station may also accommodate a Unit Receptionist/ Clerk.

The Floor area will vary according to the Unit and will depend on the activity level, the number of full and part-time staff, the operational model and the building layout.

For Planning purposes, a 30 Bed Inpatient Unit will require a Staff station of 14 m².

90.74.20 LOCATION AND RELATIONSHIPS

At least one Staff Station shall be provided within an Inpatient Unit, central to Bed Rooms to allow observation of patients.

90.74.30 CONSIDERATIONS

The model of care adopted will determine the need for additional stations and their placement within the Unit.
Lockable stable doors may be provided for additional security if required.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Store - Cleaner's

90.75.10 DESCRIPTION AND FUNCTION

The Cleaner's Store is a bulk store provided for the central storage of large items of cleaning equipment, bulk containers of cleaning chemicals and a

Part B - Health Facility Briefing and Planning

cleaner's trolley.

The Cleaner's Store should be a minimum of 12 m².

90.75.20 LOCATION AND RELATIONSHIPS

The Cleaner's Store should be located with other storage areas, or in a central area where cleaning staff can access easily in the course of their duties.

90.75.30 CONSIDERATIONS

Clean paper goods such as toilet paper and hand towels should be stored in an adjacent dry store or cupboard. The Cleaner's Store must be lockable and comply with OH&S guidelines. Refer to Part C of these Guidelines for additional information.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Store - Equipment

90.76.10 DESCRIPTION AND FUNCTION

The Equipment Store is used for the storage of medical equipment when not in use and recharging of electrical items. Space is required for parking of mobile equipment including IV poles, wheelchairs, lifting equipment, trolleys, cradles and commode chairs for the Unit.

The floor area shall be nominally 20 m². This may vary depending on the Unit size and service profile and the use/ provision of bays for mobile equipment.

90.76.20 LOCATION AND RELATIONSHIPS

The Equipment Store should be centrally located in a low traffic area with direct access to the Unit corridor.

90.76.30 CONSIDERATIONS

The Equipment Store should be lockable.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Store - Files

90.77.10 DESCRIPTION AND FUNCTION

A secure room for the storage of departmental files and patient clinical records.

The Files Store shall be a minimum of 10 m².

90.77.20 LOCATION AND RELATIONSHIPS

The Files Store should have direct access to the Staff Station or be located adjacent to the office areas served.

90.77.30 CONSIDERATIONS

The Files Store should be lockable.

For additional room considerations and details refer to Room Data Sheets and

Part B - Health Facility Briefing and Planning

Room Layout Sheets.

Store - General

90.78.10 DESCRIPTION AND FUNCTION

A secure room for the storage of general supplies used within the Unit. Equipment may also be recharged in this room.

The General Store shall be a minimum of nine m2.

90.78.20 LOCATION AND FUNCTION

The General Store should be centrally located within a Unit or group of Units when shared.

90.78.30 CONSIDERATIONS

The General Store should be lockable.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Store - Photocopy/Stationery

90.79.10 DESCRIPTION AND FUNCTION

A room for the photocopier and for secure storage of paper and stationery supplies. The facsimile and printers may also be located in this area if required.

The Photocopy/ Stationery Store shall be nominally eight m2.

90.79.20 LOCATION AND RELATIONSHIPS

The Photocopy/ Stationery Store should be located adjacent to administrative areas served, with direct access to the administrative area circulation corridor.

90.79.30 CONSIDERATIONS

Exhaust to be provided to photocopier area, to meet OH&S requirements.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Store - Sterile Stock

90.80.10 DESCRIPTION AND FUNCTION

An area centrally located within the Operating Unit or other Treatment Areas for storage and holding of sterile stock in a clean environment. This area may accommodate drugs in lockable cupboards or safe as required.

The Sterile Stock Store shall be a minimum of 10 m2.

90.80.20 LOCATION AND RELATIONSHIPS

The Sterile Stock Store should be located near or directly adjacent to Operating, Procedure and Treatment Rooms. It should have ready access to Central Sterile Supply Unit (CSSU) or Theatre Sterile Supply Unit (TSSU) and

Part B - Health Facility Briefing and Planning

may be provided as a part of the CSSU/ TSSU.

90 .80.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Toilet - Disabled

90 .81.10 DESCRIPTION AND FUNCTION

A toilet and handbasin for use by disabled persons with or without assistance. The room shall comply with AS 1428.

The Toilet - Disabled shall be a minimum of five m2.

90 .81.20 LOCATION AND RELATIONSHIPS

The Disabled Toilets should have direct access to a waiting or circulation corridor. Disabled Toilets for public use should be readily accessible from Public Areas.

90 .81.30 CONSIDERATIONS

Disabled Toilets may also include facilities for baby change. Disabled Toilets to be used by patients must also include patient/ nurse call and emergency call buttons and indicators.

For additional room considerations and details refer to Room data Sheets and Room Layout Sheets.

Toilet - Patient

90 .82.10 DESCRIPTION AND FUNCTION

A room containing a toilet and handbasin for patients in multi-bed rooms or adjacent to communal patient areas.

A Patient Toilet shall be a minimum of four m2.

90 .82.20 LOCATION AND RELATIONSHIPS

The Patient Toilet should be located immediately adjacent to, or directly accessible from Patient Bed Rooms, Unit corridor or patient areas served.

90 .82.30 CONSIDERATIONS

The door will be fitted with escape hardware to allow staff access in an emergency.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Toilet - Public

90 .83.10 DESCRIPTION AND FUNCTION

A room containing toilet and handbasin for public or visitor use. The Public Toilet may also include facilities for baby change.

Part B - Health Facility Briefing and Planning

The Public Toilet shall be a minimum of three m2. If baby change facilities are included, the size may be increased to four m2.

90.83.20 LOCATION AND RELATIONSHIPS

Toilets for public use should be readily accessible from public areas including circulation corridors, Entrances and Waiting Areas.

90.83.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Toilet - Staff

90.84.10 DESCRIPTION AND FUNCTION

A toilet and handbasin for staff use.

A Staff Toilet shall be a minimum of two m2.

90.84.20 LOCATION AND RELATIONSHIPS

Toilets for staff use should be readily accessible from staff work areas. They should be located central to a Unit

90.84.30 CONSIDERATIONS

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Treatment Room

90.85.10 DESCRIPTION AND FUNCTION

The Treatment Room provides a controlled environment, privacy and facilities for carrying out consultations, examinations and treatments which may include wound dressings.

The Treatment Room shall be a minimum of 15 m2.

90.85.20 LOCATION AND RELATIONSHIPS

The Treatment Room should be located with other patient care areas, near the Clean Utility.

90.85.30 CONSIDERATIONS

The door should be lockable.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Ultra-Isolation Airlock

90.86.10 DESCRIPTION AND FUNCTION

Separate Entry and Exit Anterooms to ensure negative pressurisation of the Ultra-Isolation area. The Airlock allows for transit of patient bed and bed isolator moving into the patient bedroom. The Entry Airlock area also may accommodate gowns, gloves, masks, overboots, goggles and linen. The Exit

Part B - Health Facility Briefing and Planning

Airlock may accommodate an autoclave for sterilisation of patient equipment prior to removal from the area.

The Ultra-Isolation Airlock/s shall be a minimum of four m2.

90.86.20 LOCATION AND RELATIONSHIPS

The Airlock/s should be located adjacent to the Patient Bed Room with direct access to the circulation corridor.

90.86.30 CONSIDERATIONS

All materials used in the room and interior surfaces are to be easily cleanable and able to withstand fumigation. All penetrations for fittings in walls and ceilings must be fully sealed. Double glazed windows with integral Venetians are preferred, however, where curtains or blinds are used, they should be washable.

For additional room considerations refer to Room Data Sheets.

Ultra-Isolation Clean Utility

90.87.10 DESCRIPTION AND FUNCTION

Room for storage and preparation of consumables, equipment for patient treatment and medications for use within the Ultra-Isolation Facility. The room may contain a write-up bay.

The Ultra-Isolation Clean Utility shall be a minimum of 11 m2.

90.87.20 LOCATION AND RELATIONSHIPS

The Ultra-Isolation Clean Utility shall be located adjacent to both the Entry Airlock and the Patient Bed Room.

90.87.30 CONSIDERATIONS

All aspects of the room are to be easily cleaned and permit fumigation. Floors, walls and other surfaces should be impervious to water and resistant to damage from disinfectants.

For additional room considerations and room details refer to Room Data Sheets.

Ultra-Isolation Dirty Utility

90.88.10 DESCRIPTION AND FUNCTION

Room within the Ultra-Isolation Facility for storage and cleaning of utensils and disposal of linen and waste. Equipment to be located within the room includes a dual function pan sanitiser/ utensil washer, slop hopper and a pass through autoclave.

The Ultra-Isolation Dirty utility shall be a minimum of eight m2.

90.88.20 LOCATION AND RELATIONSHIPS

The Dirty Utility will be located adjacent to the Patient Bed Room with external access to the circulation corridor for removal of waste, linen and equipment.

90.88.30 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

90 .88.30

All aspects of the room are to be easily cleaned and permit fumigation. Floors, walls and other surfaces should be impervious to water and resistant to damage from disinfectants.

For additional room considerations and room details refer to Room Data Sheets.

Ultra-Isolation Ensuite

90 .89.10 DESCRIPTION AND FUNCTION

A room for patients to shower, toilet and use handbasin, within the Ultra-Isolation Facility. The spatial allocation reflects the requirement for nursing assistance and the use of equipment.

The Ultra-Isolation Ensuite shall be a minimum of six m2.

90 .89.20 LOCATION AND RELATIONSHIPS

The Ensuite will have direct access to the Patient Bed Room within the Ultra-Isolation Facility.

90 .89.30 CONSIDERATIONS

All aspects of the room are to be easily cleaned and permit fumigation. Floors, walls and other surfaces should be impervious to water and resistant to damage from disinfectants.

For additional room considerations and room details refer to Room Data Sheets.

Ultra-Isolation Patient Bed Room

90 .90.10 DESCRIPTION AND FUNCTION

One Bed Isolation Room for patient requiring intensive care treatment and ultra-isolation for quarantinable infectious diseases.

The Ultra-Isolation Patient Bedroom shall be a minimum of 25 m2.

90 .90.20 LOCATION AND RELATIONSHIPS

The Ultra-Isolation Patient Bed Room shall be located adjacent to the Entry Airlock and shall have an adjoining Ensuite.

90 .90.30 CONSIDERATIONS

All materials used in the room and interior surfaces are to be easily cleanable and able to withstand fumigation. All penetrations for fittings in walls and ceilings must be fully sealed. Double glazed windows with integral Venetians are preferred, however, where curtains or blinds are used, they should be washable.

A handsfree communication system is required between the patient Bed Room and the Entry Airlock, to communicate with personnel within either room.

For additional room considerations refer to Room Data Sheets.

Ultra-Isolation Staff Change

Part B - Health Facility Briefing and Planning

90.91.10 DESCRIPTION AND FUNCTION

A room with shower and toilet facilities for staff to change on entry and exit from the Ultra-Isolation Facility. The shower is required in cases of accidental contamination.

The Ultra-Isolation Staff Change shall be a minimum of five m2.

90.91.20 LOCATION AND RELATIONSHIPS

The Staff Change/ Toilet will require direct access from the Entry Airlock and from the Dirty Utility exit.

90.91.30 CONSIDERATIONS

All aspects of the room are to be easily cleaned and permit fumigation. Floors, walls and other surfaces should be impervious to water and resistant to damage from disinfectants.

For additional room considerations and room details refer to Room Data Sheets.

Waiting

90.92.10 DESCRIPTION AND FUNCTION

An area for visitors and patients to wait in comfort prior to or during visits to a Unit. A Waiting Area may be for the use of the public, patients, families and other visitors to a facility or Unit.

A range of occupants will require waiting space and these will include adults and children, both able-bodied and disabled. Circulation requirements must cater for this.

The Waiting area shall be a nominal 10 m2. The size will be dependant on the number of people to be accommodated but will generally require 0.5 m2 per able-bodied person or one m2 per wheelchair occupant or other disabled person.

90.92.20 LOCATION AND RELATIONSHIPS

Waiting areas should be located near to the entry of a Facility or Unit and be observable from the Reception area. The Waiting area requires direct access to the circulation corridor and ready access to public amenities.

90.92.30 CONSIDERATIONS

Natural light is desirable. Waiting areas may be shared between Units. Paediatric waiting areas should allow access for prams and have baby change facilities nearby. Refer to Part C for additional information related to access and mobility.

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

X-Ray Viewing and Reporting

90.93.10 DESCRIPTION AND FUNCTION

A room within a Clinical or Diagnostic Unit for reviewing and reporting of patient imaging film or computerised images.

Part B - Health Facility Briefing and Planning

The X-ray Viewing and reporting Room shall be 12 m².

90.93.20 LOCATION AND RELATIONSHIPS

The X-ray Viewing and Reporting Room should be accessible from the Unit corridor and located near other staff work areas.

90.93.30 CONSIDERATIONS

Facilities may be required to accommodate both imaging film (X-ray boxes) and computerised images (computer screens).

For additional room considerations and details refer to Room Data Sheets and Room Layout Sheets.

Part B - Health Facility Briefing and Planning

110 ACUTE SPINAL UNIT

INDEX

Description

110 .1.00	INTRODUCTION General
	PLANNING Functional Areas Functional Relationships
	DESIGN General
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

General

110 .2.00	The Acute Spinal Unit provides for the acute therapeutic needs of patients following trauma or other disabling events. It also provides for the ongoing case management of complex issues such as spasticity, chronic pain, bladder and bowel function and interpersonal relationships.
110 .3.00	The overall aim of the Acute Spinal Unit is for the patient to achieve maximum independence. To achieve this aim, it is vital to maintain a continuum of care involving close liaison between acute care, rehabilitation care and community services.

PLANNING

Functional Areas

110 .4.00	The Acute Spinal Unit will consist of the following Functional Areas: <ul style="list-style-type: none">- Patient Areas including Acute Bedrooms, Non-acute Bedrooms and Ensuites- Staff Areas including Staff Station, Offices, Meeting Rooms, Staff Change and Toilets- Support Areas including Utilities, Stores, Beverage Bay and Cleaner's Room; Support areas may also be shared between adjacent Units.
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Functional Relationships

110 .5.00	The acute spinal unit will ideally be located close to the following units or facilities: <ul style="list-style-type: none">- Intensive Care Unit- Operating Unit- Helipad for emergency transfers- Spinal Rehabilitation Inpatient Unit- Rehabilitation therapy areas.
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Part B - Health Facility Briefing and Planning

DESIGN

General

- 110.6.00 The design of the Acute Spinal Unit should contribute to reducing noise and activity levels within the patient environment. The Acute Spinal Unit should not form a thoroughfare to any other unit or department.
- 110.7.00 The design for an Acute Spinal Unit should take into account that the Unit will need to accommodate patients of a wide age range, from young adults to elderly. Visibility from the Staff Station to patient beds is to be maximised.

COMPONENTS OF THE UNIT

Introduction

- 110.8.00 The Acute Spinal Unit may consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets and Room Layout Sheets.

Standard Components

- 110.9.00 Provide the Standard Components as identified in the Generic Schedule of Accommodation.

Non-Standard Components

- 110.10.00 There are no Non-Standard Components in the Acute Spinal Unit.

APPENDICES

Acute Spinal Generic Schedule of Accommodation

- 110.11.00 Schedule of Accommodation for an Acute Spinal Unit of 10 beds:

PATIENT AREAS

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED BAY - ACUTE	see remarks				5 x 20	5 x 20	Similar to Standard Component for 1 Bed Room-Critical Care
1 BED ROOM - SPECIAL	yes				4 x 18	4 x 18	For patients stabilised but not yet ready for Rehabilitation
1 BED ROOM - ACUTE	see remarks				1 x 22	1 x 22	Similar to Standard Component for 1 Bed Room-Critical Care
ENSUITE - STANDARD	yes				4 x 5	4 x 5	
ENSUITE - SPECIAL	yes				2 x 7	2 x 7	

110.12.00 STAFF AREAS

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes				1 x 3	1 x 3	

Part B - Health Facility Briefing and Planning

BAY - HANDWASHING	yes				2 x 1	2 x 1	In addition to handbasins for each bed
BAY - LINEN	yes				1 x 2	1 x 2	
BAY - MOBILE EQUIPMENT	yes				1 x 4	1 x 4	
BAY - RESUS TROLLEY	yes				1 x 2	1 x 2	
CLEAN UTILITY	yes				1 x 12	1 x 12	
DIRTY UTILITY	yes				1 x 10	1 x 10	
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9	1 x 9	Unit Manager
STAFF STATION	yes				1 x 14	1 x 14	
TOILET - STAFF	yes				1 x 2	1 x 2	
CIRCULATION %					40	40	

110.13.00 SHARED AREAS

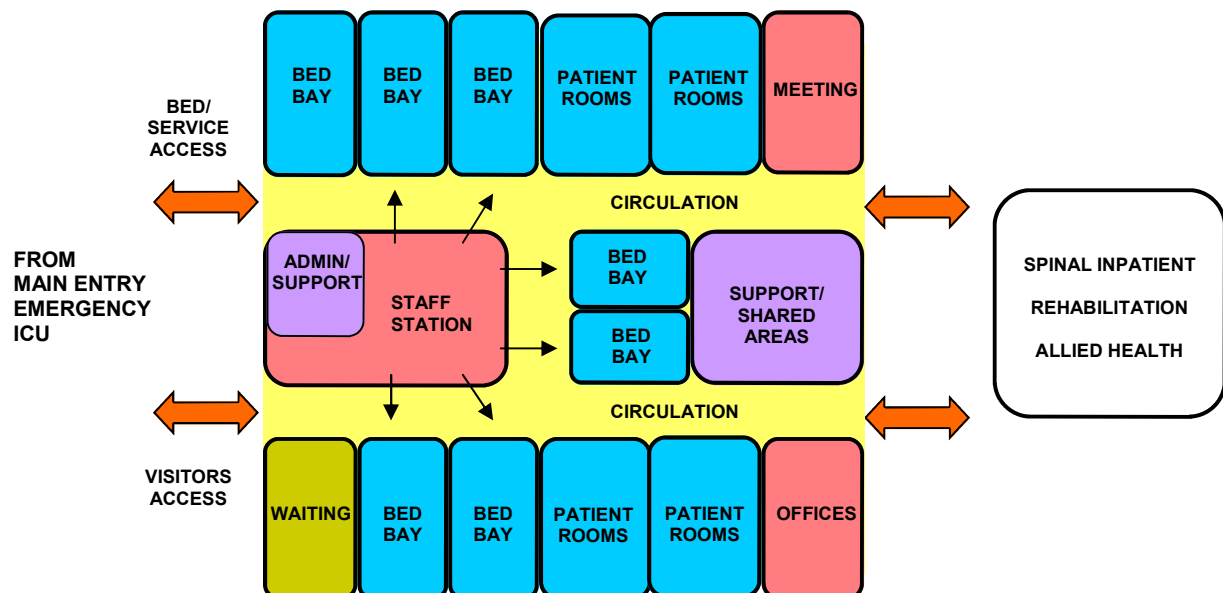
ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CLEANER'S ROOM	yes				1 x 4	1 x 4	
MEETING ROOM - SMALL	yes				1 x 9	1 x 9	For Distressed Relatives
MEETING ROOM - MEDIUM	yes				1 x 15	1 x 15	
OFFICE - CLINICAL/ HANDOVER	yes				1 x 12	1 x 12	
PROPERTY BAY - STAFF	yes				1 x 6	1 x 6	
STAFF ROOM	yes				1 x 15	1 x 15	
STORE - EQUIPMENT	yes				1 x 20	1 x 20	
STORE - GENERAL	yes				1 x 9	1 x 9	

References and Further Reading

- 110.14.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - NSW Health, SESAHS Redevelopment Unit, Project Definition Plan: POW/PHH Spinal Medicine & Rehabilitation Unit, 2000.
 - NSW Health, DS-12 Health Building Guidelines, 20 Bed Assessment & Rehabilitation Inpatient Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - ACUTE SPINAL UNIT



Part B - Health Facility Briefing and Planning

120 ADMINISTRATION UNIT

INDEX

Description

120 .1.00	INTRODUCTION General
	PLANNING Functional Areas Functional Relationships
	DESIGN Occupational Health and Safety
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Generic Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

General

120 .2.00	The level and range of facilities provided for general office and executive administration functions will vary greatly depending on the size of the proposed facility, the range of services prescribed in the Operational Policy Statement, and the management arrangements that will apply.
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PLANNING

Functional Areas

120 .3.00	Facilities shall be provided to accommodate the following administrative functions according to the Operational Policy: <ul style="list-style-type: none">- General and/or individual office accommodation for appropriate clerical, administrative, medical and nursing personnel, if required- Storage of office equipment, stationery and supplies- Meetings and conferences as required.
120 .4.00	The Administrative and Clerical staff shall have access to toilet and dining facilities, which may be shared with other hospital staff.

Functional Relationships

120 .5.00	Administration facilities should be provided, where possible, in reasonable proximity to the main entrance of the facility.
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Part B - Health Facility Briefing and Planning

DESIGN

Occupational Health and Safety

- 120 .6.00 Consideration shall be given to the role of computers in the planning and design of the area. Ergonomic design, lighting, etc. shall address occupational health issues. Refer to Part C - Access, Mobility, OH&S for specific design requirements related to ergonomics.

COMPONENTS OF THE UNIT

Introduction

- 120 .7.00 The Administration Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 120 .8.00 Provide the Standard Components as identified in the Generic Schedule of accommodation. Provision of Offices, Workstations and support areas will be dependant on the Operational Policy and service demand and may vary from the Schedule of Accommodation, however, room sizes should remain consistent.

Non-Standard Components

- 120 .9.00 There are no Non-Standard Components in this Unit.

Part B - Health Facility Briefing and Planning

APPENDICES

Administration Generic Schedule of Accommodation

120.10.00 Schedule of Accommodation for an Administration Unit in a Hospital at Levels 3, 4, 5 and 6:

STAFF AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - CEO	yes			1 x 15	1 x 15	1 x 15	Room size includes a small meeting area within the room
OFFICE - SINGLE PERSON 12 M2	yes		1 x 12	1 x 12	1 x 12	1 x 12	Director Clinical/ Nursing Service
OFFICE - SINGLE PERSON 12 M2	yes			1 x 12	1 x 12	1 x 12	Director Finance
OFFICE - 2 PERSON SHARED	yes				1 x 12	1 x 12	Accounts
OFFICE - WORKSTATION	yes				3 x 6	3 x 6	Assistants to Directors
OFFICE - WORKSTATION	yes				6 x 6	6 x 6	Accounts / Clerical staff
RECEPTION	yes			1 x 10	1 x 10	1 x 10	
STORE - FILES	yes		1 x 10	1 x 10	1 x 10	1 x 10	Accounts, Records
STORE - PHOTOCOPY/ STATIONERY	yes		1 x 8 optional	1 x 8	1 x 8	1 x 8	
CIRCULATION %			20	20	20	20	

120.11.00 SUPPORT AREAS
(Support Areas are dependent on the Operational Policy and management structure):

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9 optional	1 x 9 optional	1 x 9 optional	Manager Human Resources
OFFICE - SINGLE PERSON 9M2	yes				6 x 9 optional	6 x 9 optional	Human Resources personnel for Nursing, Medical and General staff
OFFICE - SINGLE PERSON 9M2	yes				1 x 9 optional	1 x 9 optional	Casemix
OFFICE - SINGLE PERSON 9M2	yes				1 x 9 optional	1 x 9 optional	Quality Assurance
OFFICE - SINGLE PERSON 9M2	yes				1 x 9 optional	1 x 9 optional	Public Relations
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9 optional	1 x 9 optional	1 x 9 optional	Information Technology
OFFICE - 2 PERSON SHARED	yes		1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional	Accounts and Payroll
OFFICE - WORKSTATION	yes				4 x 6 optional	4 x 6 optional	Human Resources personnel for Nursing, Medical and General staff
OFFICE - WORKSTATION	yes				3 x 6 optional	3 x 6 optional	Casemix

Part B - Health Facility Briefing and Planning

OFFICE - WORKSTATION	yes				2 x 6 optional	2 x 6 optional	Information Technology
OFFICE - WORKSTATION	yes		2 x 6 optional	3 x 6 optional	8 x 6 optional	8 x 6 optional	General staff

120.12.00 SHARED AREAS

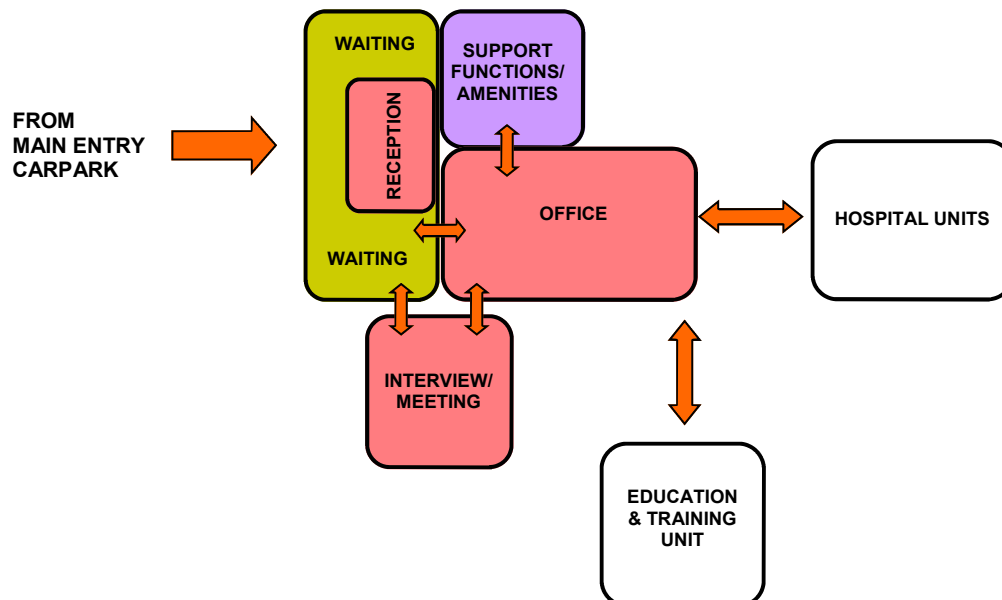
ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes		1 x 3	1 x 3	1 x 3	1 x 3	
INTERVIEW ROOM	yes		1 x 9	1 x 9	1 x 9	1 x 9	
MEETING ROOM - LARGE	yes		1 x 30	1 x 30	1 x 36	1 x 36	Board Room
MEETING ROOM - MEDIUM	yes		1 x 20	1 x 20	1 x 20	1 x 20	
STAFF ROOM	yes				1 x 15	1 x 15	
TOILET - STAFF	yes		2 x 2	2 x 2	6 x 2	6 x 2	Quantities will be dependant on staffing establishment
WAITING	yes		1 x 6	1 x 6	1 x 10	1 x 10	

References and Further Reading

- 120.13.00 - Australian Standard 3590 Screen -based workstations Parts 1, 2 & 3, 1990.
- Health Department Western Australia, Private Hospital Guidelines, 1988.
 - Standards Australia, Handbook: Ergonomics - The human factor, A practical approach to work systems design, SAA HB59-1994.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - ADMINISTRATION UNIT



Part B - Health Facility Briefing and Planning

130 ADMISSIONS UNIT

INDEX

General

- 130 .1.00 INTRODUCTION
General
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Generic Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

General

- 130 .2.00 The range of facilities provided for Admissions will vary depending on the size of the proposed facility and the range of services prescribed in the Operational Policy. Admissions functions may also be accommodated in the Main Reception area.

PLANNING

Functional Areas

- 130 .3.00 The Admissions Unit should accommodate the following functions:
- Patient admissions
 - Patient interviews or private discussions
 - Cashier
 - Bed allocations.

Functional Relationships

- 130 .4.00 The Admissions Unit should ideally be located adjacent to the Main Reception area with close access to public amenities and waiting areas.

COMPONENTS OF THE UNIT

Introduction

- 130 .5.00 The Admissions Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 130 .6.00 Provide the Standard Components as identified in the Generic Schedule of Accommodation. Provision of accommodation for Admissions will depend on the Operational Policy and service demand.

Part B - Health Facility Briefing and Planning

Non-Standard Components

130.7.00 Provide the Non-Standard Components described in this section, according to Operational Policy and service demand.

130.8.00 CASHIER

DESCRIPTION AND FUNCTION

Secured area for payment transactions. The area will include an office or workstation and a secure serving counter. The size may vary according to the number of personnel to be accommodated.

130.9.00 LOCATION AND RELATIONSHIPS

The Cashier should be located close to the Main Entrance area with ready access to public amenities.

130.10.00 CONSIDERATIONS

The Cashier's area will require security provisions. Provisions for electronic funds payments and transfers should also be available.

APPENDICES

Admissions Generic Schedule of Accommodation

130.11.00 The Schedule of Accommodation-Admissions for a 120 bed Level 4 Hospital:

ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
CASHIER				1 x 9 optional			
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional			Manager
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional			Security
CIRCULATION %				20			

130.12.00 SHARED AREAS

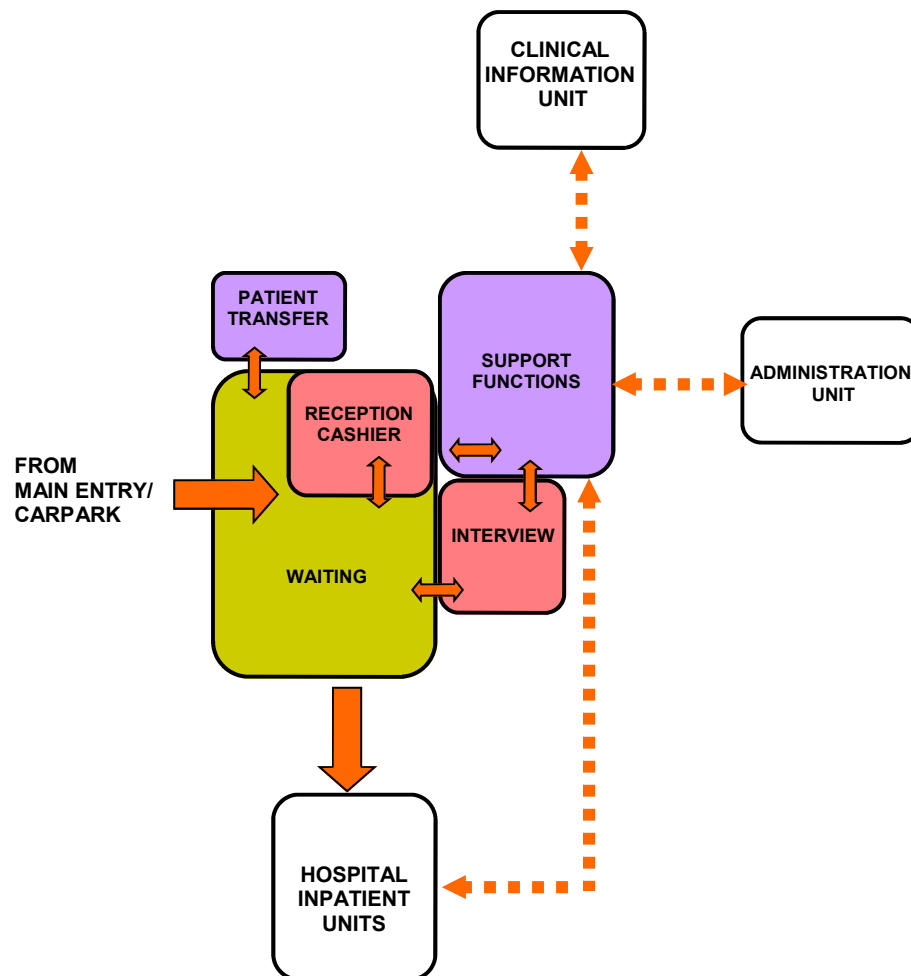
ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
BAY - MOBILE EQUIPMENT	yes			1 x 6			For wheelchairs, may be accommodated in Main Entrance area
OFFICE - SINGLE PERSON 9 M2	yes			3 x 9			May also be provided as cubicles
RECEPTION	yes			1 x 12			May be shared with the Main Reception
WAITING	yes			1 x 20			May be shared with the Main Reception

References and Further Reading

130.13.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - ADMISSIONS UNIT



132 ADOLESCENT/ CHILD & FAMILY ACUTE MENTAL HEALTH INPATIENT UNITS

INDEX

Description

132 .1.00	INTRODUCTION Description
	PLANNING Functional Areas Functional Relationships
	DESIGN General Safety and Security
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedules of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

132 .2.00	<p>The Adolescent Acute Mental Health Inpatient Unit provides short term acute inpatient mental health assessment and treatment of young people between 10 -12yrs and 16 -18 years where community approaches have proven (or are likely to prove) inadequate. The Child and Family Acute Mental Health Inpatient Unit admits young people up to 10 to 12 years of age.</p> <p>The design, layout and functionality of both the Child and Family and the Adolescent Units should meet the developmental needs of their age cohorts. Notably, the Child and Family Unit should enable active family involvement in daily care, treatment and program activities including family admission and residence where appropriate. An Adolescent Unit and a Child and Family Unit may be co-located to optimise staffing arrangements and efficient use of resources. Where co-located, they should be operated as two discrete service types with separate functional areas, programs and activities although co-location clearly offers opportunities to share some facilities.</p>
132 .3.00	<p>The patients in each unit will have a broad range of mental health problems and disorders and challenging behaviours that must be managed safely and effectively. Both the Child and Family Unit and the Adolescent Unit admit children and young people at varying stages of social, emotional and intellectual development which the layout and design of the units will need to accommodate. Young people in the Adolescent Unit will have families and others involved in their care who should feel welcome on the unit. Children in the Child and Family Unit will usually be admitted with at least one other family member also in residence.</p> <p>The unit may admit and treat patients who have:</p> <ul style="list-style-type: none">- A risk of self injury- A risk of self neglect- A risk of injury to others- A severe affective disorder

Part B - Health Facility Briefing and Planning

- Psychosis including early onset schizophrenia
- Pervasive developmental disorders
- Anorexia nervosa and related eating disorders
- Severe anxiety disorders
- Obsessive compulsive disorder
- Tourette's syndrome
- Comorbid drug and alcohol problems
- Severe family relationship difficulties.

PLANNING

Functional Areas

132 .4.00 The Units will cater for both male and female clients and family members (Child and Family Unit). Bed rooms in the Child and Family Unit will also need to accommodate family members in a bed sitting arrangement with a separate bedroom to the child. They may share an Ensuite arrangement

132 .5.00 Support areas required in Adolescent / Child & Family Units will include:

- Room that can be used for legislative functions (eg: Mental Health Review Board sittings in Victoria); this room could be a multi-purpose room made available for a sitting of the Board. It will not be required in the Child and Family Unit.
- Multipurpose Group Therapy/ Activity rooms that can also be used for education purposes
- Large Interview Rooms to accommodate families

The Units will each require immediate access to outdoor space for recreation activities.

Storage will be required for general ward equipment, occupational therapy equipment and a range of age appropriate, therapy, sport and recreation equipment in each setting.

Office accommodation should be located in a non-patient area of the unit with secured access/ egress.

132 .6.00 ASSESSMENT/ MEDICATION ROOM (may be a shared facility):

A suitably equipped room for physical/ neurological examinations which will also contain locked cupboards for dressings, medications and emergency equipment in keeping with legislative requirements. The Room will require two entry/ exit doors.

132 .7.00 EXTERNAL RELAXATION/ ACTIVITIES AREAS

Each Unit will require a discrete and separate out of doors relaxation area. These areas will not be locked but access to and from the units should be only from the respective Unit and easily observed and monitored by staff. Staff should however be able to prevent access to these areas at night. A common external activity area may be shared if Units are co-located.

132 .8.00 HIGH DEPENDENCY / INTENSIVE CARE UNIT (Adolescent Unit only):

The Adolescent Unit will require a lockable high dependency unit consisting of at least one seclusion room (public mental health facilities only operated in accord with the Mental Health Act 1986) and toilet/bath/ shower room opening onto a locked lounge area which in turn has immediate access to an external secure courtyard separate to other external recreation areas. Entry to this area directly from outside the Unit will be required for police assisted admissions or

Part B - Health Facility Briefing and Planning

where a young person is highly disturbed and at immediate risk of harm to themselves or others.

132.9.00 PATIENT BEDROOMS

Single patient bedrooms shall be provided, each with an Ensuite. The patient bedroom doors must be able to be unlocked from the outside, even if locked on the inside. It is advisable to have the capacity to restrict the access to the Ensuite.

The fittings and furniture required for a Child and Family/ Adolescent Mental Health Units include:

- Built-in wardrobe
- Built-in desk
- Pinboard for photos and posters.

Fittings must not provide opportunities for self harm and are to have a breaking strain of less than 15 kg. Blinds to external windows are to be within double glazing. Chairs should be light weight and flexible.

132.10.00 Services will include the following:

- Two power outlets - RCD protected
- Staff alarm system.

Medical gases will not be required.

132.11.00 PATIENT ENSUITES

An Ensuite shall be provided to each bedroom to comply with Standard Components Ensuite - Mental Health. The fittings must not provide opportunities for self harm and are to have a breaking strain of less than 15 kg.

132.12.00 PARENT/ FAMILY/ CARER BEDROOMS (Child and Family Unit only)

Bedrooms for parents or other family members should include a double bed and a single bed and be of sufficient size to allow a fold away cot for very young children. A shared Ensuite to enable parents/ carers to look after their child accommodated in another room should be available to each parent/ family/ carer bedroom.

132.13.00 QUIET/TIME OUT ROOM (Child and Family Unit only):

The unit will require a room to be used for quiet time/ time out for agitated and distressed children. The room should be located in an area that will minimise disruption to unit activities. The room will be very plain and simple with unbreakable fittings. The room should have ready access to a toilet and washing facilities close by that does not require traversing the unit.

132.14.00 RECEPTION/ ENTRY AREA

The entrance to each unit should be readily observable from the nursing station/office and should incorporate a greeting/ waiting area for family, friends and others which is separated from all other functional areas on the units. The area should assist staff to prevent unauthorised entry to the unit and to provide a safe and therapeutic environment for children, adolescents and family members (Child and Family Unit only). Passive observation of the patient activity / recreation area from the ward office / nurses station is desirable.

Part B - Health Facility Briefing and Planning

Functional Areas

132.15.00 OFFICE ACCOMMODATION

Offices and workstations shall be provided according to the Operational Policy and staffing establishment. The Office area should be located in the 'patient-free' area of the unit. Administrative and Office areas may be shared with adjacent Units.

Functional Relationships

132.16.00 The Child and Family / Adolescent Acute Mental Health Inpatient Units shall have functional relationships with the following units, services and organizations:

- Emergency Unit
- Paediatric Inpatient Unit
- Paediatric Outpatient services
- Child Protection Unit
- Departments of Education, Community Services, Juvenile Justice, Police and Ambulance
- Diagnostic Pathology Unit
- Allied Health Unit
- Early childhood services
- Child and family support services
- Other CAMHS community services including intensive outreach services and day programs
- Drug treatment services
- Adult Mental Health Services
- Adolescent medical units.

DESIGN

General

132.17.00 The following design issues are mandatory requirements:

- Access to the Unit must not be through other units, also the unit must not form a thoroughfare to any other unit
- Bedrooms should provide a comfortable domestic environment with comfortable, robust furniture and furnishings
- All glazing must be safety glass such as 'Lexan' or similar products
- Where co-located, the Child and Family and Adolescent Acute Mental Health Inpatient Units should allow full independent operation and separation while enabling common use of appropriate facilities
- Rooms and equipment need to meet the therapeutic and educational requirements of the patient group, with provisions for video conferencing in at least one large family Meeting Room and video taping in at least one Interview Room or wet and dry Therapy/ Play Room.

Safety and Security

132.18.00 The entry to the Adolescent and Child & Family Acute Mental Health Inpatient Units should have a direct view of the Reception / Staff Station. Security features are required at all entrances and exits. These may include electronic locking, intercoms, and video surveillance.

The Entry areas to both Units require a Visitors' Toilet - Disabled with baby change facilities and a Waiting Area in close proximity.

A separate secured entry may be required for patients arriving with a police escort (applicable to Adolescent Units only).

All Meeting, Counselling, Group Therapy, Family Therapy and Review Board Meeting rooms require two means of egress and a duress alarm.

Part B - Health Facility Briefing and Planning

Furniture should be robust but light weight and designed to minimise damage or injury likely to occur if thrown.

These design elements should not be evident to the casual observer.

COMPONENTS OF THE UNIT

Introduction

- 132 .19.00 The Adolescent Acute Mental Health Inpatient Unit and the Child & Family Acute Mental Health Inpatient Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 132 .20.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 132 .21.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation.

- 132 .22.00 DINING ROOM / PANTRY/ KITCHEN

DESCRIPTION AND FUNCTION

An area for staff and parents/ family members (Child and Family Unit) to prepare meals and snacks.

- 132 .23.00 LOCATION AND RELATIONSHIPS

Ready access is required between the Dining Room and Pantry but with the ability to secure the kitchen area if needed. Access and space will be required for food trolleys.

- 132 .24.00 CONSIDERATIONS

Fittings, fixtures and equipment will include:

- Dining tables and chairs
- Bench with sink, cupboards and drawers
- Dishwasher
- Microwave oven - secured
- Domestic refrigerator.

- 132 .25.00 PLAY THERAPY ROOM (Child & Family Unit Only)

DESCRIPTION AND FUNCTION

A Play Therapy Room shall be provided for 'regressive' therapies such as artwork, doll play and clay modelling. The room shall be designed with the young child 10-12 years in mind.

- 132 .26.00 LOCATION AND RELATIONSHIPS

The Play Therapy Room should be located within the patient treatment /

Part B - Health Facility Briefing and Planning

therapy zone of the Unit.

132 .27.00 CONSIDERATIONS

Fittings, fixtures and equipment will include:

- Bench, open under
- Storage cupboards for materials
- Whiteboard
- Chairs
- Handbasin with soap and paper towel fittings.

Finishes should be smooth and easily cleaned, flooring should be vinyl.

132 .28.00 RECREATION / DAY AREA

DESCRIPTION AND FUNCTION

A Recreation / Day area shall be provided for a wide range of activities including watching TV, listening to music, computer and other activities.

132 .29.00 LOCATION AND RELATIONSHIPS

The area requires ready access to the secured courtyard and must be overseen from the Staff Station.

132 .30.00 CONSIDERATIONS

Fittings and furniture should be suitable for children up to 10-12 years, for parents in residence in the Child and Family Unit and for teenagers and their visiting family members in the Adolescent Unit.

Part B - Health Facility Briefing and Planning

APPENDICES

Adolescent/Child & Family Units Generic Schedule of

132.31.00 Schedules of Accommodation for an Adolescent Acute Mental Health Inpatient Unit and Child & Family Acute Mental Health Inpatient Unit for Levels 5/ 6:
(note Level 6 is similar to Level 5 with the addition of research functions)

ADOLESCENT ACUTE MENTAL HEALTH INPATIENT UNIT

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED ROOM - MENTAL HEALTH	yes				12 x 15	12 x 15	
ASSESSMENT/ MEDICATION ROOM					1 x 12	1 x 12	May be shared with Child & Family Unit if co-located
BAY - HANDWASHING	yes				3 x 1	3 x 1	
BAY - LINEN	yes				1 x 2	1 x 2	
DINING ROOM					1 x 20	1 x 20	
ENSUITE - MENTAL HEALTH	yes				12 x 5	12 x 5	
EXTERNAL SECURE COURTYARD					1 x 30	1 x 30	
MULTIPURPOSE ROOM					1 x 20	1 x 20	For Classroom use, games, arts & craft, etc
PANTRY / KITCHEN AREA	see remarks				1 x 12	1 x 12	Refer to Standard Component - Pantry; may be co-located with Dining Room
RECREATION / DAY AREA					1 x 30	1 x 30	
CIRCULATION %					30	30	

132.32.00 ADOLESCENT HIGH DEPENDENCY UNIT

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BATHROOM	see remarks				1 x 12	1 x 12	Refer to Standard Component - Bathroom; with Mental Health standard fittings
EXTERNAL SECURE COURTYARD					1 x 12	1 x 12	
LOUNGE / SITTING AREA					1 x 16	1 x 16	
SECLUSION ROOM	yes				1 x 14	1 x 14	

132.33.00 CHILD & FAMILY ACUTE MENTAL HEALTH INPATIENT UNIT - 8 BED

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED ROOM - MENTAL HEALTH	yes				8 x 15	8 x 15	

Part B - Health Facility Briefing and Planning

ASSESSMENT/ MEDICATION ROOM					1 x 12	1 x 12	May be shared with Adolescent Unit if co-located
BAY - HANDWASHING	yes				2 x 1	2 x 1	
BAY - LINEN	yes				1 x 2	1 x 2	
BATHROOM	yes				1 x 12	1 x 12	Mental Health standard fittings; Locate close to time out area
BEDROOM - PARENT'S					1 x 12	1 x 12	Adjoining Patient Bedroom, Ensuite shared with Patient Bedroom
DINING ROOM					1 x 15	1 x 15	
ENSUITE - MENTAL HEALTH	yes				8 x 5	8 x 5	
EXTERNAL SECURE COURTYARD					1 x 25	1 x 25	
MULTIPURPOSE ROOM					1 x 20	1 x 20	For use as Classroom, for games, arts & craft etc
PANTRY/ KITCHEN	see remarks				1 x 12	1 x 12	Refer to Standard Component - Pantry
PLAY THERAPY					1 x 12 optional	1 x 12 optional	
QUIET / TIME OUT ROOM					1 x 12	1 x 12	
RECREATION/ DAY AREA					1 x 20	1 x 20	
SITTING ROOM - PARENT'S					1 x 10	1 x 10	Adjoining Parent's and Patient's Bedroom

132 .34.00 STAFF AND SUPPORT AREAS

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes				1 x 3	1 x 3	Co-located with Staff Room
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Unit Manager
OFFICE - SINGLE PERSON 12 M2	yes				2 x 12 optional	2 x 12 optional	Psychiatrist, Psychologist
OFFICE - 2 PERSON SHARED	yes				2 x 12	3 x 12	For use by Allied Health, teachers
OFFICE - WORKSTATION	yes				6 x 6 optional	6 x 6 optional	
STAFF STATION	yes				1 x 14	1 x 14	May also function as Reception
STAFF ROOM	yes				1 x 15	1 x 15	For Unit staff

132 .35.00 SHARED AREAS

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CLEANER'S ROOM	yes				1 x 4	1 x 4	
CLEAN UTILITY	yes				1 x 12	1 x 12	

Part B - Health Facility Briefing and Planning

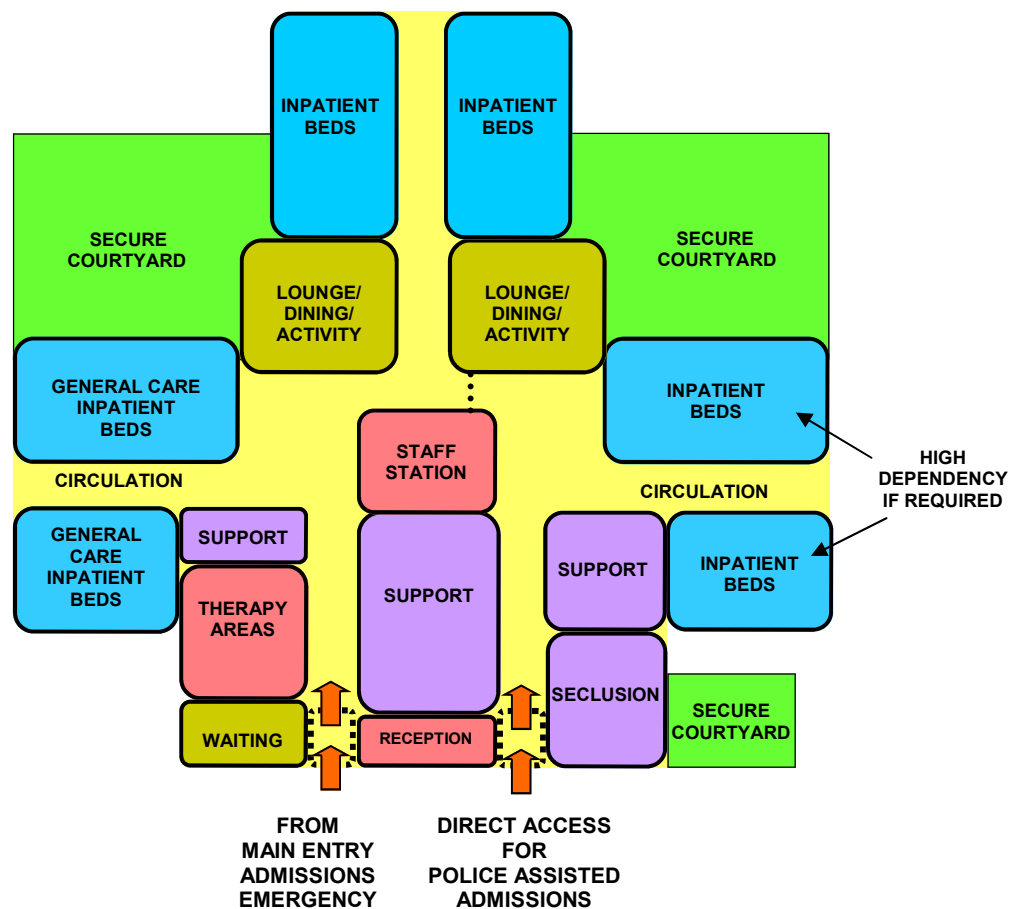
CONSULT ROOM	yes				2 x 12	2 x 12	
DIRTY UTILITY	yes				1 x 10	1 x 10	
DISPOSAL ROOM	yes				1 x 8	1 x 8	
MEETING ROOM	yes				2 x 15	2 x 15	For Counselling
MEETING ROOM	yes				1 x 30	1 x 30	For Mental Health Review Board Sitings, Education sessions etc
OFFICE - CLINICAL/ HANDOVER	yes				1 x 12	1 x 12	
PROPERTY BAY - STAFF	yes				1 x 6	1 x 6	
SHOWER - STAFF	yes				1 x 2	1 x 2	
STORE - GENERAL	yes				1 x 9	1 x 9	
TOILET - DISABLED	yes				1 x 5	1 x 5	
TOILET - STAFF	yes				2 x 2	2 x 2	
WAITING	yes				1 x 12	1 x 12	

References and Further Reading

- 132 .36.00 - NSW Health - Hunter Area Health Service, HAHS Capital Works, Project Definition Plan: Child and Adolescent Mental Health, 2001.
- NSW Health, Design Standard 26 - Mental Health Facility Planning Guideline, 2000.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - ADOLESCENT/CHILD & FAMILY ACUTE MENTAL HEALTH UNIT



Part B - Health Facility Briefing and Planning

134 ADULT ACUTE PSYCHIATRIC INPATIENT UNIT

INDEX

Description

- 134 .1.00 INTRODUCTION
General
- PLANNING
Planning Models
Functional Areas
Functional Relationships
- DESIGN
Environmental Considerations
Fixtures and Fittings
Safety and Security
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

General

- 134 .2.00 This section is applicable to:
- A stand alone Adult Acute Psychiatric Inpatient Unit or group of units
 - A dedicated Adult Acute Psychiatric Inpatient Unit within a general hospital
 - A number of dedicated Patient Bedrooms as an annexe to an Acute Inpatient Unit.
- 134 .3.00 The Operational Policy shall determine the size and function of the Adult Acute Psychiatric Inpatient Unit.
- 134 .4.00 An Adult Acute Psychiatric Inpatient Unit shall comply with the requirements outlined for Inpatient Accommodation, but with the noted modifications or additions in this section.

PLANNING

Planning Models

- 134 .5.00 Some patients may at times exhibit disturbed or high risk behaviour. Appropriate planning and use of materials (for example safety glass, low maintenance/ resilient surface etcetera) can achieve an environment where all patients can co-exist with minimal disruption to each other. The building should be able to accommodate patients of all levels of disturbance without taking on the characteristics of a jail.
- 134 .6.00 Externally the principal concept of planning should be to integrate the new facility with its surrounds, and with the other buildings. Planning of external spaces must take into account the requirement for provision of a secure garden associated with the High Dependency area, and an open garden area

Part B - Health Facility Briefing and Planning

for general use. This area should be around 80 m2.

- 134 .7.00 The design of external spaces, as for the building, should be domestic in nature, rather than formal or monumental. They should have the following features:
- The building should consciously have a front and a back
 - It should provide opportunities for privacy, recreation and self expression
 - It should provide opportunities for movement/ambulation both indoors and outdoors with unobtrusive environmental boundaries and with appropriate safety provisions
 - Single rooms are recommended.
- 134 .8.00 Additional considerations include:
- Flexibility of space usage through consideration of a range of patient needs for personal and shared space
 - Clearly defined patient residential areas readily identifiable by patients who may be disoriented or disturbed
 - An effective balance between opportunities for patients' privacy and the need for staff to observe patient behaviours.

Functional Areas

- 134 .9.00 The Adult Acute Psychiatric Inpatient Unit will consist of a number of functional areas or zones as follows:
- Main Entry/ Reception / Clerical area
 - Assessment/ Procedural area
 - Staff Offices/ Administrative and management area
 - Staff Amenities area
 - Inpatient Area including outdoor areas
 - Secure Area including secured courtyard
- 134 .10.00 ADMINISTRATION AND OFFICE AREAS
- The Unit Manager's Office should be located in, or directly adjacent to the patient area and in particular, the Staff Station.
- 134 .11.00 There should be the capacity to control patient's access to administrative and office areas. There may be a requirement for a communication system between interview areas and the Staff Station to signal the need for assistance. There should be provision for a Secure Store as part of the Group/View Room to house audio-visual equipment.
- 134 .12.00 ADMISSIONS AREA
- The Admissions area will comprise an Admission Office, general purpose Interview Room and Examination Room and will be used by nursing, allied health and medical staff to interview relatives/ patients. Examination and consultation of patients will be carried out in these areas. Duress alarms are required in all these areas.
- 134 .13.00 The Admissions Area should be directly screened from the Waiting Area. Noise transmission between these rooms and the waiting area should be reduced to a minimum so that conversations are not overheard.
- 134 .14.00 DAY ROOMS
- At least two separate social spaces shall be provided, one for quiet activities and one appropriate for noisy activities.

Part B - Health Facility Briefing and Planning

Functional Areas

134.15.00 DRUG DISPENSING / STORAGE

The Drug Distribution Station shall include extra provision for security against unauthorised access.

134.16.00 ECT FACILITIES

ECT procedures should be undertaken in the Day Procedures Unit, ECT Suite or Operating Unit.

134.17.00 ENSUITES

In a psychiatric facility whose role is covered by the Mental Health Act or equivalent, Ensuite doors are to be fitted with locks, that can be overridden by staff.

134.18.00 ENTRY AREAS

The Entrance provides direct access to the unit for patients referred for admission as involuntary patients arriving either via police or ambulance and alternative access to the unit for patients arriving via the Emergency Unit of the main hospital.

Provision should be made for a gun safe (that complies with relevant firearms legislation) that allows Police to deposit firearms when they are in attendance at the Inpatient Unit.

134.19.00 The Emergency Entrance should be capable of direct approach by ambulance/ police vehicles and should have sufficient shelter to allow transfer of patients in shelter from the elements. The Entrance should have an airlock capable of accepting an ambulance trolley with ease.

134.20.00 There should be provision for an intercom between the Emergency Entrance and the Staff Station.

134.21.00 The Entrance Area zone of the building should attempt to break down the 'threshold' feeling of many institutional buildings, while maintaining a sense of direction to the approach.

134.22.00 GROUP THERAPY AREA

Space for group therapy shall be provided. This may be combined with the quiet space noted above, provided that an additional 0.7 m² per patient is added and a minimum room area of 21 m², enclosed for privacy, is available for therapy activities.

134.23.00 HIGH DEPENDENCY / SECLUSION / INTENSIVE CARE AREA

The high dependency bedrooms must be lockable and accessible to both the low dependency and high dependency sections of the unit.

Intensive Care Area refers to a High Dependency Unit in a Private mental health facility. The High Dependency/ Intensive Care Areas will require access to a Seclusion Room.

Only Approved Mental Health services under the Mental Health Act can seclude Mental Health patients.

Part B - Health Facility Briefing and Planning

Functional Areas

134 .24.00 The High Dependency Unit, for client and staff safety purposes, should back on to the Staff Station to ensure easy visibility of the interior of the High Dependency Unit and rapid response in times of patient emergency. Patients in this area will require access to a secured courtyard.

134 .25.00 OCCUPATIONAL THERAPY AREA

Each Adult Acute Psychiatric Inpatient Unit shall contain 1.5 m2 of separate space per patient for Occupational Therapy with a minimum total area of 20.0 m2.

134 .26.00 The space shall include provisions for:

- Hand-washing
- Workbenches
- Storage
- Displays.

Occupational Therapy Areas may serve more than one Inpatient Unit.

Functional Relationships

134 .27.00 The Adult Acute Psychiatric Inpatient Unit should be located with ready access to the Emergency Unit, Main Entry and service and support areas including Catering Unit, Cleaning/ Housekeeping, Linen Handling, Waste Management and Supply Unit.

DESIGN

Environmental Considerations

134 .28.00 ACOUSTICS

Acoustic treatment should be applied to the following areas:

- Day Areas such as patient living, dining and activities areas
- Consulting Rooms
- Admission Areas.

134 .29.00 In acoustically treated rooms, return air grilles should be acoustically treated to avoid transfer of conversations to adjacent areas. Door grilles to these areas should be avoided.

134 .30.00 WINDOWS AND GLAZING

For glazing, graduate the impact resistance of the glass from toughest at lower level to weakest at high level. Avoid glazing at floor level particularly to doors.

134 .31.00 In areas where damage to glass may be expected, avoid larger pane sizes. Smaller panes are inherently stronger for a given thickness than larger panes. Where toughened glass is used it should be treated with a protective film to ensure glass is held together when broken.

134 .32.00 Laminated / toughened glass of various thicknesses should be installed dependent upon the likelihood of patient injury or building damage.

134 .33.00 All windows and observation panels shall be glazed with safety glass or a suitable alternative material such as polycarbonate.

Environmental Considerations

- 134 .34.00 Where windows are openable, effective security features such as narrow windows that will not allow patient escape, shall be provided. Locks, under the control of staff, shall be fitted. The aesthetics are to be warm and user-friendly wherever possible.

Fixtures & Fittings

- 134 .35.00 Fixtures and fittings should be safe and durable.
- 134 .36.00 Avoid exposed services, for example, sink wastes which may be easily damaged.
- 134 .37.00 Generally, all fixings should be heavy duty, concealed, and where exposed, tamper proof.
- 134 .38.00 Fittings, including hooks, curtain tracks, bathroom fittings, should be plastic where possible, and have a breaking strain of not more than 15kgs.
- 134 .39.00 Fittings should avoid the potential to be used either as a weapon or to inflict personal damage. Paintings, mirrors and signage should be rigidly fixed to walls with tamper proof fixings.
- 134 .40.00 Mirrors shall be of safety glass or other appropriate impact resistant and shatterproof construction. They shall be fully glued to a backing to prevent availability of loose fragments of broken glass.
- 134 .41.00 Holland blinds, Venetian blinds and curtains should be avoided in patient areas.
- 134 .42.00 Curtain tracks, pelmets and other fittings that provide potential for patients to hang themselves should be avoided or designed so that the potential is removed.
- 134 .43.00 Light fittings, smoke detectors, thermal detectors and air-conditioning vents to higher dependent areas, particularly Seclusion Rooms, should be vandal proof and incapable of supporting a patient's weight.

Safety and Security

- 134 .44.00 Security within the facility and the surrounding outdoor area as it relates to patient movements, requires careful consideration. The security of access for staff, community and domestic service deliveries should also be considered.
- 134 .45.00 The following additional aspects should be considered:
- Safety of patients and staff
 - Patients' legal rights
 - The status of the hospital or part thereof under the Mental Health Legislation in force at the time of development.
- 134 .46.00 The design should assist staff to carry out their duties safely and to supervise patients by allowing or restricting access to areas in a manner which is consistent with patients needs/skills. Staff should be able to view patient movements and activities as naturally as possible, whenever necessary.

Part B - Health Facility Briefing and Planning

Safety and Security

- 134 .47.00 Controlled and/or concealed access will be required as an option in a number of functional areas. Functionally the only difference between an open and a closed (locked) area in their design should be the provision of controls over the flow to, from and throughout the facility. Such controls should be as unobtrusive as possible.
- 134 .48.00 An Adult Acute Psychiatric Inpatient Unit providing services not covered by Mental Health Legislation, shall have general security provision as for an Inpatient Accommodation Unit, although at least one Intensive Care unit per Inpatient Unit shall be provided for emergency situations.
- 134 .49.00 Where the Adult Acute Psychiatric Inpatient Unit is providing services covered by Mental Health Legislation, the unit shall be capable of secure lockable isolation, area by area within and as a complete nursing unit. This is to ensure containment of potentially dangerous situations that may be expected with some patients, such as danger to staff and other patients and patients themselves.
- 134 .50.00 When the Adult Acute Psychiatric Inpatient Unit is located within a multi-storey building, access to external spaces above ground level such as balconies or roof is to be prevented.
- 134 .51.00 The perimeter security of the outdoor area surrounding the building is important in reducing staff anxiety in relation to patients movement and safety.
- 134 .52.00 A communication system which enables staff to signal for assistance from other staff should be included.

COMPONENTS OF THE UNIT

Introduction

- 134 .53.00 The Adult Acute Psychiatric Inpatient Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 134 .54.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 134 .55.00 Provide the Non-Standard Components as identified in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

Part B - Health Facility Briefing and Planning

APPENDICES

Adult Acute Psychiatric Unit Generic Schedule of Accommodation

134 .56.00 Schedule of Accommodation for a 25 Bed Adult Acute Psychiatric Inpatient Unit, incorporating a Secured Unit for levels 4, 5 and 6:

GENERAL INPATIENT UNIT

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED ROOM - MENTAL HEALTH	yes			21 x 15	25 x 15	25 x 15	
2 BED ROOM - MENTAL HEALTH	yes			2 x 25 optional			
BAY - HANDWASHING	yes			6 x 1	6 x 1	6 x 1	Refer to Infection Control Guidelines
BAY - LINEN	yes			2 x 2	2 x 2	2 x 2	
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	Includes Medications and Medication Dispensing area
CONSULT ROOM	yes			2 x 12	4 x 12	4 x 12	
DINING ROOM / KITCHEN				1 x 36	1 x 36	1 x 36	
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	
ENSUITE - MENTAL HEALTH	yes			23 x 5	25 x 5	25 x 5	
LOUNGE / ACTIVITY AREA				1 x 45	1 x 45	1 x 45	
MULTIFUNCTION ACTIVITY AREA				1 x 35 optional	1 x 35	1 x 35	
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9	1 x 9	1 x 9	Nursing Manager
PANTRY	yes			1 x 8	1 x 8	1 x 8	With Food Servery counter
SECURE COURTYARD AREA				1 x 60	1 x 60	1 x 60	
STAFF STATION	yes			1 x 14	1 x 14	1 x 14	
STORE - EQUIPMENT	yes			1 x 15	1 x 15	1 x 15	
STORE - FILES	yes			1 x 10	1 x 10	1 x 10	
STORE - GENERAL	yes			1 x 9	1 x 9	1 x 9	
STORE - PATIENT PROPERTY				1 x 8 optional	1 x 8 optional	1 x 8 optional	
CIRCULATION %				35	35	35	

Part B - Health Facility Briefing and Planning

134.57.00 SECURED UNIT

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED ROOM - MENTAL HEALTH	yes			4 x 15 optional	6 x 15	6 x 15	Fixtures & Fittings suitable for Secured Mental Health Unit
ENSUITE - MENTAL HEALTH	yes			4 x 5 optional	6 x 5	6 x 5	Fixtures & Fittings suitable for Secured Mental Health Unit
ENTRY - SECURED				1 x 6 optional	1 x 6	1 x 6	
LOUNGE / DINING / ACTIVITIES ROOM				1 x 15 optional	1 x 20	1 x 20	
SECLUSION ROOM	yes			1 x 14 optional	2 x 14	2 x 14	Level 4 is an Intensive care Unit in a Private health facility
SECURED COURTYARD				1 x 30 optional	1 x 60	1 x 60	
TOILET - PATIENT	see remarks			1 x 4 optional	3 x 4	3 x 4	Fixtures & Fittings suitable for Secured Mental Health Unit

134.58.00 SHARED AREAS

Note: Offices and Support Areas are dependent on the Operational Policy:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BATHROOM	yes			1 x 10	1 x 10	1 x 10	Fittings and Fictus suitable for mental health patients
BAY - BEVERAGE	yes			1 x 3	1 x 3	1 x 3	Locate adjacent to Staff Room / Conference Room
MEETING ROOM	yes			1 x 25 optional	1 x 25	1 x 25	Also for Mental Health Review Board sittings
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12	1 x 12	Director
OFFICE - SINGLE PERSON 12 M2	yes			1 x 12	1 x 12	1 x 12	Psychiatrist, according to staffing establishment
OFFICE - 2 PERSON SHARED	yes			1 x 12	1 x 12	1 x 12	Medical Personnel
OFFICE - 4 PERSON SHARED	yes				1 x 20	1 x 20	Allied Health, According to staffing establishment
PROPERTY BAY - STAFF	yes			1 x 6	1 x 6	1 x 6	
RECEPTION	yes			1 x 10	1 x 10	1 x 1	
STAFF ROOM	yes			1 x 15	1 x 15	1 x 15	
TOILET - DISABLED	yes			1 x 5	1 x 5	1 x 5	
TOILET - STAFF	yes			1 x 2	2 x 2	2 x 2	
TREATMENT ROOM	yes				1 x 15	1 x 15	For Examination / Assessment
WAITING	yes			1 x 15	1 x 15	1 x 15	

References and Further Reading

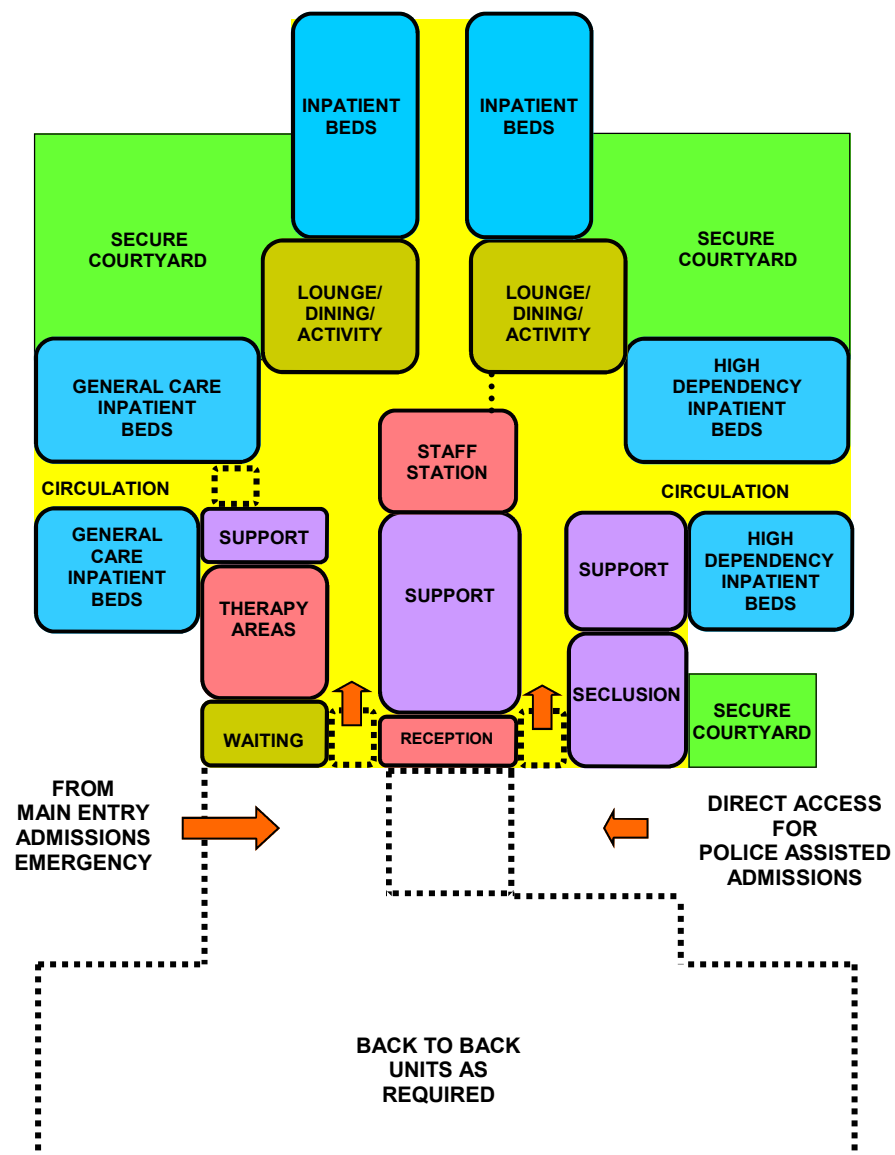
- 134.59.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.

Part B - Health Facility Briefing and Planning

- Department of Human Services: Aged Community & Mental Health Division, Acute Psychiatric Inpatient Unit - 25 Beds Generic Brief, 1996.
- Health Department Western Australia, Private Hospital Guidelines, 1998.
- NSW Health, Design Standard 26 Health Building Guidelines - Adult and Adolescent Mental Health Acute Inpatient Units, 2002.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - ADULT ACUTE PSYCHIATRIC UNIT



Part B - Health Facility Briefing and Planning

135 AGED PERSONS ACUTE PSYCHIATRIC UNIT

INDEX

Description

135 .1.00	INTRODUCTION General
	PLANNING Planning Models Functional Areas Functional Relationships
	DESIGN General Environmental Considerations Fixtures and Fittings Safety and Security
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Generic Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

General

135 .2.00	The Aged Persons Acute Psychiatric Unit specifically offers a service to adults 65 years and over. It functions as a secure unit. Some patients will be admitted on an involuntary basis. It must provide a safe, restorative environment. Patients may have: <ul style="list-style-type: none">- Tendency to wander, become lost or abscond- Reduced personal and social skills and require assistance with personal hygiene, dressing, toileting and eating- Disturbed or aggressive behaviours (verbal / physical)- Confusion, bewilderment, agitation, memory loss- Repetitive, persistent or noisy behaviour- Resistance to care- Withdrawn behaviour- Intentional self harming behaviour- Physical co-morbidity.
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PLANNING

Planning Models

135 .3.00	Some patients may at times exhibit disturbed or high risk behaviour. Appropriate planning and use of materials (for example safety glass, low maintenance/ resilient surfaces etc.) can achieve an environment where all patients can co-exist with minimal disruption to each other. The building should be able to accommodate patient of all levels of disturbance without taking on the characteristics of a jail.
135 .4.00	Externally the principle concept of planning should be to integrate the new facility with its surrounds, and with the other buildings. Planning of external

Part B - Health Facility Briefing and Planning

spaces must take into account the requirement for provision of a secure garden. This area should be around 80 m² for 20 patients.

- 135 .5.00 The design of external spaces, as for the building, should be domestic in nature rather than formal or monumental. They should have the following features:
- The building should consciously have a front and a back
 - It should provide opportunities for privacy, recreation and self expression
 - It should provide opportunities for movement/ ambulation both indoors and outdoors with unobtrusive environmental boundaries and with appropriate safety provisions
 - Single rooms with ensuites are recommended.
- 135 .6.00 Additional considerations include:
- Flexibility of space usage through consideration of a range of patient needs for personal and shared space
 - Clearly defined patient accommodation areas identifiable by patients who may be disoriented or disturbed
 - An effective balance between opportunities for patients' privacy and the need for staff to observe patient behaviours.

Functional Areas

- 135 .7.00 The Aged Persons Acute Psychiatric Unit will consist of a number of functional areas or zones as follows:
- Main Entry/ Reception/ Clerical area
 - Assessment/ Admissions area
 - Staff Offices/ Administrative area
 - Staff Amities Area
 - Inpatient Accommodation Areas including outdoor areas; patient accommodation can be divided into smaller functional zones of approximately 10 to 15 beds

135 .8.00 ADMINISTRATION AND OFFICE AREAS

The Unit Manager's Office should be located in, or directly adjacent to the patient area and in particular, the Staff Station.

There should be the capacity to control patient's access to administrative and office areas. There may be a requirement for a communication system between interview areas and the Staff Station to signal the need for assistance.

135 .9.00 ADMISSIONS AREA

The Admissions area will comprise an Admission Office, general purpose Interview Room and Examination Room and will be used by nursing, allied health and medical staff to interview relatives/ patients. Examination and consultation of patients will be carried out in these areas. Duress alarms are required in all these areas.

The Admissions Area should be directly screened from the Waiting Area. Noise transmission between these rooms and the waiting area should be reduced to a minimum so that conversations are not overheard.

135 .10.00 DRUG DISPENSING / STORAGE

The Drug Distribution Station shall include extra provision for security against unauthorised access.

Part B - Health Facility Briefing and Planning

Functional Areas

135 .11.00 ECT FACILITIES

ECT procedures should be undertaken in the Day Procedures Unit.

135 .12.00 ENSUITES

In a psychiatric facility whose role is covered by the Mental Health Act or equivalent, Ensuite doors are to be fitted with locks, activated from without, that can be solely under the control of staff.

135 .13.00 ENTRY AREAS

The Emergency Entrance provides direct access to the unit for patients referred for admission as involuntary patients arriving either via police or ambulance and alternative access to the unit for patients arriving via the Emergency Unit of the main hospital.

The Emergency Entrance should be capable of direct approach by ambulance/ police vehicles and should have sufficient shelter to allow transfer of patients in shelter from the elements. The Entrance should have an airlock capable of accepting an ambulance trolley with ease.

There should be provision for an intercom between the Emergency Entrance and the Staff Station.

135 .14.00 The Main Entrance Area zone of the building should attempt to break down the 'threshold' feeling of many institutional buildings, while maintaining a sense of direction to the approach.

135 .15.00 STAFF STATION

There is a need for visual connection between the staff base and the Main Entry to the unit.

Functional Relationships

135 .16.00 The Aged Persons Acute Psychiatric Unit should be located with ready access to the Emergency Unit, Main Entry and service and support areas including Catering Unit, Cleaning/ Housekeeping, Linen Handling, Waste Management and Supply Unit.

DESIGN

General

135 .17.00 The basic concept of the Aged Persons Acute Psychiatric Unit should avoid the impersonal, institutional structures associated with hospitals. Generally the design of the unit should create a pleasant, reassuring atmosphere whilst retaining necessary functional requirements.

Environmental Considerations

135 .18.00 The Main Entrance Area / Waiting Room is the first point of contact with the unit for members of the community. It will communicate that the building is part of the community and that service users are valued members of the community. It will communicate to relatives/carers that they are welcome and that a wide range of concerns may be discussed with the staff of the facility.

Access must be suitable for people with locomotor disabilities, including those who use walking aids. Staff will have the option of controlling access from

Part B - Health Facility Briefing and Planning

Entrance Areas to the patient areas and to the outdoors. The main entrance doors may be electrically operated by night staff with connected remote control devices. However, it may be safer for staff to go to the door to allow entry to and from the unit, particularly after hours. An intercom system may also be advisable.

The Waiting Area will need to accommodate four to six people, and at least one wheelchair.

135 .19.00 ACOUSTICS

Acoustic treatment should be applied to the following areas:

- Day Areas such as patient living, dining and activities areas
- Consulting Rooms
- Admission Areas.

In acoustically treated rooms, return air grilles should be acoustically treated to avoid transfer of conversations to adjacent areas. Door grilles to these areas should be avoided.

135 .20.00 WINDOWS AND GLAZING

For glazing, graduate the impact resistance of the glass from toughest at lower level to weakest at high level. Avoid glazing at floor level particularly to doors.

In areas where damage to glass may be expected, avoid larger pane sizes. Smaller panes are inherently stronger for a given thickness than larger panes. Where toughened glass is used it should be treated with a protective film to ensure glass is held together when broken.

135 .21.00 Laminated / toughened glass of various thicknesses should be installed dependent upon the likelihood of patient injury or building damage. All windows and observation panels shall be glazed with safety glass or a suitable alternative material such as polycarbonate.

135 .22.00 Where windows are openable, effective security features such as narrow windows that will not allow patient escape, shall be provided. Locks, under the control of staff, shall be fitted. The aesthetics are to be warm and user-friendly wherever possible.

Fixtures & Fittings

135 .23.00 Fixtures and fittings should be safe and durable.

135 .24.00 Avoid exposed services, for example, sink wastes which may be easily damaged.

135 .25.00 Generally, all fixings should be heavy duty, concealed, and where exposed, tamper proof.

135 .26.00 Fittings, including hooks, curtain tracks, bathroom fittings, should be plastic where possible, and have a breaking strain of not more than 15kgs.

135 .27.00 Fittings should avoid the potential to be used either as a weapon or to inflict personal damage. Paintings, mirrors and signage should be rigidly fixed to walls with tamper proof fixings.

Fixtures & Fittings

- 135 .28.00 Mirrors shall be of safety glass or other appropriate impact resistant and shatterproof construction. They shall be fully glued to a backing to prevent availability of loose fragments of broken glass.
- 135 .29.00 Holland blinds, Venetian blinds and curtains should be avoided in patient areas.
- 135 .30.00 Curtain tracks, pelmets and other fittings that provide potential for patients to hang themselves should be avoided or designed so that the potential is removed.
- 135 .31.00 Light fittings, smoke detectors, thermal detectors and air-conditioning vents to higher dependent areas, particularly Seclusion Rooms, should be vandal proof and incapable of supporting a patient's weight.

Safety and Security

- 135 .32.00 As a result of behavioural disabilities, patients require care in an environment modified for safety and security. In this regard, the following general design considerations are relevant:
- Sound insulation is important as disturbed behaviour may be noisy, and intrusive external noises may increase agitation
 - Fittings, fixtures and surfaces should have a safe finish and surfaces should be smooth but not slippery
 - Controlled or concealed access to some functional areas will be necessary
 - The unit will require appropriate visuo-spatial cues, to maximise patient's abilities and minimise disabilities
 - The spatial requirements for organised day programmes that are consistent with patient needs and interests must be catered for within the unit.
- 135 .33.00 The security system is an extremely important part of the design. It must be as unobtrusive as possible. Internal security should allow the patients to wander during the day, however, it should be possible to arm doors in the evening and at night. There will be a security fence around the entire perimeter of the external area to which patients have access.

The major security considerations relate to patient safety if they access functional areas where their disabilities would put them at risk. The risk of patients leaving the building and surrounding outdoor area without the assistance or supervision of staff and relatives also raises safety issues.

In this regard, the security of the building and surrounding outdoor areas may be broadly considered as three zones:

- Perimeter security
 - An intermediate security area or buffer zone that allows access for the community and domestic service deliveries and collections; Staff, visitors and patients must pass through this area in order to leave the facility
 - Internal security areas that are flexible and operate at staff discretion. Functional areas may have locked/controlled access.
- 135 .34.00 The following additional aspects should be considered:
- Safety of patients and staff
 - Patients' legal rights
 - The status of the hospital or part thereof under the Mental Health Legislation in force at the time of development.
- 135 .35.00 The design should assist staff to carry out their duties safely and to supervise patients by allowing or restricting access to areas in a manner which is

Part B - Health Facility Briefing and Planning

consistent with patients needs/skills. Staff should be able to view patient movements and activities as naturally as possible, whenever necessary.

- 135 .36.00 Controlled and/or concealed access will be required as an option in a number of functional areas. Functionally the only difference between an open and a closed (locked) area in their design should be the provision of controls over the flow to, from and throughout the facility. Such controls should be as unobtrusive as possible.
- 135 .37.00 An Aged Persons Acute Psychiatric Inpatient Unit providing services not covered by Mental Health Legislation or equivalent, shall have general security provision as for an Inpatient Accommodation Unit, although at least one Seclusion Room per Inpatient Unit shall be provided for emergency situations.
- 135 .38.00 Where the Aged Persons Acute Psychiatric Inpatient Unit is providing services covered by Mental Health Legislation, or equivalent, the unit shall be capable of secure lockable isolation, area by area within and as a complete nursing unit. This is to ensure containment of potentially dangerous situations that may be expected with some patients, such as danger to staff and other patients and patients themselves.
- 135 .39.00 When the Aged Persons Acute Psychiatric Inpatient Unit is located within a multi-storey building, access to external spaces above ground level such as balconies or roof is to be prevented.
- 135 .40.00 The perimeter security of the outdoor area surrounding the building is important in reducing staff anxiety in relation to patients movement and safety.
- 135 .41.00 A communication system which enables staff to signal for assistance from other staff should be included.

COMPONENTS OF THE UNIT

Introduction

- 135 .42.00 The Aged Persons Acute Psychiatric Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with Standard Components in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 135 .43.00 Provide the Standard Components as identified in the Generic Schedule of accommodation.

Non-Standard Components

- 135 .44.00 Provide the Non-Standard Components as described in this section.

- 135 .45.00 ACTIVITIES / OCCUPATIONAL THERAPY ROOM

DESCRIPTION AND FUNCTION

The Activities/ Occupational Therapy Room will be used for therapeutic activity programmes. These may include exercises to music, table games and

Part B - Health Facility Briefing and Planning

stimulating activities. Films/videos may be shown.

135 .46.00 LOCATION AND RELATIONSHIPS

The Activities/ Occupational Therapy Room should be located in the service core but be easily accessible from all patient areas. Access from the activity area to toilet facilities, therapy equipment store and the Interview / Consulting Room is required. A view of the Outdoor Area and access to the Outdoor Area are desirable.

The activities area may be adjacent to the Meeting / Seminar Room, offering shared access to the audio-visual equipment store cupboard. Visual contact from the adjoining passage is also desirable.

Access from the activity area to the equipment store, the audio-visual store cupboard and to the outdoors, must all have the potential for security control. The door from the adjoining passage into the activity area must be able to be locked.

135 .47.00 CONSIDERATIONS

Seating should be provided for up to 30 patients, three or four staff and three or four visitors that may use this area at any one time.

Sound insulation of this area is important. In this way, quiet activities will not be disturbed by noise from other parts of the building. Similarly, noisy activities will not disturb staff/ patients in office/ patient areas.

Refer to Standard Components - Meeting Room Large for room requirements. Additional provisions will include the following:

- Handwashing
- Workbenches
- Storage
- Displays
- Blackout curtains
- Noticeboards in a poster display area
- Telephone.

135 .48.00 DINING ROOM

DESCRIPTION AND FUNCTION

A domestic style kitchen can be shared between two 10 to 15 bed zones. Each 10 to 15 bed zone will require a patient Dining Room for patient meals. An important aspect of the daily routine will be mealtime and after-meals relaxation within each unit.

135 .49.00 LOCATION AND RELATIONSHIPS

The Dining Room should be adjacent to the Lounge and Kitchen Areas and have access to the outdoors. Natural light will enhance the environment and the design should incorporate views to the outdoors from the Dining Room.

135 .50.00 CONSIDERATIONS

Tables should be arranged in such a way as to enable independent movement by patients. Tables should be oblong or square, not circular as these offer confusing visuo-spatial cues.

Non-Standard Components

135 .51.00 KITCHEN

DESCRIPTION AND FUNCTION

Each 10 to 15 bed zone will require access to a domestic style Kitchen. This area will offer patients the opportunity to maintain residual domestic skills, however this will be primarily part of a supervised activity programme. The Kitchen requires an oven and hot plates that can be key locked for safety purposes, space for a microwave, and a telephone point.

135 .52.00 LOCATION AND RELATIONSHIPS

The Kitchen should be located adjacent to the Dining and Lounge Areas of the unit.

135 .53.00 CONSIDERATIONS

Restricted access to equipment will be required. A kitchen gate may be required.

Refer to Standard Components - Pantry for basic room requirements. Additional fittings and fixtures will include:

- Oven and hot plates - lockable
- Grill - lockable
- Rangehood

135 .54.00 OUTDOOR AREAS

DESCRIPTION AND FUNCTION

The Outdoor Areas should provide a pleasant setting for the building. The Outdoor Areas should enable patients to maintain ambulation and domestic skills and offer opportunities for recreation and socialisation. The design of the Outdoor Areas should be domestic in style in order to communicate familiarity to patients. Formal areas with traditional front garden shrubs and flowers should be toward the front of the building.

The Outdoor Areas may also include a lockable barbecue area and an external assisted toilet with handbasin. There should be extensive provision for walking, including covered areas or verandas where patients can walk under shelter during inclement weather conditions.

135 .55.00 LOCATION AND RELATIONSHIPS

Ideally the garden should be a logical extension of the living areas of the unit with the windows and exterior doors providing views to the garden.

Building and maintenance services and fire services will require access to the Outdoor Areas. All access points should be suitable for wheelchairs and the walking paths fairly flat.

Access to the outdoors will be from a number of points within the internal security area.

135 .56.00 CONSIDERATIONS

Protection from the sun and wind, and reduction of glare should be provided. The garden should be a continuous spatial unit with strongly defined boundaries. It is preferred that the patients cannot see through the boundary covering and patient's privacy be maintained.

Part B - Health Facility Briefing and Planning

Pathways must be non slip and some heavy and stable domestic gardening equipment should be provided.

The perimeter security fence should abut the intermediate security area. This fence should be secure and concealed to some extent by trees, shrubs and creepers. All external doors should be lockable and the only access for visitors to the outdoor security area should be via the intermediate security area.

The area surrounding the perimeter fence may be landscaped with some insulation. Plants may be planted on the outside of the fence in the event of those inside not being allowed to grow.

135 .57.00 QUIET ROOM

DESCRIPTION AND FUNCTION

The Quiet Room is a separate room that is centrally located and does not open onto a lounge area. The function of a Quiet Room is to provide a safe, quiet rest area for patients who are agitated. Staff may also use the Quiet Room for confidential conversations between themselves or with patients and relatives. It is a room where patients/visitors/staff can express emotion, either on their own or in the company of chosen individuals.

135 .58.00 LOCATION AND RELATIONSHIPS

The Quiet Room should be remote from the living areas of the units. It should preferably be located adjacent to the staff base so that it is visually and physically accessible from the Staff Station. A view to the outside will assist in creating a relaxing and calming atmosphere. Adequate sound insulation is required between the passage and other adjoining areas.

135 .59.00 CONSIDERATIONS

Seating for up to four people is needed. Colours and furnishings shall be soft, to create a calming environment. Stimulation should be kept to a minimum. The room should have a window and be relatively central.

Part B - Health Facility Briefing and Planning

APPENDICES

Aged Acute Psychiatric Unit Generic Schedule of Accommodation

135 .60.00 Schedule of Accommodation for a 30 Bed Aged Persons Acute Psychiatric Unit at Levels 4, 5 and 6
(Note: Level 6 is similar to Level 5 with the addition of teaching and research functions):

PATIENT AREAS

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED ROOM - MENTAL HEALTH	yes			18 x 15	30 x 15	30 x 15	May be arranged in clusters of 10-15 Beds
2 BED ROOM - MENTAL HEALTH	yes			6 x 25 optional			May be arranged in clusters of 10-15 Beds
ENSUITE - MENTAL HEALTH	yes			24 x 5	30 x 5	30 x 5	
KITCHEN				3 x 8	3 x 8	3 x 8	One Kitchen required for each cluster of 10-15 beds
LOUNGE - PATIENT	yes			3 x 15	3 x 15	3 x 15	One Lounge required for each cluster of 10-15 Beds; with external view
MEETING ROOM - LARGE	yes			1 x 30	1 x 30	1 x 30	Activities / Occupational Therapy Room
SECLUSION ROOM	yes			1 x 14	1 x 14	1 x 14	Level 4 is an Intensive Care Unit in a Private Health Facility

135 .61.00 STAFF AREAS
(Provision of Offices and Support Areas such as Staff and Meeting rooms will depend on the Operational Policy and management structure):

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes			1 x 3	1 x 3	1 x 3	Co-locate with Staff Room
BAY - HANDWASHING	yes			7 x 1	7 x 1	7 x 1	Refer to Part D Infection Control
BAY - LINEN	yes			3 x 2	3 x 2	3 x 2	
BAY - MOBILE EQUIPMENT	yes			1 x 4	1 x 4	1 x 4	For Wheelchairs
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	1 x 2	
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	Includes Medications and Medication Dispensing Area
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9	1 x 9	1 x 9	Manager
OFFICE - 4 PERSON SHARED	yes				1 x 20 optional	1 x 20 optional	

Part B - Health Facility Briefing and Planning

STAFF STATION	yes			1 x 14	1 x 14	1 x 14	
STORE - GENERAL	yes			1 x 9	1 x 9	1 x 9	
STORE - EQUIPMENT	yes			1 x 20	1 x 20	1 x 20	
CIRCULATION %				35	35	35	

135 .62.00 SHARED AREAS

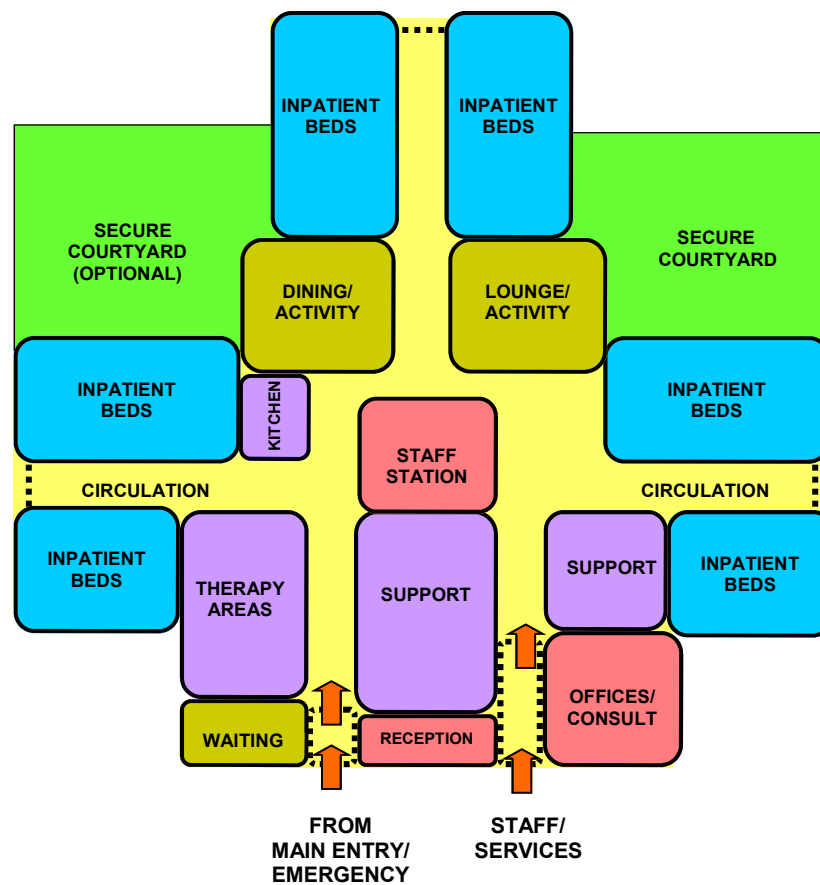
ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BATHROOM	yes			1 x 10	1 x 10	1 x 10	Fixtures and Fittings suitable for mental health patients
CONSULT ROOM	yes			1 x 12	2 x 12	2 x 12	
DINING ROOM				3 x 20	3 x 20	3 x 20	One Dining Room for each cluster of 10-15 Beds
MEETING ROOM - SMALL	yes			1 x 12	1 x 12	1 x 12	Quiet Room
MEETING ROOM - MEDIUM	yes			1 x 15	1 x 25	1 x 25	
MEETING ROOM - SMALL	yes				1 x 12	1 x 12	Tutorials, handovers
OFFICE - SINGLE PERSON 9M2	yes				1 x 9 optional	1 x 9 optional	May be located adjacent to Reception for general office functions
PROPERTY BAY - STAFF	yes			2 x 6	2 x 6	2 x 6	
RECEPTION	yes			1 x 10	1 x 10	1 x 10	
STAFF ROOM	yes			1 x 15	1 x 15	1 x 15	May be shared with an adjoining Unit
TOILET - DISABLED	yes			1 x 5	1 x 5	1 x 5	
TOILET - STAFF	yes			1 x 2	1 x 2	1 x 2	
TREATMENT ROOM	yes			1 x 15	1 x 15	1 x 15	
WAITING	yes			1 x 20	1 x 20	1 x 20	May be shared with other areas

References and Further Reading

- 135 .63.00 - NSW Health, Design Standard 26 - Mental Health Facility Planning Guideline, 2000.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - AGED PERSONS ACUTE PSYCHIATRIC UNIT



Part B - Health Facility Briefing and Planning

140 ALLIED HEALTH UNIT

INDEX

Description

- 140 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Environmental Considerations
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedules of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 140 .2.00 Allied Health Care covers a range of services which are primarily concerned with the provision of rehabilitation therapy.
- 140 .3.00 Facilities for most Allied Health Care Services may vary greatly, ranging from large, purpose designed, central facilities for inpatients and/or outpatients, to basic on-ward or bedside services.

PLANNING

Functional Areas

- 140 .4.00 Allied Health services may include Dietetics, Hydrotherapy, Occupational Therapy, Physiotherapy, Podiatry, Psychology, Speech Pathology, and Social Work.
- In general, the minimum requirement for provision of these services shall be the availability of appropriate Consult Rooms, Waiting Areas, Treatment/Therapy Areas, Group Activity area, access to Outpatient Facilities and storage for equipment and supplies.
- 140 .5.00 Where an Occupational Therapy service is to be provided the following functions or facilities shall be allowed for:
- Therapy areas
 - Office / administrative areas
 - Hand-washing facilities
 - Access to a Disabled Toilet
- 140 .6.00 Where a Physiotherapy service is to be provided the following facilities shall be allowed for:
- Individual treatment area or areas that provide for patient privacy
 - Staff hand-washing facilities close to each treatment space; this may serve several treatment spaces

Part B - Health Facility Briefing and Planning

- An exercise area with facilities appropriate for the level of intended service
- Clean linen storage; in the form of built in cupboards, cabinets or on mobile storage trolleys
- Storage for equipment and supplies
- Storage for soiled linen and waste
- Patient dressing and changing with secure storage of clothing and valuables
- Showering and toilet facilities
- Ice-making facilities to be available in or near the department
- Wall oxygen in patient waiting areas depending on service mode, and access to appropriate outdoor therapy areas.

These requirements shall apply where the physiotherapy service is also for outpatient use and they shall be capable of access and use by the disabled.

140 . 7.00 HYDROTHERAPY POOL

The need for a hydrotherapy pool should be carefully considered. The cost per unit of treatment is high and conditions for which hydrotherapy is the only appropriate treatment are limited. Hydrotherapy pools should only be provided where patient numbers are appropriate and where the pool is required for a minimum of four hours per day, five days per week.

Hydrotherapy Pools must comply with AS 3979 - Hydrotherapy Pools.

140 . 8.00 POOL SIZE

The recommended pool size is 7500 mm x 4500 mm. A rectangular shape is recommended, with the length of the pool generally one and a half times the width.

140 . 9.00 POOL DEPTH

To optimise the use of a pool for therapeutic purposes, consideration should be given to the average height of both the smallest users and the tallest users. The recommended minimum depth is 800 mm at the shallow end and the maximum depth is 1500 mm at the deep end.

140 . 10.00 GRADIENT OF POOL FLOOR

The floor of the pool should contain no steps.

140 . 11.00 ENTRY TO POOL

Steps are the accepted method of entry and exit and can also provide functional training. Steps should be placed at the shallow end of the pool and should not intrude into the working area of the pool.

A hoist should be provided and placed at a depth where the therapist can stand and maintain body balance to float the patient off and on the hoist without difficulty.

140 . 12.00 TEMPERATURE

The water temperature should be maintained in the range of 30 to 35 degrees Celsius with an optimum temperature of 34-35 degrees for most conditions being treated. The ambient temperature should be lower than the water temperature for comfort of pool side staff and patients.

Humidity control needs to be provided to minimise condensation. A pool cover may be considered to assist in maintaining water temperature and to reduce heating costs.

140 . 13.00 REFLECTION

Part B - Health Facility Briefing and Planning

- 140 .13.00 The lighting should allow the floor of the pool to be seen and should minimise reflection / glare off the surface of the water.
- 140 .14.00 **POOL SURROUNDS**
Non-slip surfaces shall be used for the pool surrounds. Ample space should be provided around the pool for staff and patient movement as well as to provide space for patients who are waiting to enter the pool or relaxing after leaving the pool. The building structure, including all fittings, should be rust-proof.
- 140 .15.00 **CHANGE FACILITIES**
Change facilities will be required for patients and staff; the size will be dependant upon the size of the pool and the expected number of users.
- 140 .16.00 **EMERGENCY CALL SYSTEM**
Adequate emergency call points should be provided. Emergency call points should also be accessible from the concourse area and from within the pool.
- 140 .17.00 **PLANT ROOM**
Consideration should be given to the requirements for water quality and the Plant Room requirements for associated equipment.
- 140 .18.00 **FOOTBATHS/ SHOWERS**
Footbaths, foot sprays or showers may be considered in the design of the pool area.
- 140 .19.00 **SECURITY**
Security design should address:
 - Personal security of patients and staff
 - Property security for patients and staff
 - Unit premises and equipment
 - Emergency access and egress
- 140 .20.00 **STORAGE**
Design should address the following storage requirements:
 - Therapy equipment
 - Consumables, and pool supplies
 - Pool aids and exercise equipment
 - Personal property of patient and staff

Functional Relationships

- 140 .21.00 Allied Health Areas should be located close to Rehabilitation therapy, patient treatment, day patient and inpatient areas. Ready access to storage areas is required.

DESIGN

Environmental Considerations

- 140 .22.00 Acoustic requirements of the Speech Pathology Service should be given special consideration since the effective provision of the service requires reduced intrusive noise levels.

COMPONENTS OF THE UNIT

Introduction

- 140 .23.00 Allied Health Units will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 140 .24.00 Provide the Standard Components as identified in the Generic Schedule of Accommodation. Provision of accommodation for Allied Health will be dependant on the Operational Policy and service demand.

Non-Standard Components

- 140 .25.00 Provide the Non-Standard Components as described in this section, according to Operational Policy and service demand.

- 140 .26.00 ADL BEDROOM

DESCRIPTION AND FUNCTION

The ADL Bedroom is a domestic style bedroom for patient assessment and training purposes, to assist patients to return to normal living. The ADL Bedroom may require use of wheelchairs and lifting equipment and specially adapted equipment may also be demonstrated in this space.

The ADL Bedroom shall be a minimum of 13 m2.

- 140 .27.00 LOCATION AND RELATIONSHIPS

The ADL Bedroom may be located with other ADL facilities, in the Allied Health / rehabilitation patient treatment zone, with ready access to waiting and amenities areas.

- 140 .28.00 CONSIDERATIONS

Furniture and fittings may include:

- Domestic bed
- Bedside table
- Bedside chair
- A patient/nurse call and access to an emergency call point is required
- GPOs are required for bedside use
- Fittings and finishes should be domestic in nature; the floor should be carpeted

- 140 .29.00 ADL LOUNGE

DESCRIPTION AND FUNCTION

The ADL Lounge is a domestic style lounge provided for patient assessment and training purposes. The ADL Lounge will require seating of varying heights and types, and will require access for wheelchairs and other mobility aids. The ADL Lounge may be combined with other therapy areas.

- 140 .30.00 LOCATION AND RELATIONSHIPS

Part B - Health Facility Briefing and Planning

The ADL Lounge may be located with other ADL facilities, in the Allied Health / rehabilitation patient treatment zone, with ready access to waiting and amenities areas.

140 .31.00 CONSIDERATIONS

The ADL Lounge will require the following fittings and furniture

- Lounge chairs of varying heights
- Dining chairs of varying heights

The area may be carpeted.

140 .32.00 AUDIOLOGY ROOM

DESCRIPTION AND FUNCTION

The Audiology Room is an acoustically isolated room containing an audiology booth and workstation area to undertake audiology testing and assessment.

140 .33.00 LOCATION AND RELATIONSHIPS

The Audiology Room should be located in a quiet zone within the Allied Health patient consult and treatment areas. It should have ready access to waiting and amenities areas.

140 .34.00 CONSIDERATIONS

The following fittings and equipment will be required:

- Soundproof booth
- Desk and chairs
- Staff handbasin with liquid soap and paper towel fittings
- GPOs for desk and booth
- Telephone and computer outlets

140 .35.00 OCCUPATIONAL THERAPY AREA

DESCRIPTION AND FUNCTION

The Occupational Therapy area is a large open space provided to enable a range of static and dynamic activities to take place. The area may include space for table based activities, such as upper limb activities or functional mobility activities such as woodwork or splinting activities.

The Room area will be sized according to the number of patients to be accommodated and will be dependant on Operational Policy and service demand.

140 .36.00 LOCATION AND RELATIONSHIPS

The Occupational Therapy area may be located adjacent to rehabilitation therapy areas, with ready access to waiting and amenities areas.

140 .37.00 CONSIDERATIONS

Fittings and Equipment required in this area may include:

- Benches with inset sink, wheelchair accessible
- Shelving for storage of equipment or tools
- Tables, adjustable height
- Chairs, adjustable height

Part B - Health Facility Briefing and Planning

- Hand-washing basin with liquid soap and paper towel fittings
- Pinboard and whiteboard for displays
- Sufficient GPOs for equipment or tools to be used in activity areas

140 .38.00 PODIATRY TREATMENT

DESCRIPTION AND FUNCTION

Treatment Room with a Podiatry chair for a Podiatrist to undertake assessment and treatment of the feet. The Room will also require a workstation area.

140 .39.00 LOCATION AND RELATIONSHIPS

The Podiatry Treatment Room should be located within the Allied Health patient treatment zone, with ready access to waiting and amenities areas.

140 .40.00 CONSIDERATIONS

The following fittings and services will be required:

- Bench with sink, cupboards and drawers for preparation, storage and cleaning
- Podiatry chair (may be electric and adjustable)
- X-ray viewing boxes
- Examination light to chair area
- Staff handbasin with liquid soap and paper towel fittings
- Workstation for writing-up with clerical chair
- GPOs for treatment and workstation areas
- Telephone and computer outlets

140 .41.00 STORE - LOAN POOL

DESCRIPTION AND FUNCTION

A secured room for storage of equipment and aids for loan to patients.

The room will be sized according to the amount of equipment to be accommodated.

140 .42.00 LOCATION AND RELATIONSHIPS

The Store - Loan Pool may be sited near the service entry for efficient transport of equipment for home assessments. Ready access to a cleaning area is required for cleaning equipment.

140 .43.00 CONSIDERATIONS

Fittings and services shall include:

- Shelving, heavy duty
- Hooks, for hanging equipment such as walking frames

140 .44.00 STORE - OCCUPATIONAL THERAPY

DESCRIPTION AND FUNCTION

Secured room for storage of splinting equipment, mobility aids, adaptive equipment, demonstration equipment and appliances.

The room will be sized according to the amount of equipment and

Part B - Health Facility Briefing and Planning

consumables to be accommodated.

140 .45.00 LOCATION AND RELATIONSHIPS

The Store should be located adjacent to the Occupation Therapy Room.

140 .46.00 CONSIDERATIONS

Fittings and services shall include:

- Shelving, heavy duty
- Hooks, for hanging equipment such as walking frames
- GPOs for recharging of equipment.

140 .47.00 STORE - PHYSIOTHERAPY

DESCRIPTION AND FUNCTION

Secured room for storage of electromedical equipment, mobility aids including crutches, and consumables used for Physiotherapy treatment.

The room will be sized according to the amount of equipment to be accommodated.

140 .48.00 LOCATION AND RELATIONSHIPS

The Store - Physiotherapy will be located with close access to the Gymnasium and other Physiotherapy treatment areas.

140 .49.00 CONSIDERATIONS

Fittings and services will include:

- Shelving, heavy duty
- Hooks, for hanging of equipment such as walking frames
- GPOs for recharging of equipment.

140 .50.00 TREATMENT CUBICLES

DESCRIPTION AND FUNCTION

Individual treatment cubicles are required that provide acoustic and visual privacy for the patient.

140 .51.00 LOCATION AND RELATIONSHIPS

Treatment Cubicles may be located in close proximity to the Gymnasium and other Allied Health/ Rehabilitation patient treatment areas. Close access to patient amenities is required.

140 .52.00 CONSIDERATIONS

Fittings and equipment include:

- Plinth, may be electric and/or adjustable
- Patient chair
- Clothes hooks for patient clothing
- Cubicle screen track and curtains
- Patient/nurse call point and access to an emergency call point
- Body protected power outlets
- Clinical handbasin in close proximity

Part B - Health Facility Briefing and Planning

Non-Standard Components

140 .53.00 VIEWING ROOM

DESCRIPTION AND FUNCTION

A discreet room with one-way glass for unobserved viewing of patients in therapy.

140 .54.00 LOCATION AND RELATIONSHIPS

The Viewing Room may be located adjacent to Speech Pathology Consult/ Treatment Rooms.

140 .55.00 CONSIDERATIONS

The following features will be required:

- One way glass between therapy and viewing areas
- Separately controlled lighting
- Curtain track and light proof screen curtains to viewing window (both sides)
- Viewing area to be sound isolated
- Electronic sound system from treatment to viewing area

APPENDICES

Allied Health Generic Schedule of Accommodation

140 .56.00 A Generic Schedule of Accommodation for an Allied Health Unit in a Hospital providing Rehabilitation services, at Levels 3,4,5 and 6:

ALLIED HEALTH AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
AUDIOLOGY ROOM				1 x 10 optional	1 x 10 optional	1 x 10 optional	
OFFICE - CONSULT	yes			1 x 12 optional	1 x 12 optional	1 x 12 optional	Speech Pathology
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9 optional	1 x 9 optional	1 x 9 optional	Dietetics
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9 optional	2 x 9 optional	2 x 9 optional	Social Work
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Psychology
PODIATRY TREATMENT				1 x 14 optional	1 x 14 optional	1 x 14 optional	
VIEWING ROOM				1 x 6 optional	1 x 6 optional	1 x 6 optional	Adjacent to Audiology Room if required
CIRCULATION %				25	25	25	

140 .57.00 OCCUPATIONAL THERAPY AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks

Part B - Health Facility Briefing and Planning

ADL BATHROOM	yes			1 x 12 optional	1 x 12 optional	1 x 12 optional	
ADL BEDROOM				1 x 13 optional	1 x 13 optional	1 x 13 optional	
ADL KITCHEN	yes			1 x 12 optional	1 x 12 optional	1 x 12 optional	
ADL LAUNDRY	yes			1 x 8 optional	1 x 8 optional	1 x 8 optional	May be incorporated into Occupational Therapy Room
ADL LOUNGE				1 x 12 optional	1 x 12 optional	1 x 12 optional	
LOAN POOL EQUIPMENT				1 x 14 optional	1 x 18 optional	1 x 18 optional	May be located separately; requires vehicle access
OCCUPATIONAL THERAPY ROOM				1 x 30 optional	1 x 50 optional	1 x 50 optional	Size dependant on service demand
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9 optional			Occupational Therapist
OFFICE - 4 PERSON SHARED	yes				1 x 20 optional	1 x 20 optional	Will be dependant on staffing establishment
STORE - OCCUPATIONAL THERAPY			1 x 10 optional	1 x 14 optional	1 x 20 optional	1 x 20 optional	

140.58.00 PHYSIOTHERAPY AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
GYMNASIUM	yes			1 x 45 optional	1 x 80 optional	1 x 80 optional	Size according to Operational Policy and service to be provided
OFFICE - 2 PERSON SHARED	yes			1 x 12 optional			
OFFICE - 4 PERSON SHARED	yes				1 x 20 optional	1 x 20 optional	Provision of offices will be dependant on staffing establishment
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional				
PATIENT BAY	yes			4 x 9 optional	5 x 9 optional	5 x 9 optional	Treatment Cubicles
PLASTER ROOM	yes			1 x 14 optional	1 x 14 optional	1 x 14 optional	
STORE - PHYSIO			1 x 9 optional	1 x 14 optional	1 x 20 optional	1 x 20 optional	Size will be according to equipment to be accommodated

140.59.00 SHARED AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes			1 x 3	1 x 3	1 x 3	
BAY - LINEN	yes			1 x 2	2 x 2	2 x 2	
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CONSULT ROOM	yes		1 x 12	1 x 12	2 x 12	2 x 12	
DIRTY UTILITY - SUB	yes			1 x 8	1 x 8	1 x 8	May be co-located with Disposal
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	

Part B - Health Facility Briefing and Planning

MEETING ROOM	yes			1 x 15	1 x 20	1 x 20	
PROPERTY BAY - STAFF	yes			1 x 6	1 x 6	1 x 6	
RECEPTION	yes			1 x 10	1 x 10	1 x 10	
TOILET - DISABLED	yes				1 x 5	1 x 5	
TOILET - PATIENT	yes			2 x 4	4 x 4	4 x 4	
TOILET - STAFF	yes			1 x 2	2 x 2	2 x 2	
WAITING	yes			1 x 8	1 x 10	1 x 10	

Hydrotherapy Generic Schedule of Accommodation

140 .60.00 A Generic Schedule of Accommodation for a Hydrotherapy Pool in a Hospital with a Rehabilitation Unit at Levels 4, 5 and 6:

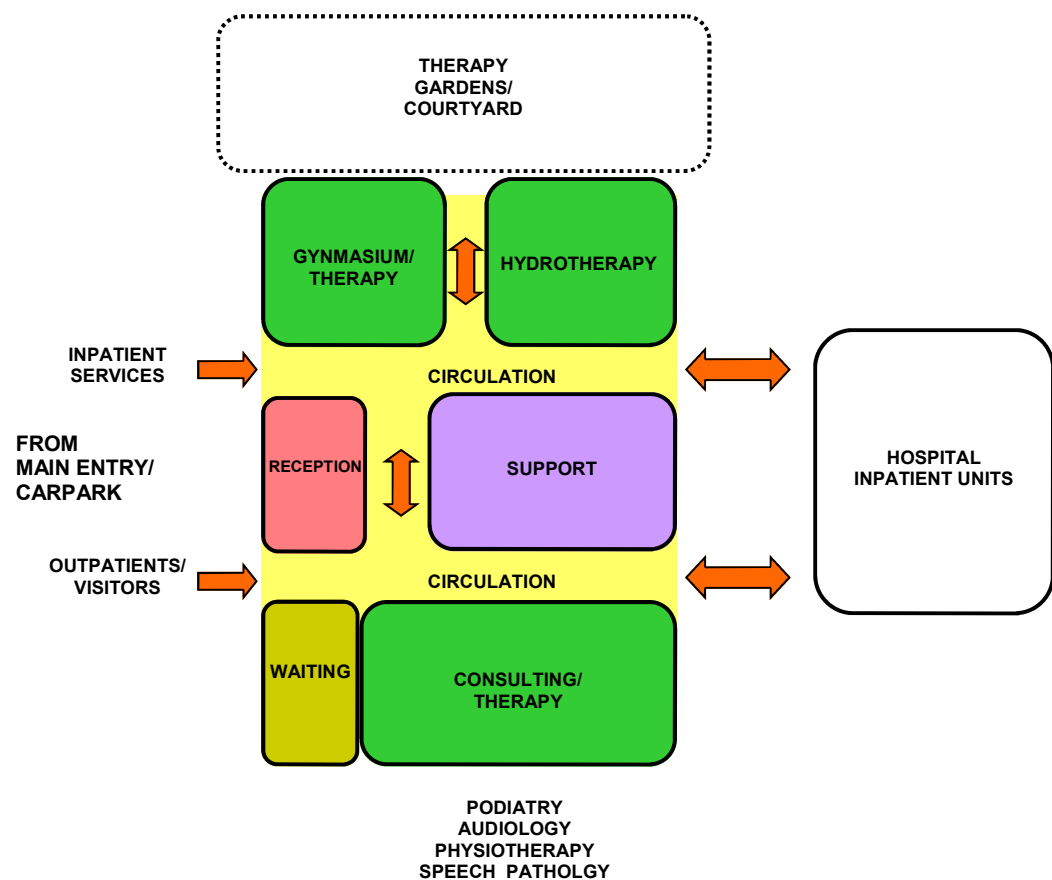
ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional	1 x 9 optional	1 x 9 optional	
OPEN SHOWER AREA				1 x 3 optional	1 x 6 optional	1 x 6 optional	This area may be included in the pool surround area
POOL AND SURROUNDS				1 x 90 optional	1 x 240 optional	1 x 240 optional	L5/6 pool size is 7.0 M x 15 M.
STORE - GENERAL	yes			1 x 9 optional	1 x 9 optional	1 x 9 optional	
SHOWER - DISABLED				1 x 5 optional	1 x 5 optional	1 x 5 optional	
TOILET - DISABLED	yes			1 x 5 optional	1 x 5 optional	1 x 5 optional	
TOILET / SHOWER / CHANGE - PATIENT				2 x 8 optional	2 x 24 optional	2 x 24 optional	
TOILET / SHOWER / CHANGE - STAFF				1 x 3 optional	1 x 6 optional	1 x 6 optional	
WORKSHOP EQUIPMENT & MATERIALS STORE				1 x 10 optional	1 x 12 optional	1 x 12 optional	
CIRCULATION %				25	25	25	

References and Further Reading

- 140 .61.00
- DHS Victoria, Aged, Community & Mental Health Division, Community Rehabilitation Centres Generic Brief, 1999.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.
 - NSW Health, DS-27 Health Building Guidelines, Rehabilitation/ Day Hospital, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - ALLIED HEALTH UNIT



Part B - Health Facility Briefing and Planning

150 AMBULANCE UNIT

INDEX

Description

- 150 .1.00 INTRODUCTION
 - Description
- PLANNING
 - Functional Relationships
- DESIGN
 - General
 - Building Service Requirements
- APPENDICES
 - References and Further Reading
 - Functional Relationships Diagram

INTRODUCTION

Description

- 150 .2.00 The specific requirements of the Ambulance Service(s) serving the area shall be obtained and complied with. These requirements will be in relation to areas such as ramp gradients, ambulance parking/unloading area gradients, height clearance and ambulance bay dimensions.
 - Note 1: Some Ambulance Services may require drive-through Ambulance Bays for efficient movement, especially at busy Emergency Units.
 - Note 2: Some Ambulance Services are not in favour of tandem ambulance parking bays and may require each Ambulance Bay to be independently accessible.

PLANNING

Functional Relationships

- 150 .3.00 Access for Ambulances shall not conflict with other vehicular or pedestrian traffic.
 - Note: Nothing in this clause prevents a section of the road or driveway being shared between an ambulance and other vehicles.
- 150 .4.00 The Ambulance Access to a Hospital shall be located away from public entrances and shall be reasonably screened from public view.
 - Note: In this context, "away from public entrances" means not shared with public entrances.
 - Note: In day procedure units that are not part of a Hospital, Ambulance Entrances may be combined with public entrances, although a separate entrance is highly recommended.
- 150 .5.00 If the Ambulance Access is directly connected to a Hospital Department (such as Emergency Unit), an air lock shall be provided between the inside and the outside.
 - Ambulance Access to an Emergency Unit shall not be via hospital corridors that are open for public access.

DESIGN

General

- 150 .6.00 The number of Ambulance Bays required depends on the services provided by the Hospital or Day Procedure Unit.

Any Hospital without an Emergency Unit, regardless of its size or level of service shall have a minimum of one Ambulance Bay.

Any Hospital with an Emergency Unit shall have one Ambulance Bay for each Resuscitation Room/Bay or a minimum of one.

- 150 .7.00 The Ambulance Collection/Drop Off Points in any Hospital must be discreet and shall be covered.

Ambulance access to and from a Day Procedure Unit must be readily accessible. A direct and dedicated way is recommended.

- 150 .8.00 Suitable access ways for trolleys will be flat (ie no ramps) and provide adequate turning circles/workspace for trolleys and carers between the entry/exit and the departments requiring access.

Doorways should be designed to allow easy access for trolleys and carers (automatic doors are recommended).

The need for ambulance vehicles to reverse should be minimised. Drive-through facilities minimise the risk to other pedestrians including staff.

Building Service Requirements

- 150 .9.00 In Ambulance Bays serving Hospitals which include an Emergency Unit, the following additional requirements shall apply:

1. A lockable storage cupboard or room no less than 2 m² shall be provided for Ambulance supplies. The cupboard or room shall have adjustable shelves and be lockable with a separate key or keypad lock.
2. A hose cock with attached hose shall be located close to an Ambulance Bay serving an Emergency Unit. It is recommended that the hose cock and hose be located in a discrete cabinet or recessed bay.
3. An intercom system shall be provided between the Ambulance door and the Emergency Unit Reception/Clerical Area, Triage Area or Staff Station. The Intercom system shall be integrated with a security CCTV system located to clearly show those requesting entry.
4. Emergency Units in Level 5 or 6 Facilities will require a Decontamination Area. If provided, this may be integrated with the Ambulance Bay by incorporating shower heads in a section of the Ambulance Bay ceiling. This may be further enhanced by a retractable plastic screen to contain the water flow. Any water flowing out of such a decontamination area shall be treated as contaminated water and treated accordingly.

- 150 .10.00 LIGHTING

Any Ambulance Bay used for access to an Emergency Unit or a Birthing Unit shall be permanently lit during the night.

In other Hospitals and Day Procedure Units, an Ambulance Bay shall have

Part B - Health Facility Briefing and Planning

adequate lighting systems to be used as needed. This may involve a manual switch, timer or movement detector.

150.11.00 SIGNAGE

All Ambulance Bays shall be clearly marked and sign-posted. The external signage system shall direct ambulances and vehicles carrying emergency cases to the Ambulance Bays. These sign(s) shall be clearly visible at the entrance to the Hospital and/or any major change of direction.

Signs directed to ambulance bays intended for emergency units or birthing units shall be permanently lit during the night.

In order to avoid confusion, the signage system shall be designed in such a way that ambulant patients, including ambulant access to an emergency unit are not to be directed to the ambulance bay or ambulance door.

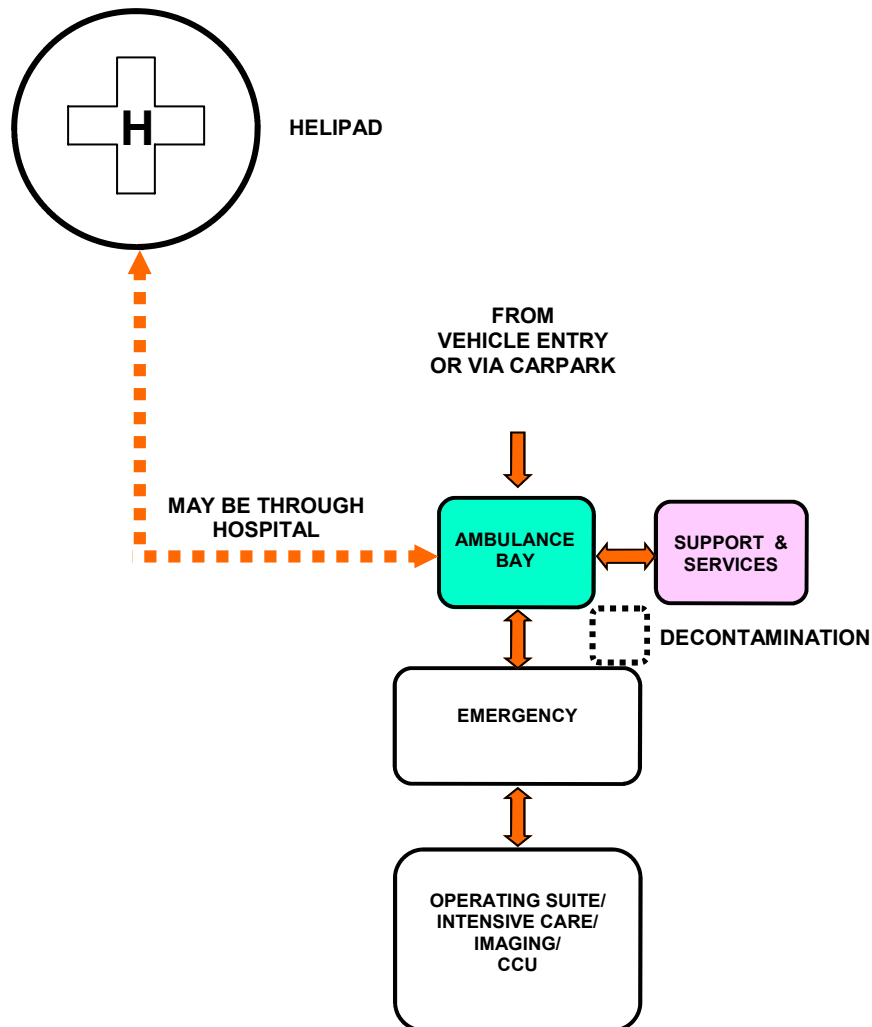
APPENDICES

References and Further Reading

- 150.12.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - AMBULANCE UNIT



Part B - Health Facility Briefing and Planning

170 CARDIAC CATHETERISATION UNIT

INDEX

Description

- 170 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Building Service Requirements
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

General

- 170 .2.00 The Cardiac Catheterisation Unit may be provided as a separate unit, but it may be within the Medical Imaging Unit, provided that the appropriate sterile environment is provided. The Cardiac Catheterisation Unit can be combined with Angiography in low usage situations.

PLANNING

Functional Areas

- 170 .3.00 The Cardiac Catheterisation Unit will require the following minimum functional areas:
- Catheter Laboratory procedure room
 - Control Room which may be co-located with a Viewing and Reporting room
 - Equipment/ Computer room to accommodate the generating and computer modules
 - Scrub-up/ Gowning area
 - Patient bed bays for holding and recovery
 - Access to a film storage room
- 170 .4.00 If a Cardiac Catheterisation Unit is provided as a freestanding unit, the following additional facilities/requirements will be applicable:
- Reception / Clerical Area
 - Patient Toilet / Change
 - Staff Toilet / Change
 - Radiation protection.

Functional Relationships

- 170 .5.00 The Cardiac Catheterisation Unit may be a freestanding Unit or co-located with the Medical Imaging Unit. It should have ready access to the Operating Unit, Intensive Care/ Coronary Care Units and Cardiac Inpatient Accommodation Units.

DESIGN

Building Service Requirements

170 .6.00 RADIATION PROTECTION

Plans and specifications will require assessment for radiation protection by a certified physicist or other qualified expert as required by the Australian Radiation and Nuclear Safety Agency. The radiation protection assessment will specify the type, location and amount of radiation protection required according to the final equipment selections and layout. Radiation protection requirements shall be incorporated into the final specifications and building plans.

COMPONENTS OF THE UNIT

Introduction

170 .7.00 The Cardiac Catheterisation Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

170 .8.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

170 .9.00 Provide the Non-Standard Components identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

170 .10.00 EQUIPMENT/ COMPUTER ROOM

DESCRIPTION AND FUNCTION

An equipment room or enclosure to accommodate the X-ray transformers, power modules, and associated computer electronics and electrical gear shall be provided.

The Equipment/ Computer Room size may vary according to the equipment to be accommodated.

170 .11.00 LOCATION AND RELATIONSHIPS

The Equipment/ Computer room should be located with ready access to both the Catheter Laboratory and the Control Room. Equipment/ Computer rooms may be co-located for multiple Catheter Laboratory procedure rooms.

170 .12.00 CONSIDERATIONS

Special attention to ventilation and cooling of the room will be required.

Part B - Health Facility Briefing and Planning

APPENDICES

Cardiac Catheter Generic Schedule of Accommodation

170.13.00 Schedule of Accommodation for a Cardiac Catheterisation Unit in a Hospital at Levels 4, 5 and 6:

Note: Level 6 is similar to level 5 with the addition of research and teaching functions.

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - HANDWASHING	yes			1 x 1	2 x 1	2 x 1	
BAY - LINEN	yes			1 x 2	2 x 2	2 x 2	
BAY - MOBILE EQUIPMENT	yes			1 x 4	1 x 8	1 x 8	
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	1 x 2	
CATHETER LABORATORY	yes			2 x 38	4 x 38	4 x 38	
CONTROL ROOM	yes			2 x 10	4 x 10	4 x 10	May be shared for adjacent Catheter Laboratories
ENSUITE - STANDARD	yes			1 x 4	2 x 4	2 x 4	With change facilities
EQUIPMENT / COMPUTER				1 x 10	2 x 10	2 x 10	May be co-located for multiple Procedure Rooms
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional	1 x 9 optional	1 x 9 optional	Unit Manager
PATIENT BAY	yes			1 x 9	2 x 9	2 x 9	Holding; may be co-located with Recovery
PATIENT BAY	yes			3 x 9	10 x 9	10 x 9	Recovery
SCRUB-UP GOWNING	yes			1 x 10	2 x 10	2 x 10	Shared between Catheter Labs
CIRCULATION %				35	35	35	

170.14.00 STAFF AREAS

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Nursing personnel
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Radiographer

170.15.00 SHARED AREAS

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes				1 x 3	1 x 3	Co-locate with Staff Room

Part B - Health Facility Briefing and Planning

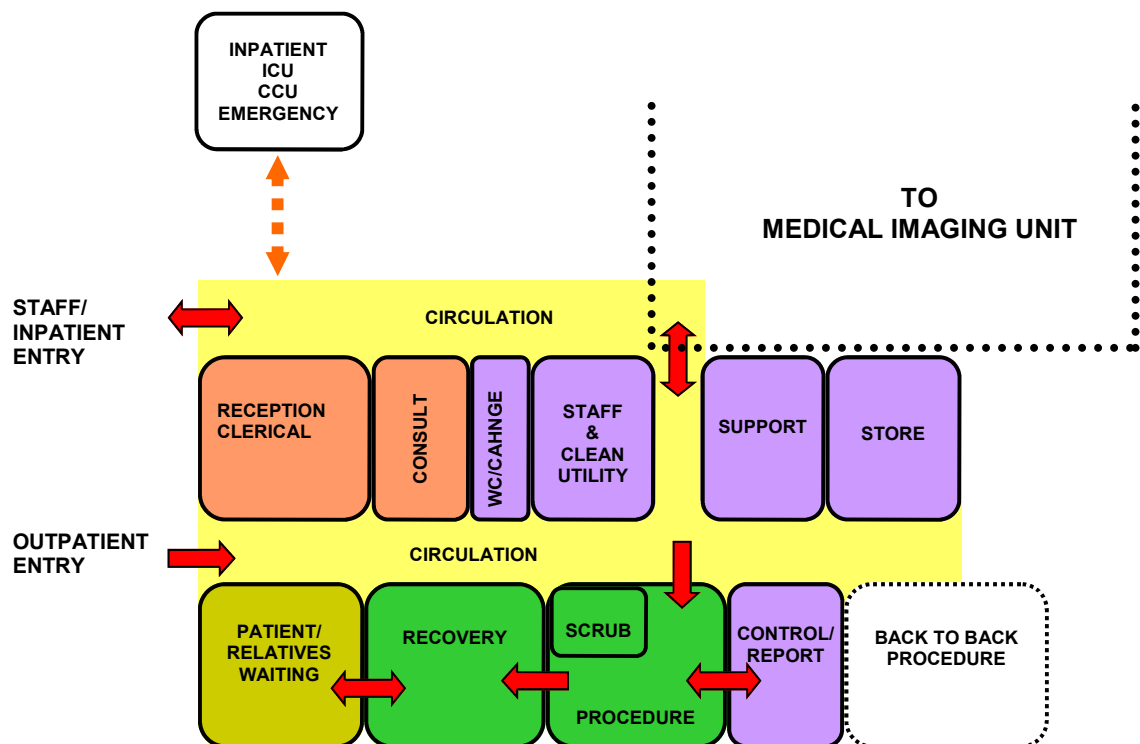
CHANGE ROOM - STAFF	yes			1 x 8	2 x 8	2 x 8	May be co-located with Toilet-Staff
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	
DIRTY UTILITY - SUB	yes			1 x 8	2 x 8	2 x 8	May be co-located with Disposal
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	
INTERVIEW ROOM	yes				1 x 12	1 x 12	Large - for family groups
MEETING ROOM	yes				1 x 20	1 x 20	
RECEPTION	yes			1 x 10	1 x 10	1 x 10	Also functions as a Staff Station
STAFF ROOM	yes				1 x 15	1 x 15	
STORE - FILM				1 x 8	1 x 12	1 x 12	
STORE - EQUIPMENT	yes				1 x 20	1 x 20	
STORE - GENERAL	yes			2 x 9	1 x 9	1 x 9	
TOILET - STAFF	yes			1 x 2	2 x 2	2 x 2	May be co-located with Change Room- Staff
X-RAY VIEWING AND REPORTING	yes			1 x 12	2 x 12	2 x 12	

References and Further Reading

- 170 .16.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - CARDIAC CATHETERIZATION UNIT



Part B - Health Facility Briefing and Planning

180 CATERING UNIT

INDEX

Description

180 .1.00	INTRODUCTION Description
	PLANNING Planning Models Functional Areas Functional Relationships
	DESIGN Finishes Infection Control Safety and Security Fixtures and Fittings Building Service Requirements
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

180 .2.00	The Catering System shall provide food service for staff, visitors, inpatients, outpatients, and ambulatory patients as appropriate. The Catering System shall also provide nourishment and snacks between scheduled meal services and cater for the special dietary needs of patients. Food service facilities and equipment shall conform with these Guidelines and other appropriate codes for food services.
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PLANNING

Planning Models

180 .3.00	The Catering Unit may be designed to accommodate a Cook-Chill or a Cook-Serve food preparation system. Cook-Chill refers to the process where food (fresh or frozen) is prepared, cooked and then chilled for up to five days. Food may be chilled in bulk or cold plated and then chilled. Plated, chilled food may then be reconstituted and served. Alternatively, bulk chilled food may be reconstituted and then plated and served.
180 .4.00	Variations on Cook-Chill preparation include: <ul style="list-style-type: none">- Extended Shelf Life Cook-Chill, where food is processed according to the Cook-Chill method and stored chilled at a controlled temperature for up to 28 days- Cook-Freeze, where food is prepared, portioned or left in bulk form and frozen for up to 12 months; following thawing, food is processed the same way as conventional Cook-Chill.

Part B - Health Facility Briefing and Planning

180 .5.00 Cook-Serve refers to the process where food, fresh or frozen is prepared, cooked, plated and served immediately. Variations of the Cook-Serve process include:

- Hot plating, delivery and serving
- Delivery of hot bulk food, then plating and serving.

180 .6.00 Food preparation systems require space and equipment for receipt, storage, preparing, cooking and baking. Convenience food service systems such as frozen prepared meals, bulk packaged entrees, individual packaged portions, or systems using contractual commissioned services, require space and equipment for refrigeration, holding, thawing, portioning, cooking and/or baking.

180 .7.00 OFF SITE PREPARATION

If food is prepared off site or in a remote location on the hospital campus, then the following will apply:

- Briefed requirements under this section (Catering) may be reduced as appropriate
- Provide protection for food delivered to ensure it maintains freshness, retains temperature and avoids contamination.

If delivery is from outside sources, provide protection against the weather. Provisions must be made for thorough cleaning and sanitising of equipment to avoid mixing soiled and clean items. If food is brought in from a remote part of the hospital site, all connections must be under cover and reasonably weather protected.

Functional Areas

180 .8.00 Every Hospital shall have a suitably equipped Catering Unit (kitchen) to prepare and serve food for patients and staff. The Catering Unit may include the following Functional Areas

- Food preparation areas
- Cooking facilities
- Reheating facilities and/ or rethermalisation facilities if cook-chill food is processed
- Plating areas
- Dishwashing and pot washing areas
- Refrigerator/s, cool rooms and freezers of adequate size to store perishable foodstuffs
- Storage areas for dry goods
- Parking and cleaning areas for food distribution trolleys
- Staff Dining Room
- Access to staff amenities

Note: Preparation of food referred to above does not necessarily involve cooking on site. Food may be prepared off site, then reheated and served on site.

180 .9.00 FOOD DISTRIBUTION

A cart distribution system shall be provided with spaces for storage, loading, distribution, receiving, and sanitising of the food service carts.

The cart traffic and the cleaning and sanitising process shall be designed to eliminate any danger of cross-circulation between outgoing food carts and incoming, soiled carts. Cart traffic shall not be through food processing areas.

Part B - Health Facility Briefing and Planning

Functional Areas

- 180.10.00 The distribution service must ensure food is delivered to the patient hot or cold as required.

180.11.00 GARBAGE DISPOSAL

Provision shall be made for regular wet and dry garbage storage, removal and disposal in accordance with Waste Management Guidelines. All garbage, and in particular wet garbage, shall be stored in sealed bins. Provision shall be made for the storage and cleaning of bins.

In large Hospitals or catering facilities, the following are highly recommended:

- Refrigerated wet waste storage.
- Special equipment to reduce the water content of wet waste.

180.12.00 STAFF AMENITIES

Staff toilets and locker spaces shall be provided for the exclusive use of the catering staff. These shall not open directly into the food preparation areas, but must be in close proximity to them.

180.13.00 STORAGE

Food storage components shall be grouped for convenient access from receiving and to the food preparation areas. All food shall be stored clear of the floor. The lowest shelf shall be not less than 300 mm above the floor or shall be closed in and sealed tight for ease of cleaning.

- 180.14.00 Storage space for at least a four day supply of food shall be provided. Separate space will be required for refrigerated (cold and frozen) storage, dry foods storage and crockery, utensils and cutlery storage.

Facilities in remote areas may require proportionally more food storage facilities than needed for the four days recommended depending on the frequency and reliability of deliveries.

180.15.00 SUPPLIES RECEIVAL

An area shall be provided for the receiving and control of incoming food supplies such as a loading dock. This area shall be separated from the general loading dock areas used for access to garbage areas, a morgue or body holding room.

The receiving area shall contain the following:

- A control station
- A breakout for loading, uncrating, and weighing supplies.

These areas may be shared with clean dock areas.

DESIGN

Finishes

- 180.16.00 All tables, benches and other surfaces on which food is prepared or handled shall be covered in a smooth impervious material.

Infection Control

- 180.17.00 Staff hand-washing facilities shall be provided and located in or close to the food preparation area.

Part B - Health Facility Briefing and Planning

Safety and Security

- 180 .18.00 To prevent accidents, all internal kitchen doors shall have clear glazing to the top half.

Fixtures & Fittings

- 180 .19.00 Self dispensing ice-making facilities may be located in the food preparation area or in a separate room, but must be easy to clean and convenient to the food preparation area.

Building Service Requirements

- 180 .20.00 Under-counter conduits, piping, and drains shall be arranged to not interfere with cleaning of the equipment or of the floor below the counter.

- 180 .21.00 INSECT CONTROL

In new Hospitals the kitchen may not open directly to the outside. A form of air lock shall be provided between the kitchen and the outside. A section of hospital corridor may be used as an air lock

In existing kitchens being refurbished, any door leading directly from the kitchen to the outside shall be fitted with a fly screen door with a self closer.

COMPONENTS OF THE UNIT

Introduction

- 180 .22.00 The Catering Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 180 .23.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 180 .24.00 Provide the Non-Standard Components identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 180 .25.00 COOLROOMS/ FREEZERS

DESCRIPTION AND FUNCTION

Rooms for the refrigerated storage of perishable food supplies.

Coolrooms / Freezers shall be sized according to the amount of food to be stored; the minimum area is six m2.

- 180 .26.00 LOCATION AND RELATIONSHIPS

Coolrooms and freezers shall be located with ready access to food preparation areas and supplies receipt area.

- 180 .27.00 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

Walk-in Coolrooms and Freezers may be lockable from outside but must have a release mechanism for exit from inside at all times.

The Coolroom / Freezer interior shall have lighting installed which may be automatically operated when the door is opened. An additional over-ride switch inside the cool room is recommended.

All shelving shall be corrosion resistant, easily cleaned, and constructed and anchored to support the expected load.

180 .28.00 DISHWASHING

DESCRIPTION AND FUNCTION

The Catering Unit will provide separate stainless steel sinks and drainers or equipment for washing of dishes, utensils and cutlery. The area shall also provide space for receiving, scraping, rinsing, sorting and stacking of soiled tableware.

180 .29.00 LOCATION AND RELATIONSHIPS

Dedicated crockery, utensil and cutlery washing (warewashing) facilities shall be located as far as practical from the food preparation and serving area. It is recommended that where practical, a warewashing space be located in a separate room or alcove.

Warewashing facilities shall be designed to prevent contamination of clean wares with soiled wares through cross-traffic. The clean wares shall be transferred for storage or use in the Dining Area without having to pass through food preparation areas.

180 .30.00 CONSIDERATIONS

The Dishwashing area requires the following finishes:

- Walls and ceiling that are smooth, impervious and easily cleanable
- Floors that are impervious and non-slip

Commercial type washing equipment is recommended.

180 .31.00 POT WASHING

DESCRIPTION AND FUNCTION

The Catering Unit shall provide separate stainless steel sinks and drainers or equipment for washing of pots.

180 .32.00 LOCATION AND RELATIONSHIPS

Pot washing sinks or equipment shall be located with ready access to preparation and cooking areas and may be co-located with dishwashing areas.

180 .33.00 CONSIDERATIONS

The Potwashing area requires the following finishes:

- Walls and ceiling that are smooth, impervious and easily cleanable
- Floors that are impervious and non-slip

Pot scrubbing facilities are required that incorporate emergency manual warewashing facilities in the event of equipment failure.

180 .34.00 SERVERY

DESCRIPTION AND FUNCTION

An area for plating and serving food with facilities for keeping food warm or cool.

180 .35.00 LOCATION AND RELATIONSHIPS

The Servery may be located with close access to the Catering Unit and adjacent to Staff Dining Areas.

180 .36.00 CONSIDERATIONS

The Servery will require the following finishes:

- Walls and ceiling that are smooth, impervious and easily cleanable
- Floors that are impervious and non-slip

The Servery will require the following fittings and fixtures:

- A workbench with an impervious top and splashback
- A single or double bowl stainless steel sink set in the benchtop supplied with hot and cold reticulated water, lever action or automatically activated taps
- A disposable glove dispenser
- A handbasin, with liquid soap and paper towel dispensers

180 .37.00 STAFF DINING ROOM

DESCRIPTION AND FUNCTION

The Staff Dining Room provides an area for staff dining and relaxation. The Room shall provide space for all staff potentially requiring sit down dining space during any single shift.

Note: Staggered dining sessions is an acceptable way of reducing the size of this room.

The minimum area for a Staff Dining Room shall be 1.25 m² per person dining at any one time or 9.5 m² whichever is the greater.

180 .38.00 LOCATION AND RELATIONSHIPS

The Staff Dining Room should be located in a staff only, discreet area of the facility with direct access to a circulation corridor. It should have ready access to the Catering Unit. Access to an external dining area is desirable.

180 .39.00 CONSIDERATIONS

The Dining Room should incorporate the following:

- External windows
- Dining tables and chairs
- Telephone within or adjacent to the room for staff use
- Acoustic privacy may be required to adjoining areas.

180 .40.00 TROLLEY WASH

DESCRIPTION AND FUNCTION

An area shall be provided for stripping, washing and disinfecting of trolleys

Part B - Health Facility Briefing and Planning

and carts.

180.41.00 LOCATION AND RELATIONSHIPS

The Trolley Wash area should be located remotely from the food preparation and storage areas. It should have ready access to the trolley return and parking areas.

180.42.00 CONSIDERATIONS

The trolley washing area will require:

- Smooth, impervious and easily cleanable surfaces to walls and ceiling
- Impervious and non-slip finishes to the floor
- Hot and cold water outlets.

Part B - Health Facility Briefing and Planning

APPENDICES

Catering Generic Schedule of Accommodation

180.43.00 The Schedule of Accommodation for a Catering Unit suitable for a Level 4 Hospital of 120 Beds, providing an on-site 'Cook-Serve' food preparation service.

Note - modifications required for a 'Cook-Chill' food preparation system are noted:

ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
BLAST CHILLERS				1 x 20 optional			Additional area if Cook-Chill system is used
COOLROOM - DAIRY/ VEGETABLE				1 x 12			
COOLROOM - MEAT				1 x 6			
COOKING				1 x 35			
DISHWASHING				1 x 25			
DRY STORE				1 x 15			
ENTRY / TROLLEY RETURN				1 x 15			
FREEZER				1 x 10			
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9			Manager
POT-WASHING				1 x 15			
PREPARATION - DIET				1 x 8			May be reduced if cooking is off-site
PREPARATION - MEAT				1 x 8			May be reduced if cooking is off-site
PREPARATION - PASTRY				1 x 8			May be reduced if cooking is off-site
PREPARATION - SALAD				1 x 8			
PREPARATION - VEGETABLE				1 x 8			May be reduced if cooking is off-site
PLATING / TRAY PREPARATION				1 x 35			
STAFF DINING				1 x 75 optional			Allows for up to 60 persons, may be located remotely
SERVERY				1 x 12 optional			
TROLLEY PARKING				1 x 15			
TROLLEY STRIPPING				1 x 15			
CIRCULATION %				25			

180.44.00 SHARED AREAS

Part B - Health Facility Briefing and Planning

180 .44.00

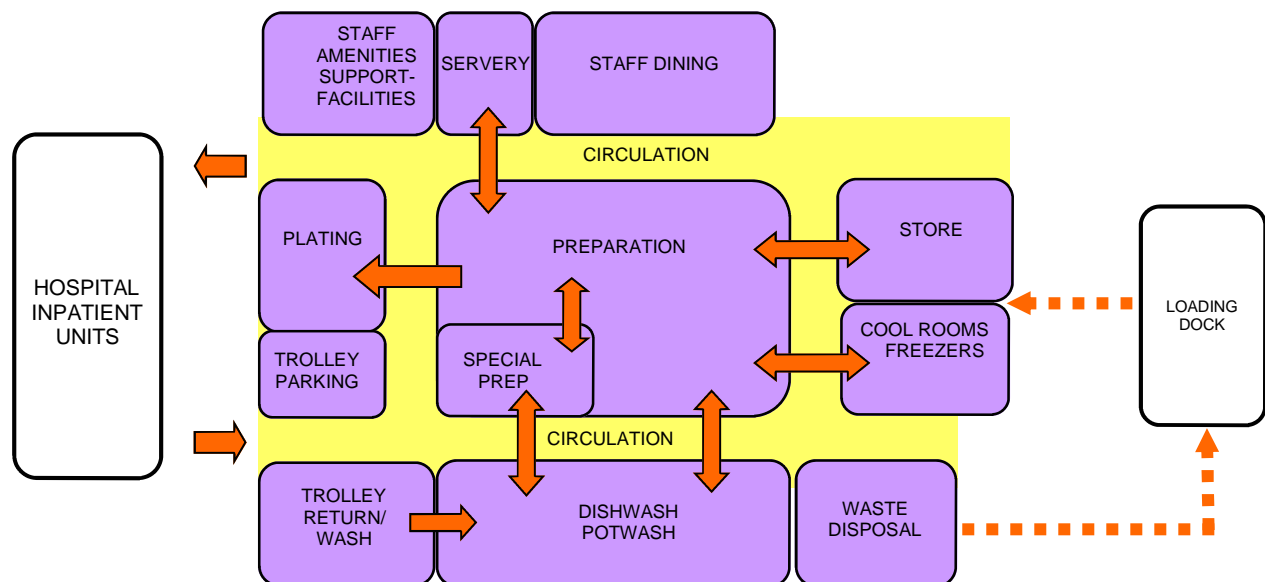
ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
CLEANER'S ROOM	yes			1 x 4			
DISPOSAL ROOM	yes			1 x 8			Preferrably located outside the Catering Unit
LOADING DOCK				1 x 20			Shared with clean Loading Dock areas
OFFICE - 2 PERSON SHARED	yes			1 x 12			Dietary staff; may be external to the Unit

References and Further Reading

- 180 .45.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Department of Human Services, Victoria, Design Guidelines for Private Hospital Buildings, 1987.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - CATERING UNIT



Part B - Health Facility Briefing and Planning

190 CENTRAL STERILE SUPPLY UNIT (CSSU)

INDEX

Description

190 .1.00	INTRODUCTION General
	PLANNING Operational Models Functional Areas Functional Relationships
	DESIGN General Communications Finishes Building Service Requirements
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further reading CSSU Flow Diagrams Functional Relationships Diagram

INTRODUCTION

General

190 .2.00	A Hospital must provide adequate facilities for cleaning, sterilisation and storage of equipment and instruments to ensure the care and safety of patients, and the safety of staff, at all times.
190 .3.00	The sterilisation process may be carried out entirely or partially on-site, the latter relying on an external supply source to regularly restock the hospital sterile goods store. The scale of operation can be small or large, dependent upon the requirements of the serviced departments, for example, an Operating Unit requires the services of a Theatre Sterile Supply Unit (TSSU) or a full Central Sterile Supply Department (CSSD), whereas an Acute Ward requires only a basic Sterile Supply Service.

PLANNING

Operational Models

190 .4.00	The size and role of the sterile goods supply service shall be clearly defined in the Operational Policy Statement. The following documents shall be referred to for design and operational standards: <ul style="list-style-type: none">- Australian Standard 4187 - Cleaning, disinfecting and sterilising reusable medical and surgical instruments and equipment and maintenance of associated environments in Health Care Facilities- National Standard for the Operation of Sterile Supply Service in Health Care Facilities produced by the National Consultative Council for Therapeutic Goods, (NCCTG).
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Functional Areas

- 190.5.00 The Central Sterile Supply Unit will include the following functional areas or zones:
- Receiving Area where soiled articles for recycling are received on trolleys from Units throughout the facility
 - Cleaning Area where all articles are sorted, rinsed, ultrasonically cleaned or mechanically washed then mechanically dried; this area may also include cleaning of the delivery trolleys
 - Packing Area (Clean Workroom) where the clean instruments, equipment and other articles are sorted, counted and packaged for sterilising
 - Sterilising and Cooling Area where sterilisers are loaded, set into operation and unloaded following completion of the sterilising cycle
 - Despatch Area where sterile stock is held prior to despatch to Units in the facility; distribution trolleys may also be located in this area
 - Administrative Areas including Offices or Workstations
 - Staff Amenities which includes Staff Toilets, Change Rooms and Staff Rooms; these may also be shared with Operating Unit if convenient.

190.6.00 ADMINISTRATIVE AREAS

A separate room, or space within the Workroom, shall be provided for routine clerical/administrative procedures. The provision of a separate office will depend upon the size of the unit/department. An area for write-up and storage of stationery and files shall be provided. A pinboard/whiteboard should also be considered.

190.7.00 CLEAN WORKROOM AREA

A room shall be provided that contains hand-washing facilities, work space and equipment for terminal sterilising of medical and surgical equipment and supplies. Linen folding shall be carried out in a separate room, preferably the laundry. Where procedure packs are prepared in a sterile supply unit they shall be in a separate area to instrument preparation. The air handling system shall be filtered or discharged direct to the outside to prevent lint build-up and related industrial and fire safety problems. High level supply and low level exhaust is the recommended airflow pattern, with localised high level extraction for heat removal only. Special attention shall be given to the height and depth of workbenches to allow staff to work sitting or standing.

- 190.8.00 Views to the outside are considered highly desirable.

190.9.00 DISTRIBUTION

A distribution point, if required, shall be provided in the form of a staffed counter or stable door, or a pass through cupboard from the sterile store into an adjacent service corridor. No general access is allowed to the CSSU.

190.10.00 STAFF AMENITIES

Showers, toilets and secure lockers for staff employed in this area shall be provided. These facilities shall be conveniently located and may be shared with the Operating Unit staff in cases where the Sterile Supply Department is attached to the Operating Unit. A lunch room can be a shared central facility outside the Sterile Supply Department. Access to a training room in close proximity to CSSU for formal training activities is recommended.

- 190.11.00 Facilities shall also be provided in the Change Room to store caps, overalls and footwear protection. 'Barrier' principles are observed when entering the

Part B - Health Facility Briefing and Planning

unit.

190.12.00 STORAGE

A room shall be provided for the storage of processed sterile packs etc. Ventilation, humidity and temperature control is required. Supply air pressure shall be positive with respect to surrounding areas and the level of filtration shall equal or exceed that of the Operating Room. Storage cupboards shall be fitted with doors.

190.13.00 A separate room shall be provided to store stock that is 'clean' but not sterile. Access to this room shall be provided from outside the unit/department for stocking, and from within the unit/department for drawing stock to process.

190.14.00 Space shall also be provided for storing distribution trolleys as required.

Functional Relationships

190.15.00 The Central Sterile Supply Unit (CSSU) should be located with direct or close access to the Operating Unit. It should have ready access to Supply Unit and Linen Handling Unit for delivery of supplies.

Access to the CSSU should be restricted to authorised personnel only.

DESIGN

General

190.16.00 The planning of the facility must provide for separate clean and dirty working areas.

Communications

190.17.00 A telephone or intercom system should be installed within the Clean Workroom and/or Office to allow communication with outside personnel and departments, without breaching the "clean barrier" regime.

Finishes

190.18.00 Floor finishes shall be easy to clean. Welded sheet vinyl, coved up the wall, is recommended. Wall finishes shall also be easy to clean, with special consideration for damage by trolleys. Windows, if provided, must be unable to be opened.

190.19.00 The ceiling shall be of a flush type and sealed against the walls.

Building Service Requirements

190.20.00 AIR FILTRATION

Where the Sterile Supply Unit is attached to an Operating Unit, ventilation shall be provided by a treated air supply, with air-conditioning to comply with AS 1386 and HEPA filters to comply with AS 1324. Refer to Part E - HVAC Services for more detailed information.

190.21.00 LIGHTING

Part B - Health Facility Briefing and Planning

190 .21.00

Light fittings shall be fully recessed and selected to prevent dust and insects from entering.

190 .22.00 The light level shall be not less than 400 lux.

190 .23.00 SIGNAGE

Door signs are required to provide instruction as to the closed nature of the department and the limited access points for services.

COMPONENTS OF THE UNIT

Introduction

190 .24.00 The Central Sterile Supply Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

190 .25.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

190 .26.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

190 .27.00 DECONTAMINATION

DESCRIPTION AND FUNCTION

The Decontamination area shall contains work space and equipment for sorting, decontamination and cleaning medical and surgical equipment, and for disposal of used/soiled material. It shall include hand-washing facilities.

The Decontamination functions may also be provided in a Clean-Up Room.

190 .28.00 There will be a need to provide special types of cleaning equipment, dependent on the level of service, for example, ultrasonic cleaners, anaesthetic tubing washers and dryers.

190 .29.00 LOCATION AND RELATIONSHIPS

The Decontamination area should be located between the Receival area and the Sorting/ Packing area.

190 .30.00 CONSIDERATIONS

The Decontamination area will require the following finishes:

- Walls and ceiling that are smooth, impervious, and easily cleanable
- Floors that are impervious and non slip.

Part B - Health Facility Briefing and Planning

Fittings and fixtures located in this area will include the following:

- Stainless steel deep bowl sinks with tubing manifolds (air and water) and additional water outlets for water pistols
- Stainless steel benches
- Instrument and tubing washers/ decontaminators, according to service requirements
- Ultrasonic cleaner, according to service requirements
- Instrument and tubing dryers, according to service requirements
- Staff handwashing basin
- Exhaust air extraction over sinks and equipment doors.

All decontamination and washing equipment shall be installed and commissioned to the requirements of all relevant Australian Standards and Occupational Health requirements, in particular AS 2773 for Ultrasonic Cleaners and AS 2945, AS 3836 for Washer/Disinfectors.

190 .31.00 STERILISING AND COOLING

DESCRIPTION AND FUNCTION

The Sterilising and Cooling Area provides accommodation for sterilisers and parking space for steriliser and cooling trolleys. Following unloading of the steriliser, packs should not be handled until cool.

Specialised sterilisers such as ethylene oxide, require separate installation and accommodation. Low temperature specialised sterilisers require separate installation according to manufacturer's recommendations.

The size of the area will be dependent on the number and type of sterilisers installed.

190 .32.00 LOCATION AND RELATIONSHIPS

The Sterilising and Cooling area should be located between the Sorting and Packing area and the Despatch area.

Special consideration shall be given to the location of the sterilisers. External access to a steriliser duct is highly desirable so that repairs or routine maintenance do not interfere with the activities within the Workroom.

A duct enclosure can also minimise heat build-up within the Workroom. An exhaust over the front of the steriliser(s) shall also be considered, to extract both heat (cabinet) and steam (opening door).

190 .33.00 CONSIDERATIONS

An exhaust over the front of the steriliser(s) shall be considered, to extract both heat (cabinet) and steam (opening door).

Part B - Health Facility Briefing and Planning

APPENDICES

CSSU Generic Schedule of Accommodation

190.34.00 Schedule of Accommodation for a CSSU in a Hospital at levels 3, 4, 5 and 6:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
DEBOXING				1 x 15	1 x 15	1 x 15	
DECONTAMINATION / CLEAN-UP / WASHING			1 x 15	1 x 40	1 x 80	1 x 80	May be smaller if Decontamination included in Clean-up Rooms
DECONTAMINATION - RESPIRATORY				1 x 12	1 x 15	1 x 15	
DECONTAMINATION - SPECIAL INSTRUMENTS					1 x 30	1 x 30	
DISPATCH / TROLLEY HOLD				1 x 8	1 x 20	1 x 20	
DISPOSAL ROOM	yes		1 x 8	1 x 8	1 x 8	1 x 8	
ENTRY/ INSTRUMENT RETURN				1 x 15	1 x 15	1 x 15	
RESPIRATORY PACKING					1 x 20	1 x 20	
SORTING & PACKING			1 x 12	1 x 30	1 x 50	1 x 50	
STERILISING & COOLING			1 x 10	1 x 20	1 x 30	1 x 30	Area allows for 1 steriliser/plant for L3, up to 2 for L4 and up to 3 for L5/6
STORE - NON-STERILE			1 x 6	1 x 20	1 x 30	1 x 30	
STORE - STERILE STOCK	see remarks		1 x 6	1 x 20	1 x 30	1 x 30	Refer to Standard Component Store-Sterile; size according to quantity of stock
CIRCULATION %			20	20	20	20	

190.35.00 STAFF AREAS

Note: Provision of Offices is dependent on the Operational Policy and Management Structure

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional	1 x 9 optional	1 x 9 optional	Manager
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	
OFFICE - WORKSTATION	yes		1 x 6 optional		2 x 6 optional	2 x 6 optional	

190.36.00 SHARED AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes			1 x 3	1 x 3	1 x 3	

Part B - Health Facility Briefing and Planning

CHANGE ROOM - STAFF	yes			2 x 8	2 x 10	2 x 10	May be shared with adjacent areas or Operating Unit
CLEANER'S ROOM	yes		1 x 4	1 x 4	1 x 4	1 x 4	
MEETING ROOM - LARGE	yes				1 x 40	1 x 40	
RECEPTION	yes				1 x 10	1 x 10	
STAFF ROOM	yes			1 x 15	1 x 15	1 x 15	
TOILET - STAFF	yes			2 x 2	4 x 2	4 x 2	May be shared with adjacent areas or Operating Unit

References and Further Reading

- 190 .37.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- Health Department Western Australia, Private Hospital Guidelines, 1998.
- Queensland Government, Private Health Facilities Building Code, 2000.

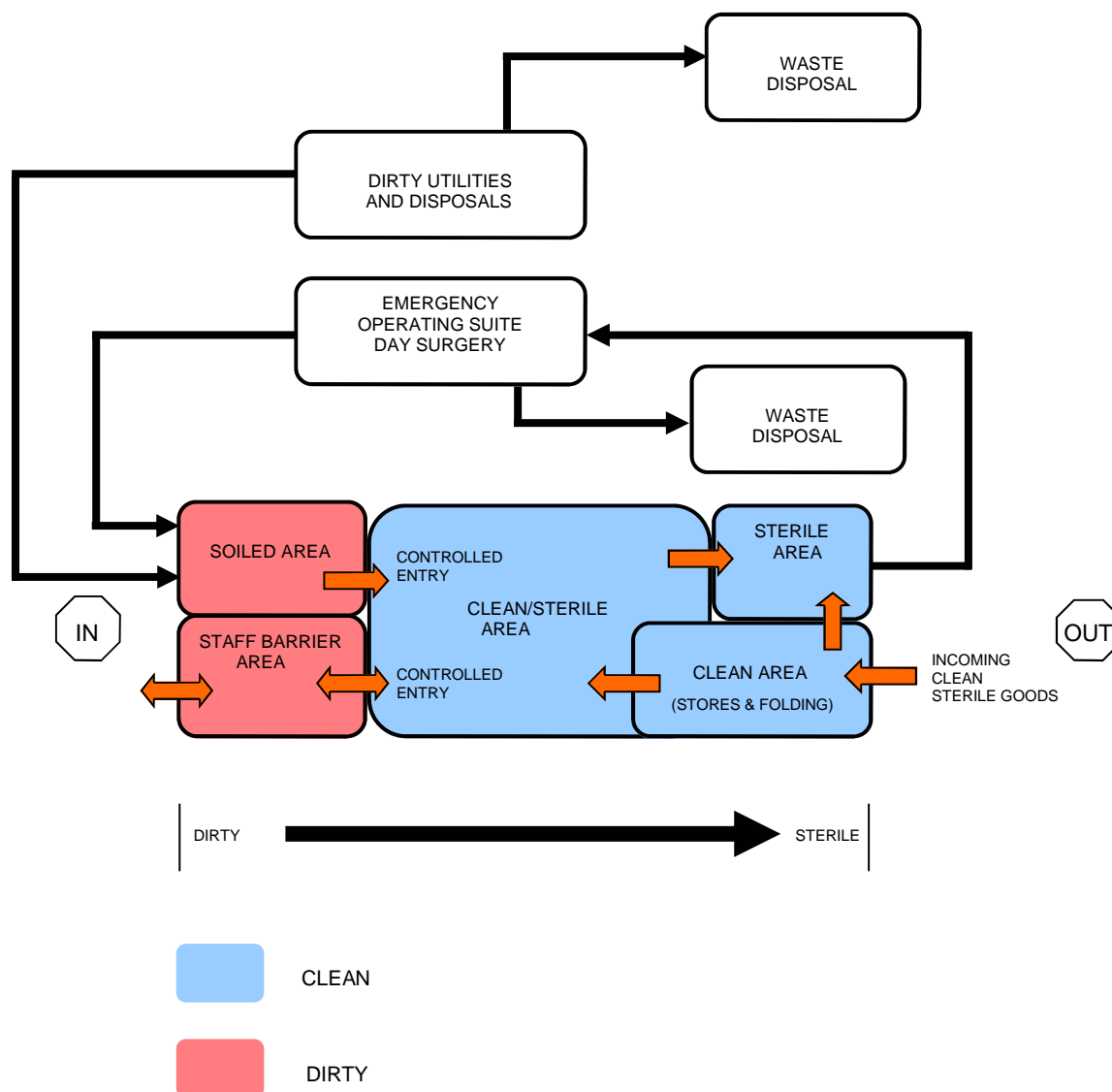
Functional Relationships Diagram/s

- 190 .38.00 Refer to Enclosure Sheet 1 for a flow diagram representing the Base Model.
- 190 .39.00 Refer to Enclosure Sheet 2 for a flow diagram representing a Stand-alone Model.
- 190 .40.00 Refer to Enclosure Sheet 3 for a diagram showing the pressure differentials.
- 190 .41.00 Refer to Enclosure Sheet 4 for a flow diagram indicating one sterile stock store.
- 190 .42.00 Refer to Enclosure Sheet 5 for a flow diagram indicating two sterile stock stores.
- 190 .43.00 Refer to Enclosure Sheet 6 for a flow diagram indicating a simple CSSU model which integrates (back to back) with an Operating Unit shown in Operating Unit Enclosure - Functional Relationship Diagram.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - CENTRAL STERILE SUPPLY UNIT

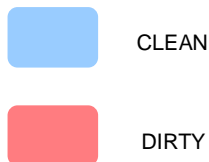
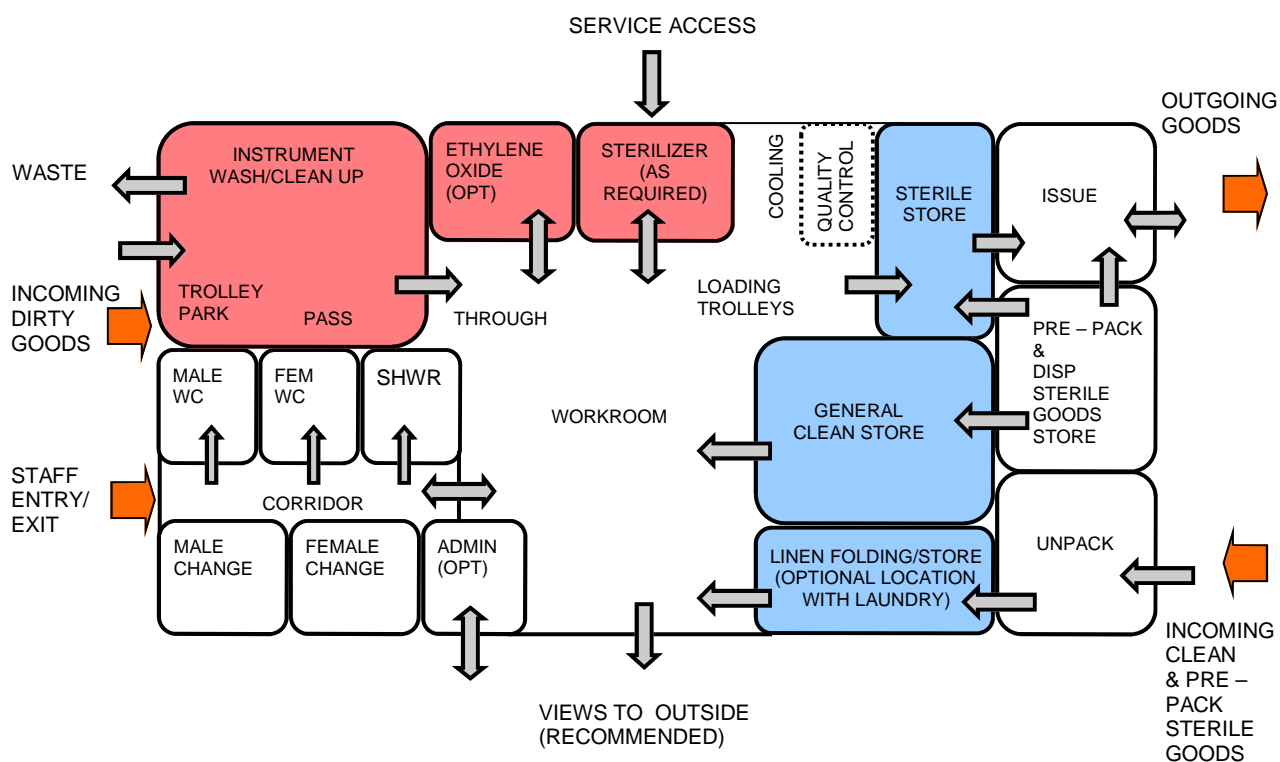
STAND ALONE FLOW DIAGRAM



Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - CENTRAL STERILE SUPPLY UNIT

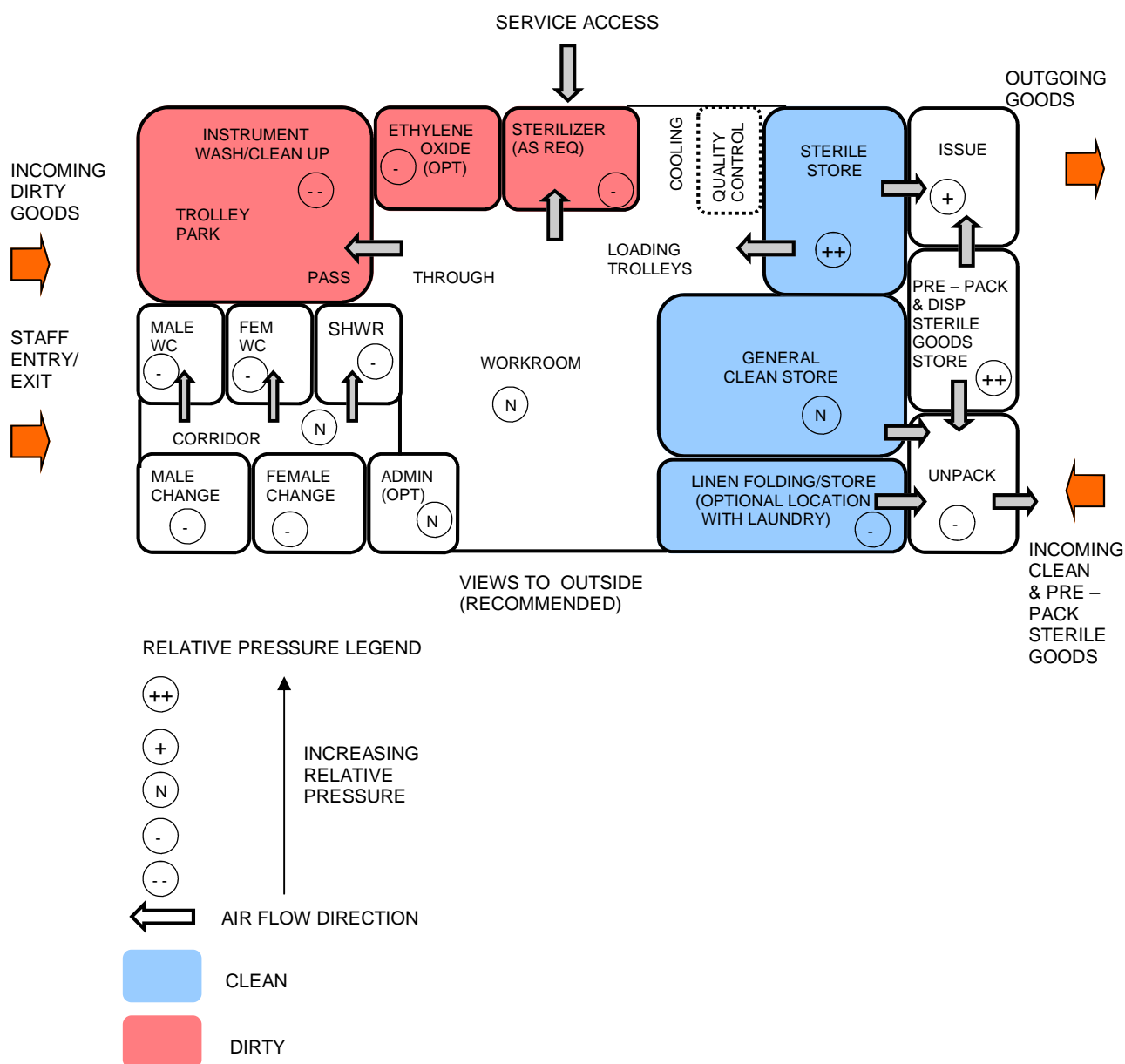
SCHEMATIC FUNCTIONAL SPACE DIAGRAM (BASE MODEL)



Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - CENTRAL STERILE SUPPLY UNIT

AIR FLOW DIAGRAM WITH PRESSURE DIFFERENTIALS



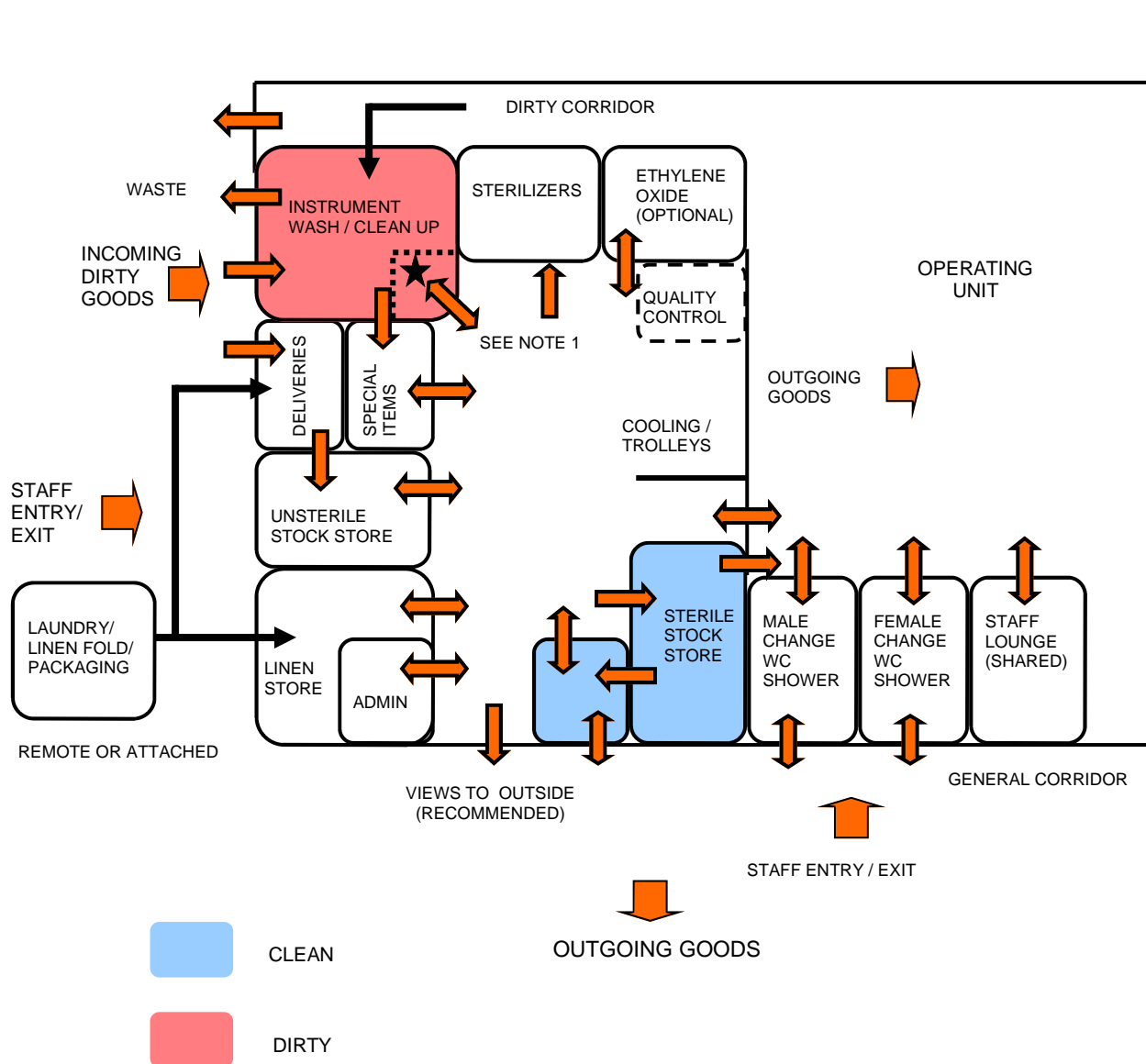
Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - CENTRAL STERILE SUPPLY UNIT

SIMPLE MODEL 1 - INTEGRATED WITH OPERATING UNIT
(ONE STERILE STOCK STORE)

NOTE 1 DIRECT ACCESS (OTHER THAN PASS THROUGH) BETWEEN INSTRUMENT WASH AND THE WORKROOM SHOULD BE RESTRICTED OTHER THAN IN SMALL FACILITIES WHERE DUPLICATION OF STAFF FOR BOTH "CLEAN" AND "DIRTY" AREAS IS NOT POSSIBLE

★ BARRIER ENTRY (SRUC - UP, GOWN, ETC PRIOR TO RE - ENTRY)



Part B - Health Facility Briefing and Planning

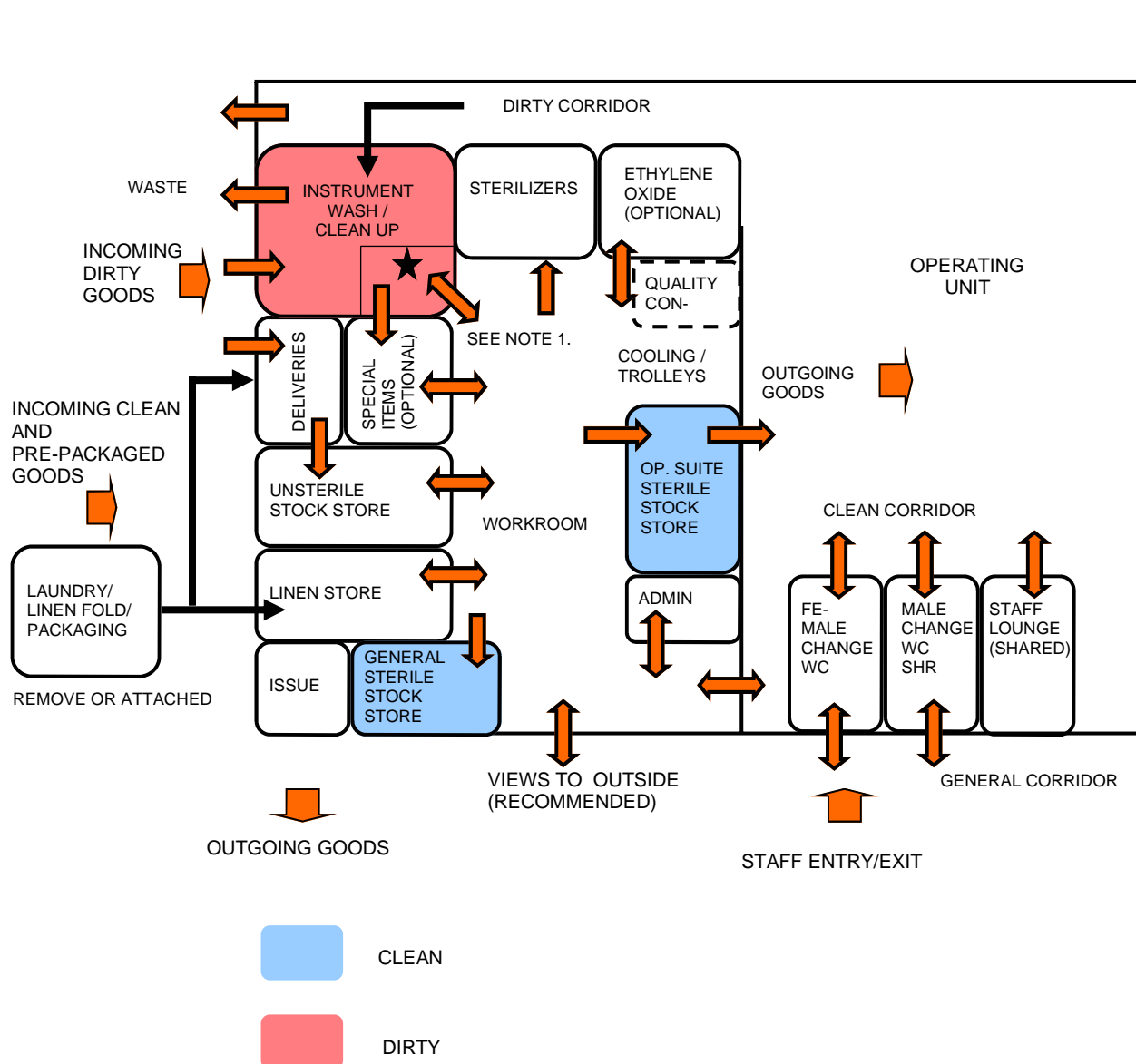
FUNCTIONAL RELATIONSHIPS DIAGRAM - CENTRAL STERILE SUPPLY UNIT

ALTERNATE MODEL 2
(TWO STERILE STOCK STORES)

NOTE 1 DIRECT ACCESS (OTHER THAN PASS THROUGH) BETWEEN INSTRUMENT WASH AND THE WORKROOM SHOULD BE RESTRICTED OTHER THAN IN SMALL FACILITIES WHERE DUPLICATION OF STAFF FOR BOTH "CLEAN" AND "DIRTY" AREAS IS NOT POSSIBLE



BARRIER ENTRY (SRUC - UP, GOWN, ETC PRIOR TO RE - ENTRY)



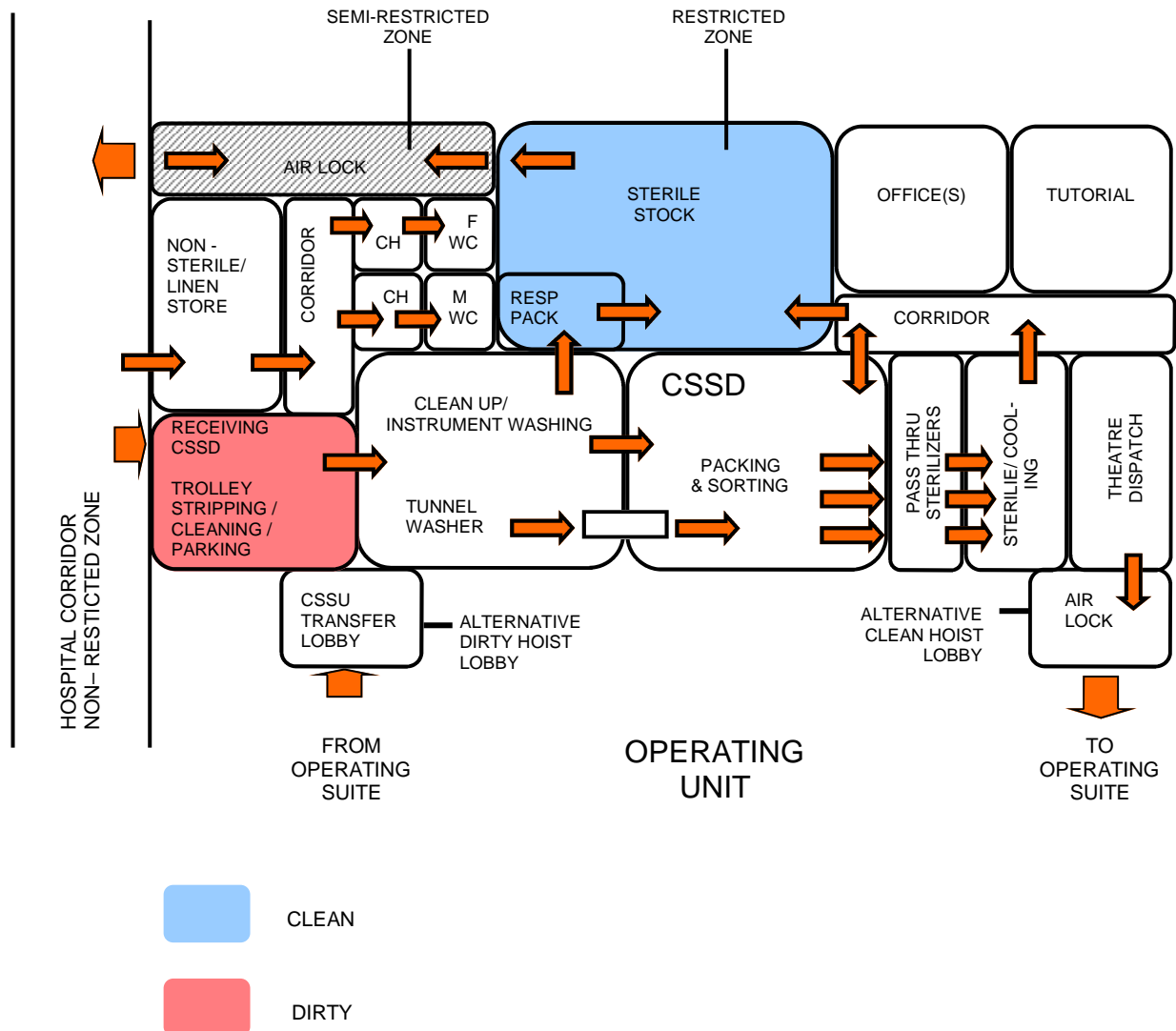
Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - CENTRAL STERILE SUPPLY UNIT

STERILE SUPPLY / SERVICE UNIT - SIMPLE MODEL
Integrated with Operating Suite

NOTE 1 ONLY THE MOST IMPORTANT FUNCTIONS ARE SHOWN FOR CLARITY

NOTE 2 CSSU MAY BE CONNECTED TO OPERATING SUITE VIA CLEAN/DIRTY HOISTS
CSSU TRANSFER LOBBY MAY BE REPLACED WITH DIRTY HOIST LOBBY
THEATRE DISPATCH AIR-LOCK MAY BE REPLACED WITH CLEAN HOIST LOBBY



Part B - Health Facility Briefing and Planning

220 CHILD CARE UNIT

INDEX

Description

- 220 .1.00 INTRODUCTION
General

INTRODUCTION

General

- 220 .2.00 Provision of Child Care Facilities is not mandatory, but it is recommended that the provision of these facilities be considered.

The provision of a Child Care Centre requires compliance with The Children's Services Act 1996 and the Children's Services Regulations 1998. Please refer to this legislation for approval requirements and building guidelines

Part B - Health Facility Briefing and Planning

230 CLEANING/ HOUSEKEEPING UNIT

INDEX

Description

- 230 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationship Diagram

INTRODUCTION

Description

- 230 .2.00 The Cleaning Service may be contracted or in-house. In addition to the Cleaner's Rooms already requested in the specialist Units, others may be required throughout the facility to maintain a clean and sanitary environment.

PLANNING

Functional Areas

- 230 .3.00 A typical hospital Cleaning/ Housekeeping Unit comprises the following:
- Manager's Office
 - Cleaner's Meeting/ Briefing room
 - Cleaner's Equipment / Supply Store
 - Cleaner's Sign-on Bay
- The above facilities are not mandatory. When provided, these should be sized adequately for the number of staff and the amount of equipment stored.
- 230 .4.00 Facilities shall be provided to clean and sanitise trolleys serving the Cleaning/ Housekeeping Unit, Catering Unit, and Linen Services. These facilities may be centralised or departmentalised.
- 230 .5.00 Storage areas are required for bulk cleaning materials, consumable supplies and equipment. Storage areas may be shared with the Supply Unit.

Functional Relationships

- 230 .6.00 The Cleaning/ Housekeeping Unit should be located in a service area of the facility with ready access to the Waste Management Area, the Loading Dock and Laundry/ Linen Handling areas.

Part B - Health Facility Briefing and Planning

COMPONENTS OF THE UNIT

Introduction

- 230 .7.00 The Cleaning/ Housekeeping Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 230 .8.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 230 .9.00 Provide the Non-Standard Components as identified in this section.

- 230 .10.00 BAY - SIGN-ON

DESCRIPTION AND FUNCTION

A recessed area for staff to sign-on, check and record rosters. The Sign-on Bay shall be a minimum of four m2.

- 230 .11.00 LOCATION AND RELATIONSHIPS

The Sign-on Bay should be located in a discreet area with ready access to staff entry area and circulation corridor. It may also be located close to the Unit Manager's Office.

- 230 .12.00 CONSIDERATIONS

The Sign-on Bay will require the following fittings and services:

- bench at standing height
- pinboard for display of rosters (or computer for computerised rosters)
- computer terminal (optional)
- power and data outlets for computers as required

Part B - Health Facility Briefing and Planning

APPENDICES

Cleaning Generic Schedule of Accommodation

230.13.00 Schedule of Accommodation - Cleaning/ Housekeeping Unit to service a Hospital at levels 1 to 6:

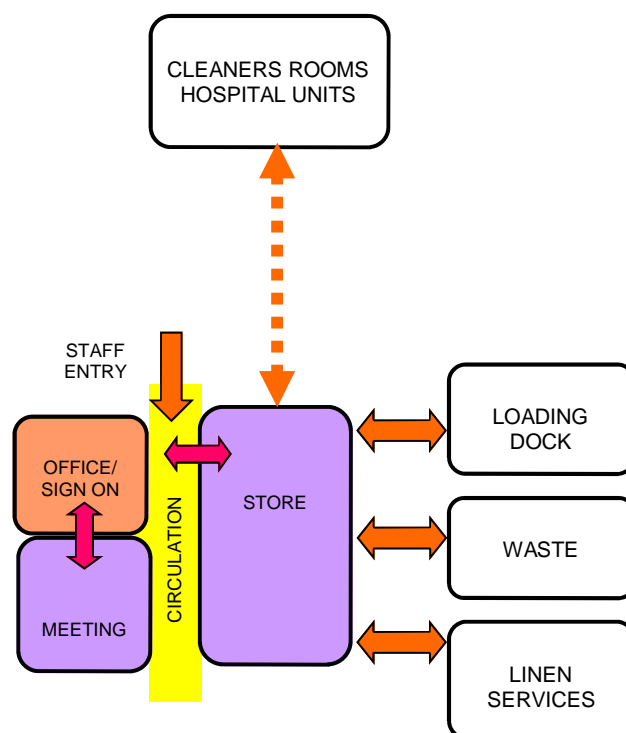
ROOM / SPACE	Standard Component	Level 1/2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - MOBILE EQUIPMENT	yes			1 x 12 optional	1 x 12 optional	1 x 12 optional	
BAY - SIGN-ON				1 x 4 optional	1 x 4 optional	1 x 4 optional	May be co-located with Office -Manager
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	For Supervisor -Dependent on staffing establishment
STORE - CLEANER'S	yes	1 x 12	1 x 12	2 x 12 optional	4 x 12 optional	4 x 12 optional	Cleaning chemical & supplies may be located in Supply Unit
CIRCULATION %		10	10	10	10	10	

References and Further Reading

- 230.14.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - CLEANING / HOUSEKEEPING UNIT



Part B - Health Facility Briefing and Planning

240 CLINICAL INFORMATION UNIT

INDEX

Description

- 240 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 240 .2.00 A Health Facility must provide appropriate secure record storage and retrieval to ensure patient confidentiality at all times.
- 240 .3.00 A Health Facility must store all patient related administrative, historical and medical records in a fire rated construction as indicated in the Building Code of Australia, Section C2.5(g).

PLANNING

Functional Areas

- 240 .4.00 Rooms, areas, or offices for the following personnel and/or functions shall be provided:
- Medical Records Administrator / coding personnel
 - Review and Dictation
 - Sorting and Recording
 - Microfilming of records, if applicable
 - Record Storage, active and archived
- 240 .5.00 ELECTRONIC RECORDS
- If electronic records are held the following additional facilities will be required:
- An area for scanning
 - An area for retrieving hard copies of records
 - Secured disc storage
- 240 .6.00 MICROFILM RECORDS
- Microfilming of records may be attended on-site or off-site. If on-site Microfilming is performed, the following additional facilities are to be provided:
- Microfilming camera
 - Sorting bench
 - Secure storage of microfilm
 - Microfilm reading area

Functional Relationships

- 240 .7.00 The Clinical Information Unit should be located with ready access to the Emergency Unit, Admissions, Inpatient Units, Outpatient areas, Pathology Unit and Medical Imaging Units. Alternatively, a record transport system may be considered for rapid transfer of records. Location on an external face is desirable to ensure staff have external views and daylight.

COMPONENTS OF THE UNIT

Introduction

- 240 .8.00 The Clinical Information Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 240 .9.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 240 .10.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Functional Brief and Operational Policy.

- 240 .11.00 ACTIVE RECORDS STORE

DESCRIPTION AND FUNCTION

The Active Records Store should be able to accommodate current records for a minimum of five to seven years.

Active records storage space requirements will depend on the size of the Hospital and the type of record storage used, such as paper records, microfilm or optical disc.

- 240 .12.00 LOCATION AND RELATIONSHIPS

The Active records Store should be located with close access to the Assembly/ Sorting area.

- 240 .13.00 CONSIDERATIONS

Records may be accommodated in open shelving units or compactus shelving. Heights of shelves must comply with Occupational Health and Safety Guidelines.

Part B - Health Facility Briefing and Planning

APPENDICES

Clinical Information Generic Schedule of Accommodation

240.14.00 Schedule of Accommodation for a Clinical Information Unit at Levels 2 to 6:

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - MOBILE EQUIPMENT	yes		1 x 4	1 x 4	2 x 6	2 x 6	For trolleys
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9	2 x 9	2 x 9	Manager/ Supervisor, according to staffing establishment
OFFICE - 2 PERSON SHARED	yes				1 x 12	1 x 12	Medico-Legal
OFFICE - WORKSTATION	yes	1 x 6	2 x 6	2 x 6	2 x 6	3 x 6	Clerical / Typing - dependent on staffing establishment
OFFICE - WORKSTATION	yes		1 x 6	1 x 6	5 x 6	5 x 6	Coding - dependent on staffing establishment
RECORD SORTING/ ASSEMBLY			1 x 25	1 x 25	1 x 50	1 x 50	
RECORDS STORE - ACTIVE		1 x 15	1 x 60	1 x 60	1 x 200	1 x 300	Size dependent on quantity of records to be held
REVIEW / DICTATION CUBICLES			1 x 9	1 x 9	1 x 20	1 x 20	
STORE - GENERAL	yes		1 x 9 optional	1 x 9	1 x 9	1 x 9	
STORE - MICROFILM/ EQUIPMENT					1 x 20	1 x 20	
CIRCULATION %		15	15	15	15	15	

240.15.00 SHARED AREAS

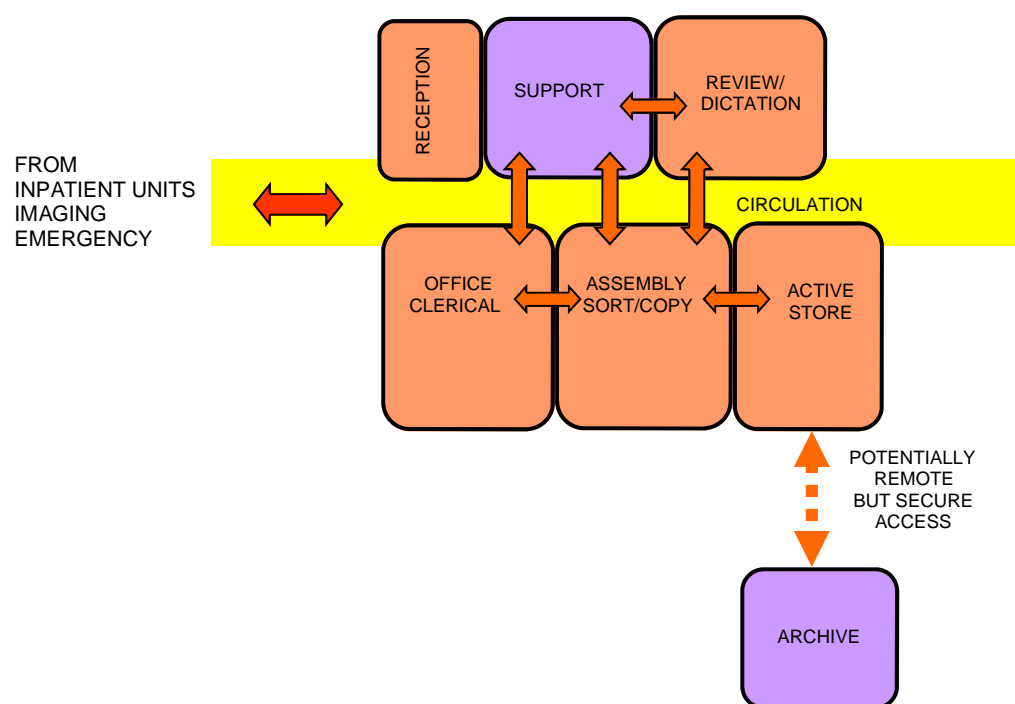
ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
INTERVIEW ROOM	yes				1 x 9	1 x 9	
PROPERTY BAY - STAFF	yes				1 x 6	1 x 6	
RECEPTION	yes		1 x 10	1 x 10	1 x 10	1 x 10	May include a small waiting area
RECORDS STORE - ARCHIVE		1 x 10	1 x 80	1 x 80	1 x 100	1 x 120	May be located remotely from the Unit
STAFF ROOM	yes				1 x 15	1 x 15	
STORE - PHOTOCOPY / STATIONERY	yes	1 x 8	1 x 8	1 x 8	1 x 8	1 x 8	
TOILET - STAFF	yes				1 x 2	1 x 2	

References and Further Reading

- 240.16.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Queensland Government, Private Health Facilities Building Code, 2000.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM CLINICAL INFORMATION UNIT



Part B - Health Facility Briefing and Planning

250 COMMUNITY MENTAL HEALTH

INDEX

	Description
250 .1.00	INTRODUCTION Description
	PLANNING Operational Models Functional Areas Functional Relationships
	Design Safety and Security
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

	Description
250 .2.00	A Community Mental Health Centre (CMHC) delivers a range of community mental health services for people living in the catchment area who have a serious mental illness and/or significant enduring disabilities resulting from mental illness.
250 .3.00	A CMHC will incorporate Continuing Care, Clinical and Consulting Services, and could also include the Crisis Assessment Team Service (CAT), the Mobile Support and Treatment Service (MST), Primary Mental Health Team and the Homeless Person's Team.
250 .4.00	The target population of the CMHC are those suffering from serious mental illness, and in some cases ongoing disability, who are aged between 16 and 64. The CMHC provides Continuing Care, Clinical and Consultancy Services as well as Non-residential Rehabilitation Services to this population group.
250 .5.00	The provision of Continuing Care, Clinical and Consultancy Services includes: <ul style="list-style-type: none">- Intake/Duty - the provision of assessment services, crisis services to existing clients, and transitional case management- Clinical services - the provision of post-intake assessment, diagnosis, family work, discharge planning, and a range of individual and group therapeutic interventions- Case Management - provision of case management to clients referred and accepted from Clinical Services- Community Development - coordinate and provide consultation and education to agencies and develop networks to enhance access and service opportunities for clients- Administrative Support - administrative support services to the clinic.

PLANNING

Operational Models

- 250 .6.00 The clinic services generally operate from Monday to Friday, between 8.30 am to 5.30 pm. Some of the services located in the clinic will generally work extended hours and weekends.

Functional Areas

- 250 .7.00 The Community Mental Health Centre will consist of the following areas/zones:

- Public / Client areas including:
 - Reception Areas
 - Waiting Areas
 - Public Toilets
- Public / Client / Staff areas including:
 - Duty / Intake Room
 - Interview Rooms
 - Medical Examination / Treatment Room
 - Meeting / Group Rooms
- Staff Areas, including:
 - Offices
 - Staff facilities
 - Accommodation for teams
- Sheltered external area.

- 250 .8.00 ADMINISTRATIVE AND OFFICE AREAS

Clinical services staff with management responsibilities engage in confidential and sensitive discussions and require a private office. These include:

- Area manager
- Service manager
- Continuing care managers
- Consultant psychiatrists
- Senior psychologist
- Senior social worker
- Senior psychiatric nurse
- Senior occupational therapist
- Medical officer
- Case managers
- Program Manager, i.e. CAT, MST, PMHT etc if they are based at the clinic.

In some cases the area manager will be permanently based at a particular clinic. Their office requirements will therefore differ from those area managers who visit several clinics during the course of a week.

The service manager will need access to the administrative support staff and will require the use of a private space to engage in confidential and sensitive discussions. The functions of the service manager are only partially scheduled and ad hoc.

Other staff will require open-plan accommodation that is designed to meet team requirements. The open-plan accommodation shall provide a designated workstation for each person and access to Meeting and Interview Rooms. Students will also need to be accommodated in an open-plan area. Because of part-time employment the number of people working on any given day or part of day is variable and the design needs to accommodate the peaks of staff activity.

Part B - Health Facility Briefing and Planning

Medical staff will require permanent access to medical/ physical examination space during these periods. The access required by allied health and nursing staff will be variable and will not be consistently applied across the day.

Case managers require access to other team members, Medical Records, administrative support, Reception and medical staff.

Offices are to comply with Standard Components.

- 250 .9.00 An area is required for administrative support staff whose primary function is word-processing and general clerical duties. These workers will each require a computer desk with return, computer, printer, chair, benchtop, two four-draw filing cabinets and shelf and cupboard space for storage. One worker may manage petty cash and may need access to a safe.

250 .10.00 ENTRY / WAITING AREAS

The Reception and Waiting Area is the first point of contact for clients and members of the community. It should communicate to clients and visitors that they are welcome and that a wide range of concerns may be discussed with the staff of the clinic.

The Waiting Area should be designed as a calm, comfortable and relaxing environment. The area will need to accommodate various sizes and types of groups including clients accompanied by children. Space should be made for children to play safely whilst under supervision from accompanying adults. Coffee and tea making facilities may be made available. An information area for the display of pamphlets will be required. People in the Waiting Room shall have direct access to toilets, which should include a fold down baby change table in each, and access to a sheltered external area which is not accessible from outside the building.

250 .11.00 CLINICAL RECORDS

Administrative support staff require access to the Clinical Records Area for information and, in particular, the receptionist needs immediate access to the clinical records administrative officer for back up support. The Clinical Records Area, therefore needs to be readily accessible to all clinical and administrative areas.

250 .12.00 RECEPTION AREA

The Reception Area is required where a receptionist can receive clients and other visitors.

The design of this area needs to include requirements to ensure the safety of the receptionist, while not being discomforting for clients. The telephone operation needs to be organised in a way that sufficiently isolates the sound from the Waiting Area while remaining responsive to those waiting. Public / Client / Staff Areas constitute the second zone of security.

The Reception area shall comply with Standard Components - Reception. Additional fittings / fixtures may include:

- Telephone command centre
- Duress alarm.

250 .13.00 STAFF DEVELOPMENT AND EDUCATION

Sufficient space and equipment is required to accommodate the needs of staff

Part B - Health Facility Briefing and Planning

for on-the-job training and education, which includes a room for seminars and library materials.

Functional Relationships

250 .14.00 SITE PLANNING

The overriding concern in the selection of a suitable site for a CMHC is that it is co-located within the general community and within walking distance of other services such as shops, community services and public transport. Ground floor accommodation is strongly preferred for a CMHC. Good access from the street minimises the possibility of confusion for clients and visitors and ensures easy access to the building for clients, staff or visitors with functional disabilities. The clinic should have an individual street address.

250 .15.00 CAR PARKING

Car parking is required to provide staff with reasonable access to their work. At a minimum there must be sufficient car parking space for staff with clinic vehicles and a reasonable allocation for clients and visitors, including MST and CAT staff and interpreters. Disabled access parking is also required.

DESIGN

Safety and Security

250 .16.00 SECURITY ZONES

The Unit should incorporate security zones which allow supervised access to restricted areas as follows:

- The Waiting area should constitute the first zone of security and will be proximal to the Reception and Clinical Areas
- Public / Client / Staff Areas constitute the second zone of security
- Staff areas constitute the third zone of security.

250 .17.00 PHARMACEUTICAL STORAGE

Sufficient space for secure, locked storage shall be provided in the Medical Examination and Treatment Room to store the small amount of pharmaceuticals kept on site.

250 .18.00 RECEPTION AREA

The design of the reception area needs to include requirements to ensure the safety of the receptionist, while not being discomforting for clients.

COMPONENTS OF THE UNIT

Introduction

250 .19.00 The Community Mental Health Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

250 .20.00 Provide the Standard Components as identified in the Schedule of

Accommodation.

Non-Standard Components

250 .21.00 Provide the Non-Standard Components identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

250 .22.00 DUTY AND INTAKE ROOM

DESCRIPTION AND FUNCTION

The Duty/ Intake Room will be comprised of at least one separate Interview Room with a telephone to enable interviewing of up to four people. The Duty/ Intake workers will be placed in close proximity to this area.

250 .23.00 LOCATION AND RELATIONSHIPS

The work of the intake/duty workers is coordinated through the Switchboard / Reception. The Intake / Duty Room will be proximal to the Reception and Waiting Area for back-up in the case of walk-in crises.

The intake/duty workers need ready access to the Medical Records Area and to medical staff for consultation and review of clients. The intake/duty workers may provide a depot injection service to people outside of their regular appointment times and thus need easy access to the Medical Examination and Treatment Room. In addition, the intake/duty workers provide a security back-up function to all other areas of the service, therefore, ease of access to all other areas is required.

250 .24.00 CONSIDERATIONS

Sufficient space is required for each staff member to have a desk, chair, filing cabinet, whiteboard and telephone. One computer with access to a printer and a fax machine is also required.

The Intake/Duty room will also need a duress alarm system and a second door to allow the safe and quick withdrawal of the duty worker from the room where necessary.

Part B - Health Facility Briefing and Planning

APPENDICES

CMHC Generic Schedule of Accommodation

250.25.00 Schedule of Accommodation for a Community Mental Health Centre with levels of service 3, 4, 5 and 6:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CONSULT ROOM	yes			3 x 15	3 x 15	3 x 15	For Counselling and interviewing; large for family groups
DUTY / INTAKE ROOM			1 x 15	1 x 15	1 x 15	1 x 15	
INTERVIEW ROOM	yes		4 x 12	4 x 12	4 x 12	4 x 12	Large - for family/ groups
MEDICATION DISPENSING				1 x 12	1 x 12	1 x 12	
MEETING ROOM	yes		1 x 30	1 x 30	2 x 30	2 x 30	Case Conferences / Group Room / Mental Health Review Board sittings
OFFICE - SINGLE PERSON 12 M2	yes		1 x 12	1 x 12	1 x 12	1 x 12	Service Manager
SHOWER - STAFF	yes		1 x 2 optional	1 x 2 optional	1 x 2 optional	1 x 2 optional	
TOILET - DISABLED	yes		2 x 5	2 x 5	2 x 5	2 x 5	
TOILET - STAFF	yes		1 x 2	1 x 2	1 x 2	1 x 2	Staff Toilet, Shower and Property Bay may be combined
TREATMENT ROOM	yes		1 x 15	2 x 15	2 x 15	2 x 15	
WAITING	yes		1 x 20	1 x 20	1 x 20	1 x 20	
CIRCULATION %			30	30	30	30	

250.26.00 STAFF & SUPPORT AREAS

Note: Staff Offices are dependent on the staffing establishment and Operational Policy.

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
LIBRARY / RESOURCE					1 x 15 optional	1 x 15 optional	
OFFICE - SINGLE PERSON 12 M2	yes			1 x 12 optional	1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 12 M2	yes		1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional	Area Manager, according to Staffing establishment
OFFICE - SINGLE PERSON 9 M2	yes		7 x 9 optional	8 x 9 optional	8 x 9 optional	8 x 9 optional	Quantity according to staffing establishment
OFFICE - WORKSTATION	yes		18 x 6 optional	18 x 6 optional	18 x 6 optional	18 x 6 optional	Quantity according to staffing establishment

Part B - Health Facility Briefing and Planning

CMHC Generic Schedule of Accommodation

250 .27.00 SHARED AREAS

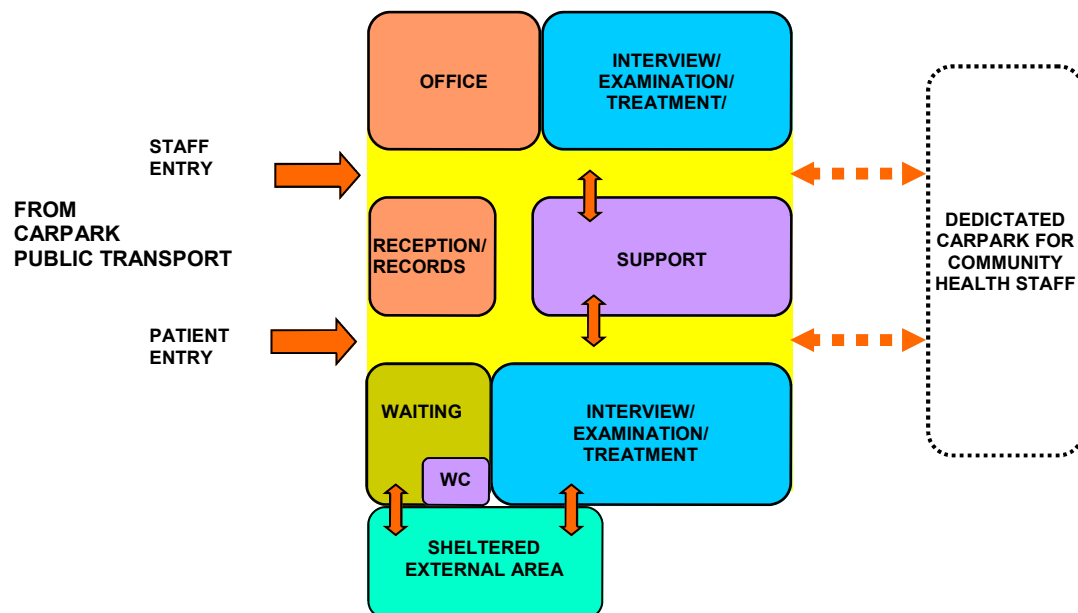
ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes		1 x 3	1 x 3	1 x 3	1 x 3	Co-located with Staff Room
PROPERTY BAY - STAFF	yes		1 x 6	1 x 6	1 x 6	1 x 6	
RECEPTION	yes		1 x 10	1 x 10	1 x 10	1 x 10	May be larger if accommodating more than 2 persons
STAFF ROOM	yes		1 x 15	1 x 15	1 x 15	1 x 15	
STORE - GENERAL	yes			1 x 9	1 x 9	1 x 9	

References and Further Reading

- 250 .28.00
- Department of Human Services, Victoria, Aged, Community & Mental Health Division, Generic Brief for a Community Mental Health Centre, 1997.
 - NSW Health, DS 26 Mental Health Facility Planning Guideline, 2000.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - COMMUNITY MENTAL HEALTH UNIT



Part B - Health Facility Briefing and Planning

260 CORONARY CARE UNIT

INDEX

Description

- 260 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 260 .2.00 Coronary patients have special needs. They are often fully aware of their surroundings but still need immediate and critical emergency care. In addition to the standards set out in Intensive Care, the following standards apply to the Coronary Critical Care Unit:

PLANNING

Functional Areas

- 260 .3.00 PATIENT AREAS
- Each coronary patient should have a separate room for acoustic and visual privacy.
- 260 .4.00 Each coronary patient should have access to a toilet in the room. (Portable commodes may be used in lieu of individual toilets, but provisions must be made for their storage, servicing, and odour control.)

Functional Relationships

- 260 .5.00 The Coronary care Unit should be located with ready access to the Operating Unit, Medical Imaging Units, Emergency Unit and Cardiac Inpatient Units. The Coronary Care Unit may also be co-located with the Intensive Care Unit, or an Inpatient Accommodation Unit

Part B - Health Facility Briefing and Planning

COMPONENTS OF THE UNIT

Introduction

- 260 .6.00 The Coronary Care Unit may consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 260 .7.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 260 .8.00 There are no Non-Standard Components in the Coronary Care Unit.

Part B - Health Facility Briefing and Planning

APPENDICES

Coronary Care Generic Schedule of Accommodation

260.9.00 The Coronary Care Unit may be co-located with an Inpatient Accommodation Unit in order to efficiently share facilities. The Schedule of Accommodation for a 6 Bed / 8 Bed and 12 Bed CCU at Levels 4, 5 and 6 respectively:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
				6 Bed	8 Bed	12 Bed	
1 BED ROOM - SPECIAL CCU	yes			6 x 18	7 x 18	11 x 18	
1 BED ROOM - ISOLATION	yes				1 x 18 optional	1 x 18 optional	Dependent on Service Demand
BAY - HANDWASHING	yes			2 x 1	2 x 1	3 x 1	
BAY - LINEN	yes			1 x 2	1 x 2	1 x 2	
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	1 x 2	
ENSUITE - STANDARD	yes			6 x 5	8 x 5	12 x 5	
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9	1 x 9	1 x 9	Unit Manager
OFFICE - SINGLE PERSON 12 M2	yes					1 x 12 optional	Cardiologist
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	Registrars
STAFF STATION	yes			1 x 9	1 x 15	1 x 20	
STORE - GENERAL	yes			1 x 9	1 x 9	1 x 9	
WAITING	yes			1 x 10 optional	1 x 15 optional	1 x 15 optional	May be shared with an adjacent Unit
CIRCULATION %				35	35	35	

260.10.00 SHARED AREAS

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes			1 x 3	1 x 3	1 x 3	
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	May be co-located with Disposal Room
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	
MEETING ROOM	yes			1 x 12	1 x 15	1 x 15	For Meetings, Tutorials
PROPERTY BAY - STAFF	yes			1 x 6	1 x 6	1 x 6	

Part B - Health Facility Briefing and Planning

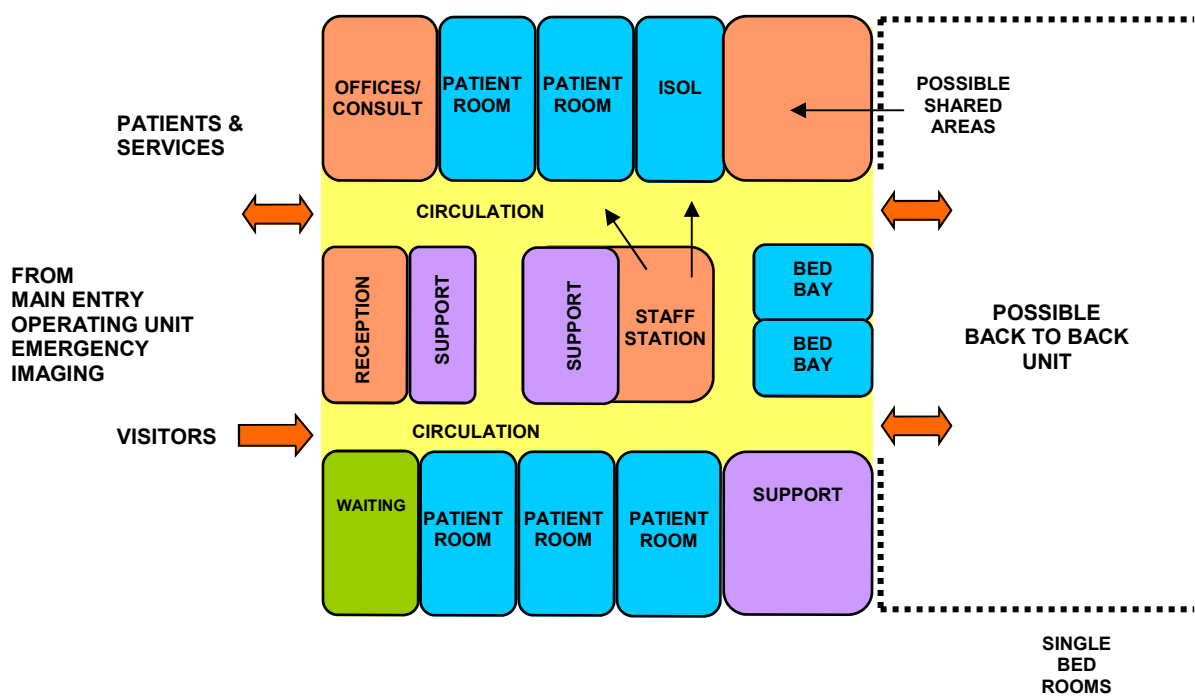
STAFF ROOM	yes			1 x 15	1 x 15	1 x 15	
TOILET - STAFF	yes			1 x 2	1 x 2	1 x 2	

References and Further Reading

- 260 .11.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- NSW Health, Design Standard 13 Health Building Guidelines - Intensive Care Unit, Coronary Care Unit, 1992.
 - Queensland Government, Private Health Facilities Building Code, 2000.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - CORONARY CARE UNIT



Part B - Health Facility Briefing and Planning

270 DAY PROCEDURE UNIT

INDEX

Description

- 270 .1.00 INTRODUCTION
Description
General
- PLANNING
Operational Models
Functional Areas
Functional Relationships
- DESIGN
General
Doors
Fixtures and Fittings
Safety and Security
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 270 .2.00 A Day Procedure Unit is where operative procedures are performed. It comprises one or more Operating Rooms, with provision to deliver anaesthesia and accommodation for the immediate post operative recovery of day patients.

General

- 270 .3.00 The Day Procedures Unit can be a stand-alone, attached or shared service. If the facility is part of an Acute Care Hospital or other Medical Facility, services can be shared, as appropriate to minimise duplication.

PLANNING

Functional Areas

- 270 .4.00 The Unit functions as an appropriate and safe venue to perform surgical procedures, using inhalations and other anaesthetic agents and to provide adequate facilities for:
- Admission of patients
 - Procedures performed
 - Recovery and observation
 - Discharge of patients
 - Staff amenities.
- 270 .5.00 The design shall separate waiting patients from those recovering or undergoing procedures. Waiting patients shall not be exposed to frightening and distasteful noises.

- 270 .6.00 Additional requirements for a Day Procedures Unit are as follows:
- A clinical handbasin located in all patient care areas
 - All patient bed spaces to be provided with the following minimum requirements:
 - suction and oxygen
 - patient nurse call and emergency call
 - four GPOs with earth leakage protection
 - Floor and wall finishes are to be seamless, impervious or welded and washable
 - Floors are to be non-slip and graded to fall to floor wastes as required
 - Intersections of walls and floors are to be coved in continuous materials.

270 .7.00 ADMINISTRATIVE AREAS

General and individual offices shall be provided as required for business transactions, records and administrative and professional staff. These shall be separate from public and patient areas with provision for confidentiality of records. Enclosed office spaces shall be provided for:

- Administration and consultation
- Manager / Nurse Unit Manager as required

Offices are to comply with Standard Components.

270 .8.00 CLINICAL RECORDS

A secure room shall be provided with provision for storage, recording and retrieval of clinical records.

- 270 .9.00 If geographically appropriate, and if the day procedures unit is part of, or attached to, an acute hospital, the general clinical records facility might be used in lieu of a dedicated and separate room.

270 .10.00 ENDOSCOPY SERVICE

Where the Endoscopic Service is attached to an Operating Unit, then the Recovery Room, Recovery Lounge and Support Services can be shared.

270 .11.00 ENDOSCOPE ROOM/S

The number and operation of Endoscope Rooms shall be as determined by the Operational Policy.

- 270 .12.00 Room size will vary, dependent upon:

- The use of video equipment
- Electrosurgical laser treatment
- Fluoroscopy
- Multiple scope activity
- Multiple observers
- The use of X-ray (image intensifying)

- 270 .13.00 However, where basic endoscopy is to be performed, the room size shall be no smaller than 36 m². Where video equipment is used the room size may be 42 m². Larger sizes, where possible, are recommended for flexibility and future developments. The ceiling height shall be 3000 mm.

- 270 .14.00 Endoscope Room/s shall be fitted out as for a Minor Operating Room, for example, it will be suitable for general anaesthetic with appropriate medical gases, power, lighting, air-conditioning and ventilation. Staff assistance call shall be provided. Consideration shall also be given to the special

Part B - Health Facility Briefing and Planning

requirements of laser equipment.

- 270 .15.00 A clinical scrub up basin shall be provided outside the entrance to the Endoscope Room.
Direct access to the Clean-up Room is recommended.
Impervious wall, floor and ceiling treatments are essential for ease of cleaning.

270 .16.00 ENTRY AREAS

A covered entrance for picking up patients after surgery shall be provided; this may be shared with other departments.

- 270 .17.00 The Entry shall include:
- Convenient access to wheelchair storage
 - Reception and information counter or desk
 - A Waiting Area that allows for the separation of paediatric and adult patients, if organised Paediatric Services are provided
 - A convenient access to public toilet facilities
 - A convenient access to public telephones
- This area may be a shared Outpatient Facility.

270 .18.00 HOLDING AREA

A Holding Area shall be provided where gowned patients enter after changing and wait for their procedure.

- 270 .19.00 The Pre-operative Holding area shall be provided with the following minimum requirements as appropriate to the proposed service:
- A patient trolley or patient seating
 - Privacy screening
 - Handbasin with liquid soap and paper towel fittings
 - Patient nurse call buttons with pendant handsets and indicators
 - Emergency call buttons with indicators
 - Medical gases including oxygen and suction to each bed
 - A minimum of four GPOs for each bed space.

270 .20.00 OPERATING/ PROCEDURES ROOMS

The design of the Operating / Procedure Rooms must allow for adequate space, ready access, free movement and demarcation of sterile and non sterile zones.

270 .21.00 PATIENT CHANGE AREAS

A separate area shall be provided where outpatients can change from street clothing into hospital gowns and be prepared for surgery. It shall be convenient to the Waiting Area. This patient change area shall include Waiting Rooms and lockers.

270 .22.00 PERI-OPERATIVE UNIT

Where Day Procedures (day only surgical service) are provided within the same area as Inpatient Acute Surgery (shared facility), the design shall consider the need to separate the two distinct functions at the incoming side. The design shall also preclude unrelated traffic from the Day Procedures Unit and the Operating Unit.

270 .23.00 PREPARATION ROOM

Part B - Health Facility Briefing and Planning

270 .23.00

A Preparation Room may be required for patients undergoing certain procedures such as Endoscopy or Ophthalmology. If included, the Preparation Room should include:

- Handbasin - Clinical
- Bench, and cupboards for setting up of procedures
- Adequate space for procedures equipment trolleys
- Examination couch
- Patient privacy screening

270 .24.00 RECOVERY AREAS

In larger facilities it is often considered desirable to have a three stage recovery area. The first stage involves intensive supervision, the second stage has changing facilities in more casual surroundings and in the third stage, the patient is fully mobile and takes visitors. Supervision of the patient is vital at each stage.

270 .25.00 Patients in this area may recover in recliners/chairs. A ratio of two chairs (minimum) to each Operating/Procedure room, in addition to the above bed requirement, is considered appropriate.

270 .26.00 The number of bed/trolley spaces in the Stage 1 Recovery Area will be dependent upon the nature of surgery or procedures performed as outlined in the Operational Policy and the proposed throughput. As a minimum, 1.5 bed/trolley spaces per Operating Room shall be provided.

270 .27.00 If Paediatric Surgery is part of the function, the Recovery Room shall provide for the needs of parents/attendants. A Resuscitation trolley shall be located in this Unit.

270 .28.00 A Dirty Utility for disposal, cleaning and storage of bed pans shall be provided within easy access of the Recovery Room. The Dirty Utility is to comply with Standard Components - Dirty Utility.

270 .29.00 RECOVERY - STAGE 2

Stage 2 Recovery Room may be provided as required to accommodate:

- Patients who have regained consciousness after anaesthesia but require further observation
- Patients who have undergone procedures with local anaesthetic.

The patient is required to remain under observation until ready for discharge.

270 .30.00 Stage 2 Recovery areas can be further described as follows:

- Stage 2A: Provision of patient trolley bays
- Stage 2B: Provision of a combination of discreet patient trolley bays and patient recliners.

External windows are to be provided in Stage 2 Recovery.

Provision for immediate access to, and use of, a resuscitation trolley shall be made at both the Procedural and Recovery Areas

270 .31.00 Minimum space requirement is three bed / trolley / chair spaces per Room and some comfortable seating for ambulant patients.

Part B - Health Facility Briefing and Planning

Functional Areas

270 .32.00 STORAGE

An area shall be provided for trolley/wheelchair storage/parking that is convenient and out of the direct line of traffic.

Functional Relationships

270 .33.00 There shall be appropriate access for non-ambulant patients and their attendants where the facility is not on the ground floor.

270 .34.00 AMBULANCE ACCESS

A discreet pick-up point, preferably under cover, shall be provided for the transfer of patients to and from the Day Procedure Unit.

270 .35.00 CAR PARKING

Adequate car parking facilities that comply with Local Council requirements need to be provided.

DESIGN

General

270 .36.00 Pre-operative and post-operative patient facilities can be located together as required.

Doors

270 .37.00 All door widths in patient areas shall allow access for trolley bed/ trolley transfer.

Fixtures & Fittings

270 .38.00 Consideration shall be given to patient privacy and dignity by providing bed screens.

Safety and Security

270 .39.00 Appropriate internal security shall be maintained by employing the following:

- All drugs shall be stored in a locked cupboard or a locked room; all keys shall be kept by the authorised officer.
- Narcotic substances shall be stored in a metal drug safe.

COMPONENTS OF THE UNIT

Introduction

270 .40.00 The Day Procedure Unit may consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

270 .41.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Part B - Health Facility Briefing and Planning

Non-Standard Components

270.42.00 There are no Non-Standard Components in this Unit.

APPENDICES

Day Procedures Generic Schedule of Accommodation

270.43.00 The Department Of Human Services may approve a modified Schedule of Accommodation in the case of Hospitals to be registered as freestanding Day Care Endoscopy Centres.

270.44.00 Schedule of Accommodation for Day Procedures Unit from Levels 2 to 6:

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes	1 x 3	1 x 3	1 x 3	1 x 3	1 x 3	May be located close to Lounge areas
BAY - HANDWASHING	yes	2 x 1	3 x 1	3 x 1	4 x 1	4 x 1	Refer to Infection Control Guidelines
BAY - LINEN	yes	1 x 2	1 x 2	1 x 2	2 x 2	2 x 2	Add 1 m2 if Blanket Warmer to be included in this space
BAY - MOBILE EQUIPMENT	yes	1 x 4	1 x 4	2 x 4	1 x 4	1 x 4	
BAY - RESUS TROLLEY	yes	1 x 2	1 x 2	1 x 2	1 x 2	1 x 2	
BATHROOM	yes			1 x 10 optional	1 x 10 optional	1 x 10 optional	
CHANGE CUBICLE - PATIENT	yes	1 x 2	1 x 2	1 x 2	1 x 2	1 x 2	
CHANGE CUBICLE - PATIENT DISABLED	see remarks	1 x 5	1 x 5	1 x 5	1 x 5	1 x 5	Refer to Standard Component - Change Cubicle Patient
CLEANER'S ROOM	yes	1 x 4	1 x 4	1 x 4	1 x 4	1 x 4	
CLEAN-UP ROOM	see remarks	1 x 6	1 x 6	1 x 15	1 x 30	1 x 30	Refer to Standard Component - Clean_Up Room; size according to Operational Policy
CLEAN UTILITY	yes	1 x 12	1 x 12	1 x 12	1 x 12	1 x 12	
DIRTY UTILITY	yes	1 x 10	1 x 10	1 x 10	1 x 10	1 x 10	May be co-located with Disposal Room
OFFICE - WORKSTATION	yes	1 x 6	1 x 6				For Recovery - staff write-up area
OPERATING ROOM - MINOR	yes	1 x 36	1 x 36	1 x 36	1 x 36	1 x 36	May be located in Operating Unit
OPERATING ROOM - GENERAL	yes			1 x 42 optional	2 x 42 optional	2 x 42 optional	May be located in Operating Unit; Depending on Operational Policy
PATIENT BAY	yes	4 x 9	4 x 9	6 x 9	8 x 9	8 x 9	Holding
PATIENT BAY	yes	2 x 9	3 x 9	3 x 9	5 x 9	5 x 9	Recovery Stage 1
PATIENT BAY	yes	3 x 9	3 x 9	9 x 9	12 x 9	12 x 9	Recovery Stage 2A/ 2B and 3
SHOWER - PATIENT	yes	1 x 4	1 x 4	1 x 4	1 x 4	1 x 4	With Change facilities
STAFF STATION	yes			1 x 14	1 x 14	1 x 14	For Recovery
STORE - EQUIPMENT	yes			1 x 9	1 x 20	1 x 20	

Part B - Health Facility Briefing and Planning

STORE - GENERAL	yes	1 x 9	1 x 9	1 x 9	1 x 9	1 x 9	
TOILET - PATIENT	yes	1 x 4	2 x 4	2 x 4	3 x 4	3 x 4	With Change facilities
CIRCULATION 35%		35	35	35	35	35	

270.45.00 STAFF AND SUPPORT AREAS

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CONSULT ROOM	yes	1 x 12 optional	1 x 12	1 x 12	2 x 12	2 x 12	
INTERVIEW ROOM	yes			1 x 9	1 x 9	1 x 9	
OFFICE - SINGLE PERSON 12 M2	yes			1 x 12 optional	1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 9 M2	yes	1 x 9 optional	1 x 9	1 x 9	1 x 9	1 x 9	Unit Manager
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	CNC / Nurse Educators
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	Registrars
OFFICE - WORKSTATION	yes				1 x 6 optional	1 x 6 optional	Secretarial
RECEPTION	yes	1 x 10 optional	1 x 10 optional	1 x 10	1 x 10	1 x 10	May be larger if more than 2 persons to be accommodated
TOILET - STAFF	yes	1 x 2	1 x 2	2 x 2	2 x 2	2 x 2	
WAITING	yes	1 x 6 optional	1 x 6 optional	1 x 15	1 x 18	1 x 18	

270.46.00 SHARED AREAS

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CHANGE ROOM - STAFF	yes	1 x 8	1 x 8	2 x 8	2 x 10	2 x 10	May be shared with Operating Unit if co-located
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	
MEETING ROOM	yes				1 x 20	1 x 20	Meetings, Tutorials

References and Further Reading

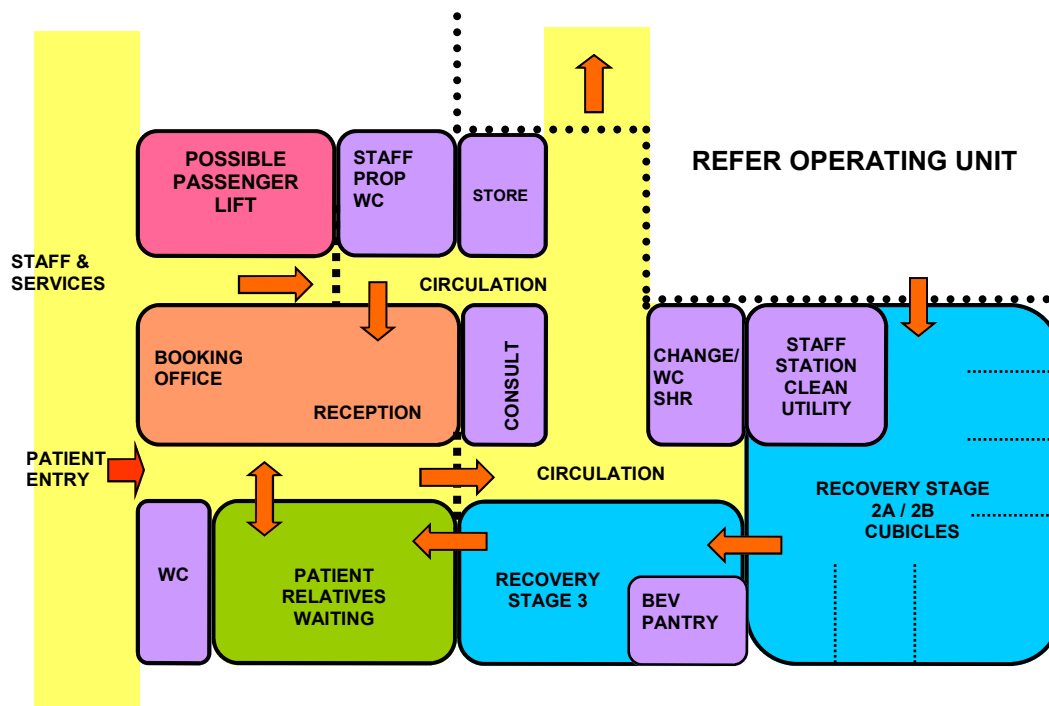
- 270.47.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.
 - National Co-ordinating Committee on Therapeutic Goods - Standards for Operation of Sterile Supply Services in Healthcare Facilities.
 - Queensland Government, Private Health Facilities Building Code, 2000.

Part B - Health Facility Briefing and Planning

- Tasmanian Department of Community & Health Services, Standards for Day Surgery/ Procedures Facilities, 1995.
- Technical Guideline TG 6.001, Department of Human Services Victoria, 1990 Revised 1998.
- The Australian Confederation of Operating Room Nurses (A.C.O.R.N.) Standards, Guidelines and Policy.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - DAY PROCEDURE UNIT



Part B - Health Facility Briefing and Planning

280 DENTAL UNIT

INDEX

Description

280 .1.00	INTRODUCTION Description
	PLANNING Functional Areas Functional Relationships
	DESIGN Building Service Requirements
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

280 .2.00	Dental Units may be attached to hospital departments, for example Emergency Units or Outpatients Units, or may be a freestanding department. Refer to Operating Unit for dental surgery as a function of an operating suite.
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PLANNING

Functional Areas

280 .3.00	The Dental Unit will consist of the following Functional Areas: <ul style="list-style-type: none">- Reception Area and Waiting- Office area for administrative and clerical activities- Dental Surgery Rooms- Support Rooms including Clean-up Room, Laboratory, Store, Sterilising, X-ray processing area and Plant areas- Staff Amenities which may be shared with adjacent Units.
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Functional Relationships

280 .4.00	The Dental Unit in a hospital precinct may be located close to other ambulatory care units. It should have ready access to Entry and Waiting areas and public amenities.
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DESIGN

Building Service Requirements

280 .5.00	Radiation protection requirements for Dental Surgery Rooms will require assessment by radiation specialists. Compliance with any statutory authority regulations is required.
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COMPONENTS OF THE UNIT

Introduction

- 280 .6.00 The Dental Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 280 .7.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 280 .8.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation.

- 280 .9.00 DENTAL LABORATORY

DESCRIPTION AND FUNCTION

Generally the manufacture of dentures is out sourced, but there is a requirement for a Dental Laboratory where dental staff are able to trim, adjust, or polish dentures. There may also be a need to pour impressions (with plaster) before they are sent out to a laboratory.

This area will require work bench space, a small sink with drainer, a dental bench lathe, and a laboratory trimming motor.

The Dental Laboratory shall be a minimum of five m2.

- 280 .10.00 LOCATION AND RELATIONSHIPS

The Dental Laboratory should be located with ready access to the Dental Surgery Rooms.

- 280 .11.00 CONSIDERATIONS

All joinery is to be moisture resistant. There is to be no exposed timber, all surfaces including drawers must be laminated or moulded plastic, for ease of cleaning.

Bench heights shall be 900 mm. The bench top is to be post formed with a coved upstand of 200 mm. A rubbish bin cupboard is required and should be located near the sink. The balance of the under bench joinery shall consist of storage cupboards and drawers. Some cupboards should be lockable.

Inclusion of a plaster trap under the sink is advised if there is a high denture workload envisaged. The sink and plaster trap may also be provided as a separate room.

Non slip vinyl flooring is recommended.

Air exhaust is recommended for dust extraction from this room.

- 280 .12.00 PLANT ROOM

DESCRIPTION AND FUNCTION

Part B - Health Facility Briefing and Planning

The Plant Room will accommodate equipment including water filtration equipment, silver water treatment system, dental suction plant and air compressors.

The Plant Room shall be a minimum of six m². The size will be dependent on the amount of equipment to be accommodated and the layout.

280 .13.00 LOCATION AND RELATIONSHIPS

The Plant Room should be located to minimise the impact of noise and heat generated by equipment accommodated within the room on adjacent areas. Access to the Plant Room though an external door is recommended as internal access may present noise issues.

280 .14.00 CONSIDERATIONS

Services required for equipment may include compressed air, cold water and both single and three phase power. Additional requirements include floor wastes and tundishes for waste water, external exhausting for suction system air discharge and room ventilation.

There may be a requirement to include a pit in the plant room floor to accommodate an air venturi for the suction system.

Remote isolation switches for plant should be considered (the sterilizing room or reception are ideal locations) so plant can be easily shut down at the end of the day.

280 .15.00 X-RAY PROCESSING

DESCRIPTION AND FUNCTION

The X-ray Processing Area will accommodate the dental X-ray developing machines. The area will require a bench and small sink for film washing. The X-Ray Processing area shall be a minimum of two m².

280 .16.00 LOCATION AND RELATIONSHIPS

The Processing area should be located with ready access to the dental Surgery Rooms. There should be restricted access for patients and children.

280 .17.00 CONSIDERATIONS

All joinery is to be moisture resistant. There is to be no exposed timber, all surfaces including drawers must be laminated or moulded plastic, for ease of cleaning.

Bench heights shall be 820 mm. The bench top is to be post formed with a coved upstand of 200 mm. Underbench storage shall be provided for storage of chemicals and must be lockable. A rubbish bin cupboard is required and should be located near the sink.

If this area is designed as an alcove off a corridor it is desirable to incorporate doors or some method of limiting access to patients, particularly children.

This is a convenient location for the placement of the treated water outlet for dental unit water bottle filling.

Air exhaust for extraction of developer chemicals is recommended.

Part B - Health Facility Briefing and Planning

APPENDICES

Dental Unit Generic Schedule of Accommodation

280.18.00 The recommended Schedule of Accommodation for a freestanding Dental Unit with four Dental Surgery Rooms in a Level 4 Hospital of 120 Beds:

ROOM / SPACE	Standard Component			Level 4 Qty x m2		Remarks
CLEAN-UP ROOM	yes			1 x 10		
DENTAL LABORATORY				1 x 9		
DENTAL SURGERY	yes			4 x 14		
OFFICE - 2 PERSON SHARED	yes			1 x 12		
PLANT ROOM				1 x 6		
RECEPTION	yes			1 x 10		
STERILISING ROOM				1 x 15		
STORE - GENERAL	yes			1 x 9		
TOILET - PATIENT	yes			1 x 3		
TOILET - PUBLIC	yes			1 x 3		
X-RAY PROCESSING				1 x 2		
CIRCULATION %				20		

280.19.00 SHARED AREAS

ROOM / SPACE	Standard Component			Level 4 Qty x m2		Remarks
BAY - BEVERAGE	yes			1 x 3		
CLINICAL RECORDS				1 x 6		
DISPOSAL ROOM	yes			1 x 8		
MEETING ROOM	yes			1 x 12		
STAFF ROOM	yes			1 x 15		
TOILET - STAFF	yes			1 x 2		
WAITING	yes			1 x 20		

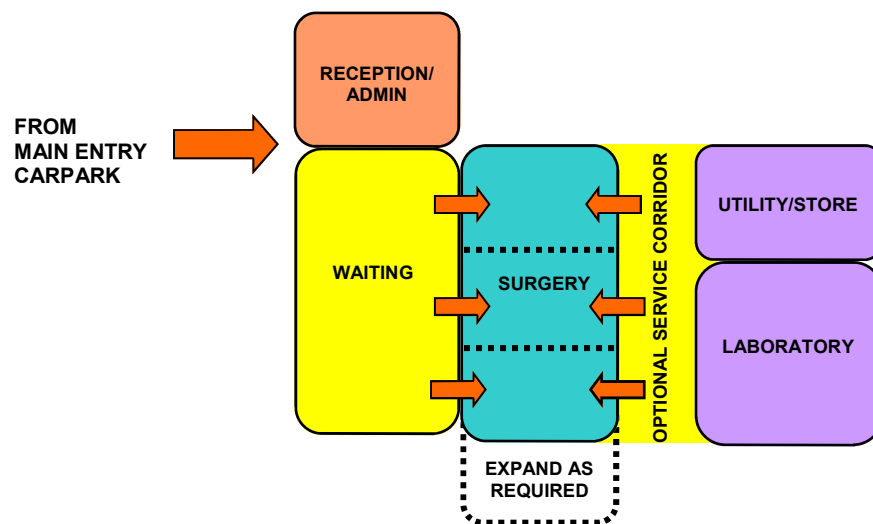
Part B - Health Facility Briefing and Planning

References and Further Reading

- 280 .20.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - DENTAL UNIT



Part B - Health Facility Briefing and Planning

290 EDUCATION & TRAINING UNIT

INDEX

Description

- 290 .1.00 INTRODUCTION
General
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Generic Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

General

- 290 .2.00 An Education and Training Unit requires access to suitable accommodation for the provision of ongoing education and training facility personnel.

PLANNING

Functional Areas

- 290 .3.00 Education and training facilities may include the following:
- Meeting Rooms for tutorials, conferences and seminars
 - Common Rooms
 - Demonstration Rooms
 - Lecture Rooms or Theatres
 - Library collection and reading areas
- 290 .4.00 LECTURE ROOM/S
- Provision of a Lecture Room is recommended, dependent upon the size of the facility and the requirement for training sessions or conferences. If provided, consideration should be given to acoustic privacy and audiovisual requirements.
- 290 .5.00 LIBRARY AREA
- A room or space fitted out for the storage of, and referral to, all types of reference material is recommended. Consideration should be given to the following inclusions:
- Desks/tables and chairs
 - Audiovisual facilities.

Functional Relationships

- 290 .6.00 Access to Public and/or Staff Amenities in close proximity to an Education/Training Unit is recommended.

Part B - Health Facility Briefing and Planning

COMPONENTS OF THE UNIT

Introduction

- 290 .7.00 The Education and Training Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 290 .8.00 Provide the Standard Components as identified in the Generic Schedule of Accommodation.

Non-Standard Components

- 290 .9.00 Provide the Non Standard Components as described in the Schedule of Accommodation, according to Operational Policy and service demand.

APPENDICES

Education Generic Schedule of Accommodation

- 290 .10.00 Schedule of Accommodation for an Education & Training Unit at Levels 3, 4 5 and 6:

EDUCATION AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
COMMON ROOM - STUDENTS					1 x 40 optional	1 x 40 optional	
DEMONSTRATION ROOM					1 x 40 optional	1 x 40 optional	
LECTURE/ CONFERENCE RM			1 x 50 optional	1 x 75	2 x 40	2 x 40	Size allocation is based on an area of 1.5 m2 per person
LECTURE THEATRE LARGE					1 x 200	1 x 200	
LECTURE THEATRE SMALL					1 x 60 optional	1 x 60 optional	
MEETING ROOM - MEDIUM/ LARGE	yes		1 x 15 optional	1 x 15 optional	4 x 20 optional	4 x 20 optional	
STORE - AUDIOVISUAL EQUIPMENT			1 x 6 optional	1 x 6 optional	1 x 10 optional	1 x 10 optional	May be provided as locked cupboards within lecture room or separately
CIRCULATION %			15	15	15	15	

290 .11.00 LIBRARY AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
JOURNAL DISPLAY			1 x 5	1 x 5	1 x 25	1 x 25	

Part B - Health Facility Briefing and Planning

LIBRARY COLLECTION			1 x 20	1 x 20	1 x 140	1 x 140	
LIBRARY WORKROOM					1 x 18 optional	1 x 18 optional	
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12	1 x 12	Librarian
READER ASSISTANCE DESK					1 x 15	1 x 15	
READER SERVICES AREA					1 x 8 optional	1 x 8 optional	
READING / STUDY AREA					1 x 70 optional	1 x 70 optional	
STORE - GENERAL	yes				1 x 9	1 x 9	

290.12.00 SUPPORT AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
ARCHIVES / MUSEUM					1 x 20 optional	1 x 20 optional	
AUDIOVISUAL ROOM					1 x 15 optional	1 x 15 optional	
COMMUNICATIONS ROOM					1 x 20 optional	1 x 20 optional	
COMPUTER ROOM					1 x 15 optional	1 x 15 optional	
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Co-ordinator, according to staffing establishment
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	According to Staffing establishment
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	Audiovisual technicians
PREPARATION ROOM					2 x 10 optional	2 x 10 optional	
RECEPTION	yes				1 x 10 optional	1 x 10 optional	
STORE - PHOTOCOPY / STATIONERY	yes				1 x 8 optional	1 x 8 optional	
TOILET - DISABLED	yes				1 x 5	1 x 5	
TOILET - PUBLIC	yes				8 x 3	8 x 3	Apportioned for Males (4) and Females (4)

290.13.00 SHARED AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes				1 x 3	1 x 3	
CLEANER'S ROOM	yes				1 x 4	1 x 4	
TOILET - STAFF	yes				4 x 2	4 x 2	Separate Male & Female facilities

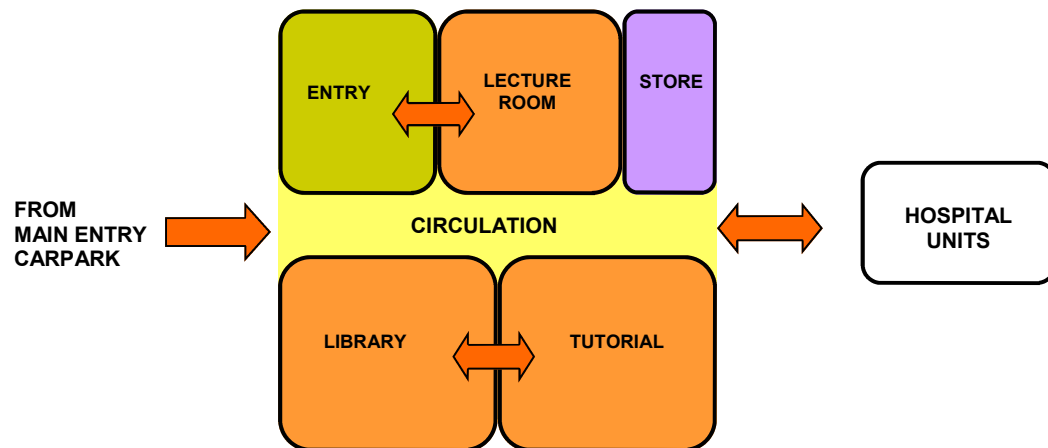
Part B - Health Facility Briefing and Planning

References and Further Reading

- 290.14.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - EDUCATION & TRAINING UNIT



Part B - Health Facility Briefing and Planning

300 EMERGENCY UNIT

INDEX

Description

- 300 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Communications
Corridors
Finishes
Infection Control
Nurse Call
Lighting
Safety and Security
Building Service Requirements
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 300 .2.00 The function of the Emergency Unit is to receive, stabilise and manage patients who present with a large variety of urgent and non urgent conditions whether self or otherwise referred. The Emergency Unit also provides for the reception and management of disaster patients as part of the Unit's role within the Disaster Plan of each region.
- 300 .3.00 It is recommended that Hospitals that do not provide an Emergency Service display a prominent exterior sign at the main entrance stating this and giving the location of the nearest Hospital with an Emergency Service.

PLANNING

Functional Areas

- 300 .4.00 An Emergency Unit is comprised of the following functional areas:
- Entrance/Reception
 - Resuscitation
 - Acute Treatment and associated Consultation Rooms / Workstations
 - Staff Amenities
 - Administration
- 300 .5.00 The main aggregation of clinical staff will be at the Staff Stating in the Acute Treatment/Resuscitation Area. This should be the focus around which the other clinical areas are grouped. The Entrance/Reception Area is the focus of initial presentation.

- 300 .6.00 In addition to clinical areas, Emergency Units may require facilities for the following essential functions:
- Teaching
 - Research
 - Administration
 - Staff amenities
- 300 .7.00 In addition to standard treatment areas, some departments may require additional, specifically designed areas to fulfil special roles, such as:
- Management of paediatric patients
 - Management of major trauma patients
 - Management of psychiatric patients
 - Management of patients following sexual assault
 - Extended observation and management of patients
 - Undergraduate and postgraduate teaching
 - Transport and retrieval services
 - Telemedical
- 300 .8.00 Provisions for Emergency Units shall include:
- A well-marked, illuminated, and covered entrance, at grade level.
 - Reception, triage, and control station shall be located so that staff can observe and control access to treatment areas, pedestrian and ambulance entrances, and public Waiting Areas.
- 300 .9.00 ENTRANCE AREA
- The entrance to the Emergency Unit must be at grade-level, well-marked, illuminated, and covered. It shall provide direct access from public roads for ambulance and vehicle traffic, with the entrance and driveway clearly marked. If a raised platform is used for ambulance discharge, provide a ramp for pedestrian and wheelchair access.
- 300 .10.00 The entrance to the Emergency Unit shall be paved to allow discharge of patients from cars and ambulances. Temporary parking should be provided close to the entrance.
- 300 .11.00 WAITING AREA
- The Waiting Area should provide sufficient space for waiting patients as well as relatives/escorts. The area should be open and easily observed from the Triage and Reception areas. Seating should be comfortable and adequate. Space should be allowed for wheelchairs, prams, walking aids and patients being assisted. There should be an area where children may play.
- Support facilities, such as a television should also be available. Fittings must not provide the opportunity for self harm or harm towards staff. Waiting Areas shall be negatively pressured.
- 300 .12.00 From the Waiting Area there must be access to:
- Triage and Reception Areas
 - Toilets
 - Baby Change Room
 - Light refreshment facilities which may include automatic beverage dispensing machines
 - Telephone and change machines
 - Health literature
- 300 .13.00 It is desirable to have a separate Waiting Area for children. This area will

Part B - Health Facility Briefing and Planning

300.13.00 provide equipment suitable for safe play activities, including a television. It shall be separated for sound from the general Waiting Room and must be visible to the Triage Nurse.

300.14.00 The area should be monitored to safeguard security and patient well being.

300.15.00 RECEPTION / CLERICAL AREAS

The Reception Area is required to accommodate:

- Reception of patients and visitors
- Registration interviews of patients
- Collation of clinical records
- Printing of identification labels.

The counter should provide seating and be partitioned for privacy at the interview area. There should be direct communication with the Reception / Triage area and the Staff Station in the Acute Treatment / Observation Area.

300.16.00 The Reception/Clerical Area should be designed with due consideration for the safety of staff. This area requires a duress alarm.

300.17.00 RECEPTION / TRIAGE

The Reception / Triage and Staff Station shall be located where staff can observe and control access to treatment areas, pedestrian and ambulance entrances, and public waiting areas. This area requires a duress alarm.

300.18.00 The Emergency Unit should be accessible by two separate entrances: one for ambulance patients and the other for ambulant patients. It is recommended that each entrance area contains a separate foyer that can be sealed by remotely activating the security doors. Access to Treatment Areas should also be restricted by the use of security doors. The Ambulance Entrance should be screened as much as possible for sight and sound from the ambulant patient entrance. Both entrances should direct patient flow towards the Reception/Triage Area.

300.19.00 The Reception / Triage area should have clear a vision to the Waiting Room, the children's play area (if provided) and the ambulance entrance. The Reception / Triage Area may perform observations and provide first aid in relative privacy.

300.20.00 ACUTE MENTAL HEALTH AREA

The patient who is suffering from an acute psychological or psychiatric crisis has unique and often complex requirements. An Emergency Unit should have adequate facilities for the reception, assessment, stabilisation and initial treatment of patients presenting with acute mental health problems.

It is not intended that this should reduce the facilities of gazetted Mental Health Admission Centres, nor be used for prolonged observation of uncontrolled patients. The main purpose of such an area is to provide a safe and appropriate space to interview and stabilise patients. Acute mental health presentations have the potential to disrupt the normal operation of an Emergency Unit. Conversely, the busy environment of an Emergency Unit may not be conducive to the care of patients with acute mental health crises.

300.21.00 Patient flows should be separated where possible to maximise privacy and

Part B - Health Facility Briefing and Planning

300 .21.00 minimise disruption. A separate secure entrance for use by community emergency mental health teams and police may be desirable. Patients should be continuously observable by staff either directly or via closed circuit television

300 .22.00 The designated area should be within close proximity of other continuously staffed areas of the department, with ready access to assistance when required. As far as possible, the facility should not contain objects that could be thrown at staff. There should be two separate exits to allow the exit of staff if one exit is blocked. The exit doors should open outwards, and should be lockable from the outside but not from the inside. If a window is incorporated, any drapes or blinds shading the window should be operable from outside. All areas should have easily accessible duress alarms.

300 .23.00 As far as possible, the area should be free of heavy or breakable furniture, sharp or hard surfaces which could injure an uncontrolled patient, and should incorporate tamper resistant electrical fittings. It should also incorporate interior design features that promote calmness, such as muted colours and soft furnishings and appropriate lighting. Patient tracking devices may enhance security.

300 .24.00 The Acute Mental Health Assessment Facility should be separate enough from adjacent patient care areas to allow both privacy for the mental health patient and protection of other patients from potential disturbance or violence. There should be both acoustic and visual separation from adjacent clinical areas, but ready access for staff in the event of an urgent need for intervention. The incorporation of sound-insulating material is recommended.

300 .25.00 Ideally the facility should contain at least two separate but adjacent areas:
INTERVIEW ROOM

This room should have two exit doors, swinging outward and lockable from outside, to allow for the escape of staff members when one exit is blocked. One door should be large enough to allow a patient to be carried through it. Consideration should be given to installing a solid door with safety viewing glass.

The Interview Room should also be:

- Shielded from external noise
- Furnished with only soft furnishings with no hard edges
- Designed in such a way that observation of the patient by staff outside the room is possible at all times; this may be backed up with closed circuit television for the safety of staff
- Arranged to ensure that patients have no access to air vents or hanging points
- Fitted with a smoke detector
- Fitted with duress alarm at each exit.

EXAMINATION/TREATMENT ROOM

The Examination/Treatment Room should be immediately adjacent to the interview room. It should contain adequate facilities for physical examination of the patient, however the inclusion of unnecessary and easily dislodged equipment should be avoided.

If operational policy dictates that IV sedation is to occur in this area, it should contain the appropriate facilities and monitoring equipment, mounted out of reach of a potentially violent patient. It should contain the minimum of additional fittings or hard furnishings that could be used to harm an uncontrolled patient or staff. It should be of sufficient size to allow a restraint team of five people to surround a patient on a standard Emergency Unit bed and should be at least 12 m² in floor area.

Part B - Health Facility Briefing and Planning

300 .26.00 ACUTE TREATMENT AREAS

Acute Treatment Areas are used for the management of patients with acute illnesses. Requirements are as follows:

- Areas to fit a standard mobile bed
- Storage space for essential equipment
- Space to allow monitoring equipment to be housed
- Minimum space between beds is 2.4 m
- Each treatment area must be at least nine m2 in area

300 .27.00 All Treatment Areas, including Triage, require the following:

- Service panel
- Examination light
- Wall mounted sphygmomanometer
- Shelving
- Waste bins and sharps containers
- Patient call and emergency call facilities

300 .28.00 When there are more than eight treatment areas in the Emergency Unit, a minimum of two Toilet Facilities will be required.

300 .29.00 CONSULTATION AREAS

Consultation Room/s are to be provided according to Unit size and requirements for examination and treatment of ambulant patients. Consult Rooms are to comply with Standard Components - Consult Room.

300 .30.00 CONSULTATION - OUTPATIENTS

If an Outpatient Consultation Service is to be provided, as listed in the Operational Policy, then the following facilities shall be provided:

- Entrance and Reception; this may be a shared facility with the hospital or other specialty departments
- Waiting Area may be shared
- Consulting / Examination room/s
- Treatment Room/s
- Nurses Office; dependent upon the size of the outpatient service
- Medical Laboratory / Utility Room; the size and type of this facility will be determined by the size of the outpatient service and whether or not shared facilities are available within the hospital
- Dirty Utility / Disposal Room
- Staff Room; may be shared with the hospital
- Toilets and Change Rooms; may be shared with the hospital-
- Storage; as required
- Cleaner's Room; may be shared with the hospital
- Environmental Requirements; special attention is to be given to the visual and acoustic privacy of patients when being interviewed and also to the quality of light when being examined (the latter requires adequate natural light or colour corrected artificial lighting or task lighting)
- Miscellaneous: construction, finishes, design for disabled access, parking, signposting etc., shall be in accordance with the other relevant sections of these Guidelines.

300 .31.00 DECONTAMINATION AREA

An Isolation Room should be available for patients who are contaminated with toxic substances. In addition to the requirements of an Isolation Room, this room must:

Part B - Health Facility Briefing and Planning

- Be directly accessible from the ambulance bay without entering any other part of the unit
- Have a flexible water hose, floor drain and contaminated water trap.

300 .32.00 LABORATORY AREA

A designated area for performing laboratory investigations such as arterial blood gas analysis and microscopy should be considered in Units of Levels 5 or 6.

300 .33.00 PHARMACY / MEDICATION AREA

A Pharmacy / Medication area is required for the storage of medications used within the Emergency Department. Entry should be secure with a self-closing door. The area should be accessible to all clinical areas and have sufficient space to house a refrigerator, which is essential for the storage of heat sensitive drugs.

300 .34.00 RESUSCITATION AREA

The Resuscitation Room/Bay is used for the resuscitation and treatment of critically ill or injured patients. The Resuscitation Room/Bay requires:

- Space to fit a specialised resuscitation bed
- Space to ensure 360 degree access to all parts of the patient for uninterrupted procedures
- Circulation space to allow movement of staff and equipment around the work area
- Space for equipment, monitors, storage, wash up and disposal facilities
- Appropriate lighting and equipment to hang IV fluids
- Maximum possible visual and auditory privacy for the occupants of the room and other patients and relatives
- Easy access from the ambulance entrance and separate from patient circulation areas
- Easy access to the Acute Treatment/Observation area from the Staff Station
- A full range of physiological monitoring and resuscitation equipment
- Workbenches, storage cupboards, handbasins, X-ray viewing facilities (or digital electronic imaging system) and computer access
- Solid partitions between it and other areas (movable partitions between bed spaces are recommended).

300 .35.00 Each Resuscitation Bay should be equipped with:

- Service panel as described; service pendants or pods should be used to maximise access to patients
- Physiological monitor with facility for ECG, printing, NIBP, SpO₂, temperature probe, invasive pressure, CO₂ monitor
- An operating theatre light with a minimum illuminism of 80,000 lux
- Radiolucent resuscitation trolley with cassette trays
- Wall mounted diagnostic set (ophthalmoscope/otoscope)
- Overhead IV track

300 .36.00 Imaging facilities should include:

- Overhead X-ray
- X-ray screening (lead lining) of walls and partitions between beds
- Resuscitation trolley with X-ray capacity

300 .37.00 STAFF STATION

The Staff Station may be raised in order to have uninterrupted vision of the

Part B - Health Facility Briefing and Planning

patients. It should be centrally located and be constructed as an enclosed area to ensure confidential information can be conveyed without breach of privacy and to provide security to staff, information and privacy.

The use of sliding windows and adjustable blinds can be used to modulate external stimuli and a separate write-up area may be considered.

Functional Relationships

300 .38.00 LOCATION AND DESIGN

Decisions regarding the site location have a major influence on the eventual cost and operational efficiency of the Emergency Unit staff. The site of the Emergency Unit should, as much as possible, maximise the choices of layout. In particular, sites of access points must be carefully considered.

- 300 .39.00 The Emergency Unit should be located on the ground floor for easy access. It should be adequately signposted.

CAR PARKING

Car parking should be close to the Entrance, well lit and available exclusively for patients, their relatives and staff. Parking areas should be available close to the Emergency Unit for urgent call in staff.

Undercover car parking should be available for:

- Appropriate number of ambulances which will be determined by the case load and the availability of ambulance access to other parts of the hospital for non emergency patients
- Taxis and private vehicles that drop off/pick up patients adjacent to the ambulance entrance.

SIGNAGE

The emergency unit should be clearly identified from all approaches.

Signposting that is illuminated is desirable to allow visibility at night. The use of graphic and character displays such as a white cross on a red background with the word emergency is encouraged.

- 300 .40.00 The design should allow for rapid access to every space with a minimum of cross traffic. There must be close proximity between the Resuscitation / Acute Treatment areas for non-ambulant patients, other treatment areas for non-ambulant patients and other treatment areas for ambulant patients, so that staff may be relocated at times of high workload. Visitor and patient access to all areas should not traverse clinical areas. Protection of visual, auditory and olfactory privacy is important whilst recognising the need for observation of patients by staff.

- 300 .41.00 The Emergency Unit will require ready access to the following key functional areas:
- Medical Imaging Unit
 - Operating Unit - rapid access is highly desirable for surgical emergencies
 - Coronary Care Unit
 - Pathology / Blood Bank Unit
 - Clinical Records Unit
 - Inpatient Accommodation Unit
 - Pharmacy Unit - proximity is required
 - Outpatients
 - Mortuary

300 .42.00 CLINICAL RECORDS

Access to clinical records is required so that patients' previous medical

Part B - Health Facility Briefing and Planning

histories are obtainable without delay. A system of mechanical or electronic clinical record transfer is desirable to minimise delays and labour costs. Access to clinical records must be available 24 hours per day.

300 .43.00 MEDICAL IMAGING

The Medical Imaging Unit should have a general X-ray table, upright X-ray facilities and an additional overhead gantry in the Resuscitation Area is recommended. The presence/absence of a film processor is dependent upon close proximity to the main Medical Imaging Department or the use of digital radiology. Immediate access to CT scanning, Ultrasound and Nuclear Medicine modalities will enhance the Emergency Unit's effectiveness. A system of electronic display of imaging is desirable.

300 .44.00 PATHOLOGY

Rapid access to Pathology services is highly desirable to minimise turnaround times for laboratory investigations. Mechanical or pneumatic tube transport systems for specimen and electronic reporting of results are recommended. Point of care access for electrolyte and blood gas analysis are highly desirable.

300 .45.00 PHARMACY

Proximity to the Pharmacy Unit is desirable to enable prescriptions to be filled by patients with limited mobility.

DESIGN

Communications

300 .46.00 Emergency Units are high volume users of telecommunications and information technology. Telephones should be available in all offices, at all staff stations, in the clerical area and in all consultation and other clinical rooms. The use of multi-function, wireless communication devices should be considered. Additional phone jacks should be available for the use of facsimile machines and computer modems where required. A dedicated telephone to receive admitting requests from outside medical practitioners is desirable. A cordless phone or phone jack should be available for access to patients' beds.

300 .47.00 An electronic Emergency Unit Information System may be installed to support clinical management, patient tracking and departmental administration. Sufficient terminals should be available to ensure that queuing does not occur, even at peak times. Workspace design should include sufficient bench-widths or suitable suspension devices for terminals, keyboards, drives and printers. Additional computer terminals, software and peripheral devices should be installed to enable other departmental functions.

300 .48.00 An intercom or public address system that can reach all areas of the Emergency Unit should be considered. Public telephones with acoustic hoods should be available in the Waiting Area. A direct line to a taxi company is desirable. Direct telephone lines bypassing the hospital switchboard should be available for use in internal and external emergencies or when the hospital PABX is out of service.

300 .49.00 The Staff Station should have a dedicated inward line for the for the ambulance and police services. There should be facsimile lines in clerical areas as well as between the ambulance service and the Emergency Unit, including incoming aeromedical transport.

300 .50.00 TELEMEDICINE

Emergency Units using telemedicine facilities should have a dedicated, fully enclosed room with appropriate power and communications cabling provided. This room should be of suitable size to allow simultaneous viewing by members of multiple service teams and should be close to the Staff Station.

Corridors

- 300 .51.00 In general, the total corridor area within the department should be minimised to optimise the use of space. Where corridors are necessary, they should be of adequate width to allow the cross passage of two hospital beds or a hospital bed and linen trolley without difficulty. There should be adequate space for trolleys to enter or exit any of the Consulting Rooms, and to be turned around. Standard corridors should not be used for storage of equipment.

Note: Refer to Part C for corridor standards

Finishes

- 300 .52.00 The floor finishes in all patient care areas and corridors should have the following characteristics:
- Non-slip surface
 - Impermeable to water, body fluids
 - Durable
 - Easy to clean
 - Acoustic properties that reduce sound transmission
 - Shock absorption to optimise staff comfort but facilitate movement of beds

Office/s, Tutorial Rooms, Staff Rooms, Clerical Areas and the Distressed Relatives' Room should be carpeted.

Infection Control

- 300 .53.00 Handbasins for hand-washing should be available within each treatment area and should be accessible without traversing any other clinical area. They should be available at a ratio of one for every four beds and at the ratio of one to one for every Procedure / Resuscitation / Consulting Room. All handbasins in clinical areas should be of surgical type with hands-free activation (Type A). Dispensers for non sterile latex gloves should be available in the vicinity of each handbasin and each treatment area.

300 .54.00 ISOLATION ROOMS

At least one negative pressure Isolation Room should be provided in Units in Level 5 & 6. The need for additional negative pressure Isolation Rooms shall be determined by the infection control risk assessment. Refer to Infection Control Part D.

Nurse Call

- 300 .55.00 All patient spaces and clinical areas, including beds, toilets, bathrooms, treatment areas, patient day areas and lounges should have access to an emergency call facility so staff can summon urgent assistance. The emergency call facility should alert to a central module situated adjacent to the Staff Station, as well as to the Staff and Tutorial rooms.

The Nurse Call / Emergency call system is to comply with AS 3811.

Part B - Health Facility Briefing and Planning

Lighting

- 300.56.00 It is essential that a high standard focused examination light is available in all treatment areas. Each examination light should have a power output of 30,000 lux, illuminate a field size of least 150 mm and be of robust construction.

Clinical care areas should have exposure to daylight wherever possible to minimise patient and staff disorientation. Lighting should conform to Australian Standards.

Safety and Security

- 300.57.00 The Emergency Unit receives a large number of patients and their visitors, many of whom may be distressed, intoxicated or involved in violence. The hospital has a duty of care to provide for the safety and security of employees, patients and visitors. Both policies and structures should be in place to minimise injury, psychological trauma and damage or loss of property. The precise details of security features should be designed in conjunction with a security risk assessment for the specific site.

- 300.58.00 The location of an office for security personnel near the entrance should be considered. This room should be positioned so that it allows Security Staff a clear view of the Waiting Room, Triage and Reception Areas. Immediate access to these areas is essential. Remote monitoring of other areas in the department by CCTV and of staff duress/personal alarms should also occur from this area.

- 300.59.00 PERIMETER ACCESS CONTROL

Ambulatory and Ambulance entrances should be separate, with electronically operated locks. Access from the Waiting Areas to the treatment areas should be controlled. There should be restricted access from the remainder of the hospital into the Emergency Unit.

- 300.60.00 RECEPTION / TRIAGE AREAS

The interface between the Waiting Areas and the Reception / Triage Areas should be carefully designed so as to permit communication and reassurance to distressed patients or visitors, yet provide safety and security for staff. Counters should be of sufficient height and depth to minimise the possibility of them being jumped over or reached over. The Reception Area should be elevated so that staff may sit at eye level with standing patients or visitors. The Reception / Triage area should have an unobstructed view of the entire Waiting Area.

- 300.61.00 Fixed and/or personal duress alarms should be positioned in suitable areas as suggested by the security risk assessment.

- 300.62.00 Uniformed security personnel may be required at very short notice to assist with a safety or security issue.

- 300.63.00 Relatively secluded or isolated areas should be monitored electronically (for example, by closed circuit television), with monitors in easily visible and continuously staffed areas.

Space Standards and Components

- 300.64.00 BED SPACING

Part B - Health Facility Briefing and Planning

In the Acute Treatment Area there should be at least 2.4 metres of clear floor space between beds. The minimum length should be three metres.

Building Service Requirements

300 .65.00 ACOUSTICS

Clinical Areas should be designed to minimise the transmission of sound between adjacent treatment areas. Sound levels should conform to Australian Standards.

300 .66.00 BEDHEAD SERVICES

Medical gases should be reticulated to all patient care areas.

300 .67.00 WALL PROTECTION

Hospital beds, ambulance trolleys, and wheelchairs may cause damage to walls. All wall surfaces in areas which may come into contact with mobile equipment should be reinforced and protected with buffer rails or similar. Bed stops should be fitted to the floor to stop the bedhead from coming into contact with and damaging fittings and monitors.

COMPONENTS OF THE UNIT

Introduction

300 .68.00 The Emergency Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

300 .69.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

300 .70.00 Provide the Non-Standard Components as identified in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

Part B - Health Facility Briefing and Planning

APPENDICES

Emergency Generic Schedule of Accommodation

300 .71.00 Schedule of Accommodation for an Emergency Unit at Levels 2 - 6:

ENTRY AND RECEPTION AREA

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - HANDWASHING	yes		1 x 1	1 x 1	1 x 1	1 x 1	Adjacent to or in Triage
BAY - MOBILE EQUIPMENT	yes		1 x 4	1 x 4	2 x 4	3 x 4	For trolleys and wheelchairs; Add 6 m2 if required for mobile X-ray equipment
COMMUNICATIONS BASE - AMBULANCE					1 x 8	1 x 8	
CONSULT ROOM	yes	1 x 12	1 x 12	1 x 12	4 x 12	6 x 12	
INTERVIEW ROOM	yes			1 x 9	1 x 9	1 x 9	
RECEPTION	yes		1 x 10 optional	1 x 10	1 x 10	2 x 10	
TRIAGE			1 x 9 optional	1 x 12	1 x 16	1 x 20	
WAITING	yes		1 x 12	1 x 20	1 x 80	1 x 110	With Children's Play Area in larger facilities
TOILET - DISABLED	yes		1 x 5	1 x 5	1 x 5	1 x 5	
TOILET - PUBLIC	yes		1 x 4	1 x 4	4 x 4	6 x 4	With Baby Change facilities

300 .72.00 TREATMENT AREAS

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED - ISOLATION	yes			1 x 15	2 x 15	2 x 15	Class N - Close to entrance
BAY - BLOOD GAS				1 x 4	1 x 4	1 x 4	
BAY - HANDWASHING	yes	2 x 1	2 x 1	4 x 1	8 x 1	10 x 1	
BAY - LINEN	yes	1 x 2	1 x 2	2 x 2	3 x 2	4 x 2	
BAY - MOBILE EQUIPMENT	yes		2 x 4	3 x 4	4 x 4	4 x 4	For Trolleys and Mobile X-ray Equipment
BATHROOM	yes			1 x 10	1 x 10	1 x 10	
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes		1 x 8	1 x 12	2 x 12	2 x 12	
DECONTAMINATION SHOWER				1 x 6 optional	1 x 6 optional	1 x 6 optional	Located outside
DIRTY UTILITY	yes		1 x 8	1 x 10	2 x 10	2 x 10	
DISASTER EQUIPMENT STORE				1 x 2 optional	1 x 2 optional	1 x 2 optional	

Part B - Health Facility Briefing and Planning

DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	
ENSUITE - STANDARD	yes			1 x 5	2 x 5	2 x 5	
MEETING ROOM - SMALL	yes				1 x 12	1 x 12	For Distressed Relatives
PANTRY	yes			1 x 8	1 x 8	1 x 8	
PATIENT BAY	yes		2 x 9	4 x 9	12 x 9	16 x 9	Treatment / Observation; Patient Bay - Acute
PATIENT BAY	yes	1 x 18	1 x 18	2 x 18	2 x 25	3 x 25	Resuscitation; Patient Bay - Resuscitation
PHARMACY / MEDICATION AREA				1 x 6	1 x 16	1 x 16	
PLASTER ROOM	yes			1 x 14	1 x 14	2 x 14	
SECLUSION ROOM	yes			1 x 14	1 x 14	1 x 14	Smaller Units may combine Seclusion room function with Isolation Room
SHOWER - PATIENT	yes		1 x 4	1 x 4	2 x 4	3 x 4	
STAFF STATION	yes			1 x 14	1 x 20	1 x 20	
STORE - CRUTCHES					1 x 6 optional	1 x 8 optional	
STORE - EQUIPMENT	yes		1 x 6	1 x 20	1 x 20	1 x 20	
STORE - GENERAL	yes	1 x 9 optional	1 x 9	1 x 9	2 x 9	2 x 9	
TOILET - PATIENT	yes	1 x 4	1 x 4	1 x 4	3 x 4	4 x 4	
TREATMENT ROOM - PAEDIATRIC	yes			1 x 15	1 x 15	1 x 15	May be combined with Treatment/ Observation in smaller Units
TREATMENT ROOM	yes			1 x 15	2 x 15	2 x 15	
X-RAY ROOM - GENERAL					1 x 30 optional	1 x 30 optional	
X-RAY VIEWING AND REPORTING	yes				1 x 12 optional	2 x 12 optional	
CIRCULATION %		40	40	40	40	40	

300.73.00 STAFF & SUPPORT AREAS

Staff accommodation and Support Areas are dependent on the Operational Policy and management structure.

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional	1 x 9 optional	1 x 9 optional	Manager
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9	1 x 9	2 x 9	Unit Manager
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Social Worker

Part B - Health Facility Briefing and Planning

OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Research
OFFICE - 2 PERSON SHARED	yes		1 x 9 optional	1 x 9 optional	1 x 12 optional	1 x 12 optional	Medical / Registrars
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	CNC/ Educators
OFFICE - WORKSTATION	yes			1 x 12 optional	4 x 6 optional	6 x 6 optional	Accommodation according to staffing establishment
STAFF ROOM	yes			1 x 15	2 x 15	2 x 15	
STORE - PHOTOCOPY / STATIONERY	yes			1 x 8	1 x 8	1 x 8	

300.74.00 SHARED AREAS

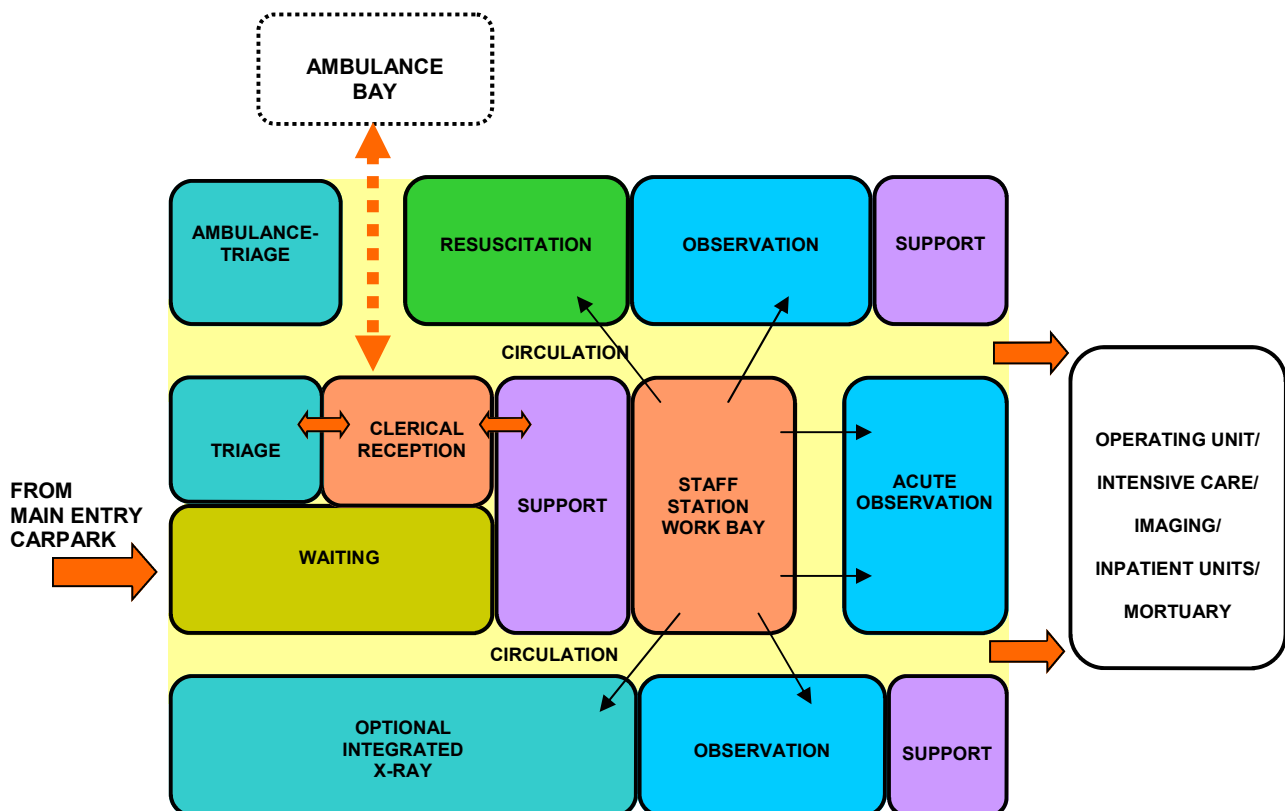
ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CHANGE ROOM - STAFF	yes			1 x 8	2 x 8	2 x 8	Size dependent on staffing establishment
MEETING ROOM	yes			1 x 12	2 x 20	2 x 30	
SHOWER - STAFF	yes			1 x 2	1 x 2	1 x 2	
TOILET - STAFF	yes			2 x 2	4 x 2	4 x 2	

References and Further Reading

- 300.75.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities. 1997.
 - Australian College of Emergency Medicine, ACEM Guidelines - Emergency Department Design, 1999.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.
 - NSW Health, Design Series 7, Health Building Guidelines - Emergency Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - EMERGENCY UNIT



Part B - Health Facility Briefing and Planning

310 ENGINEERING & MAINTENANCE UNIT

INDEX

Description

- 310 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Generic Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

General

- 310 .2.00 All facilities, no matter how large or small, will require environmental support services in the form of:
- Maintenance services
 - Engineering
 - Cleaning services
 - Waste disposal
 - Gardening services
 - Storage

Description

- 310 .3.00 A Maintenance Service shall be provided. It may be in-house or contracted, with an on-call repair service. The complexity of the services within and provided by the facility will obviously dictate the nature and extent of the Maintenance Service required. The Maintenance Service is provided to effect preventative maintenance and repairs to all elements of the facility, from the building fabric to items of specialist equipment.
- 310 .4.00 Areas that require a 24 hour per day, 7 day per week 'on-call' maintenance service are:
- Medical gases and suction systems
 - Lifts
 - Fire systems
 - Bio-electronic equipment
 - Any life-support systems
 - Emergency power systems
 - Boiler plant
 - Telecommunications systems including PA, EWIS and Nurse Call

The potential life threatening nature of the failure of any of the above systems justifies a 24 hour service.

PLANNING

Functional Areas

- 310 .5.00 The Engineering and Maintenance Unit may consist of the following Functional Areas dependent on the Operational Policy and service demand:
- Workshop areas which may include separate areas for carpentry, mechanical, plumbing and electrical services
 - Storage areas for all specialty services/trades including paint, gardening and flammable liquids
 - Office area for administrative and clerical activities
 - Staff amenities which may be shared

310 .6.00 ELECTRONICS WORKSHOP

A separate workshop may be provided specifically for the storage, repair and testing of electronic and other medical equipment. The amount of space and type of utilities will vary with the type of equipment involved and types of service and maintenance contracts used.

310 .7.00 ENGINEER'S OFFICE

If on-staff, an Engineer's Office shall be provided with file space and provision for protected storage of facility drawings, records and manuals.

310 .8.00 GARDENER'S FACILITIES

A room or shed shall be provided for the storage of all the necessary gardening equipment and material. Depending upon the size of the grounds team, consideration shall also be given to the provision of a Head Gardener's office, hand-washing facilities, toilet facilities and showering facilities.

Note: Gardening services may be externally contracted, in which case onsite provisions may not be required.

310 .9.00 STORAGE AREAS

A storage room shall be provided for the storage of building maintenance supplies. Storage for solvents and flammable liquids shall comply with relevant statutory requirements and AS 1940 - The storage and handling of flammable and combustible liquids.

310 .10.00 WORKSHOP AREAS

A general maintenance Workshop shall be provided for repair and maintenance. Sufficient space is required for a workbench, drill press, angle grinder, stainless steel trough, tool peg board, storage cabinets. Floor space is also required for the standing of equipment during repairs. Adequate lighting, power and ventilation are required.

Note: If Maintenance Services are externally contracted, then a Workshop is not required.

- 310 .11.00 Maintenance workshops incorporating carpentry, metal fabrication, plumbing, refrigeration or other noise generating trades shall be acoustically isolated from non-maintenance areas.

Functional Relationships

- 310 .12.00 The Engineering & Maintenance Unit should be located on the ground floor to facilitate delivery and despatch of heavy items of equipment. Access to a

Part B - Health Facility Briefing and Planning

loading dock is desirable. The Unit will require ready access to all areas of the hospital and in particular, to plant rooms and areas.

Depending on the size of the Unit and the Operational Policy, considerable noise and fumes may be generated by the Unit and care should be taken in locating the Unit relative to other units such as Inpatient Accommodation Units.

COMPONENTS OF THE UNIT

Introduction

- 310.13.00 The Engineering and Maintenance Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 310.14.00 Provide the Standard Component as identified in the Generic Schedule of Accommodation. Provision of accommodation for Engineering & Maintenance will depend on the Operational Policy and service demand.

Non-Standard Components

- 310.15.00 Provide the Non-Standard Components identified in the Schedule of Accommodation, according to Operational Policy and service demand.

Part B - Health Facility Briefing and Planning

APPENDICES

Engineering Generic Schedule of Accommodation

310.16.00 The following Generic Schedule of Accommodation is for a typical Engineering & Maintenance Unit in a Level 4 Hospital with 120 Beds and a range of diagnostic and treatment facilities. This schedule assumes that all services are provided in-house.

Note: For maximum functionality, some of the workshop areas should be combined into one large area.

ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
FLAMMABLE LIQUID STORE				1 x 2 optional			or Steel cupboard
GARDENING STORE / SHED				5 x 5.5 optional			
OFFICE - SINGLE PERSON 12 M2	yes			1 x 12			For Engineer if on staff
PAINTER'S STORE				1 x 9 optional			
PLAN FILE - STORAGE				1 x 12 optional			
WORKSHOP - CARPENTRY				4 x 6.5 optional			Including storage
WORKSHOP - MECHANICAL				4 x 6.5 optional			Including storage
WORKSHOP - PLUMBING				4 x 6.5 optional			Including storage
CIRCULATION %				15			

310.17.00 SHARED AREAS

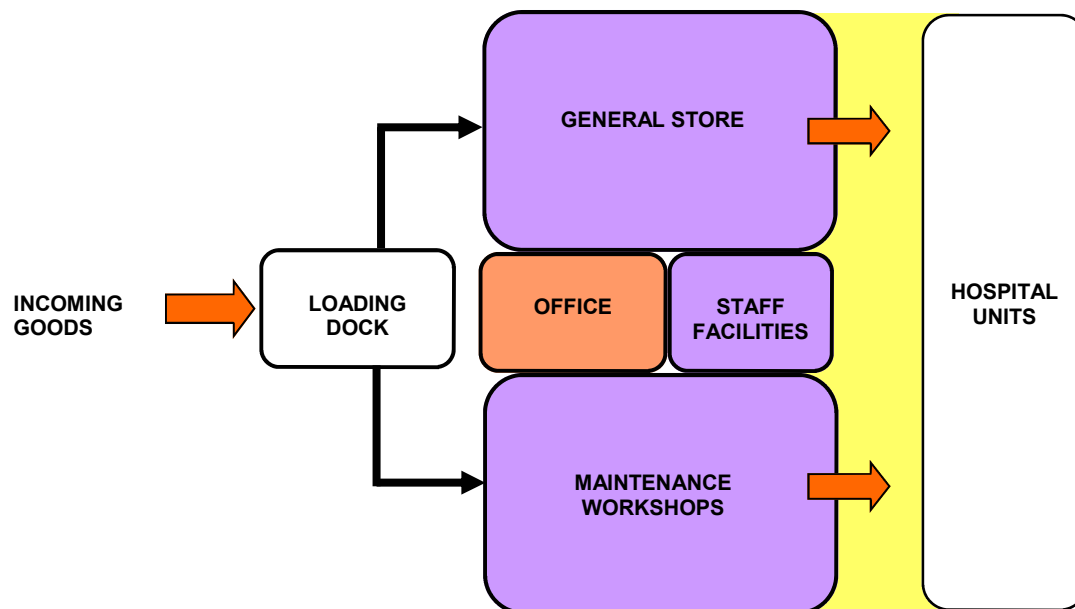
ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
BAY - CLEAN-UP				1 x 3			
STAFF ROOM	yes			1 x 15			
TOILET - STAFF	yes			2 x 2			

References and Further Reading

- 310.18.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - ENGINEERING & MAINTENANCE UNIT



Part B - Health Facility Briefing and Planning

320 GERIATRIC EVALUATION & MANAGEMENT

INTRODUCTION

Description

320 .1.00 Geriatric Evaluation and Management is care in which the clinical intent or treatment goal is to maximise health status and/or optimise the living arrangements for a patient with multi-dimensional medical conditions associated with disabilities and psychosocial problems, who usually is (but not always) an older patient. This may also include younger adults with clinical conditions generally associated with old age. This care is usually evidenced by multi-disciplinary management and regular assessment against a management plan that is working towards negotiated goals within indicative time frames.

Refer to Sub-Acute Care in these Guidelines for requirements and Schedule of Accommodation.

APPENDICES

References and Further Reading

- 320 .2.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Department of Human Services; Aged, Community & Mental Health Division, Sub-Acute Care Facilities and Specialist Clinics Generic Brief, 2000.

Part B - Health Facility Briefing and Planning

340 INPATIENT ACCOMMODATION UNIT

INDEX

Description

- 340 .1.00 INTRODUCTION
Description
General
- PLANNING
Planning Models
Functional Areas
Functional Relationships
- DESIGN
Space Standards and Components
Bed Spaces / Clearances
Access, Mobility & OH&S
Infection Control
Building Service Requirements
Fixtures & Fittings
Safety and Security
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Generic Schedules of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 340 .2.00 The Inpatient Accommodation Unit is for general medical and surgical patients. In larger health facilities this Unit includes specialist medical and surgical patients, for example, cardiac, neurology/ neurosurgery, integrated palliative care and obstetric patients.

Patients awaiting placement elsewhere may also be accommodated in this type of facility.

General

- 340 .3.00 The prime function of the Inpatient Unit is to provide appropriate accommodation for the delivery of health care services including diagnosis, care and treatment to inpatients.

The Unit must also provide facilities and conditions to meet the needs of patients and visitors as well as the workplace requirements of staff.

PLANNING

Planning Models

340 .4.00 BED NUMBERS AND COMPLEMENT

Each Inpatient Unit may contain up to 32 patient beds and shall have Bedroom accommodation complying with the Standard Components.

340 .5.00 The preferred maximum number of beds in an acute Inpatient Unit in Maternity or Paediatric Units is 20-25 beds.

340 .6.00 A minimum of 20 % of the total bed complement shall be provided as Single Bedrooms in an Inpatient Unit used for overnight stay.

340 .7.00 SWING BEDS

For flexibility and added options for utilisation it may be desirable to include provisions for Swing Beds. This may be a single bed, a group of beds that may be quickly converted from one category of use to another. An example might be long-stay beds which may be converted to acute beds.

340 .8.00 At any given time, swing beds are part of an Inpatient Unit in terms of the total number of beds and the components of the unit. For example: Ward A + Swing Beds = One Inpatient Unit as per these Guidelines. Alternatively: Ward B + the same Swing Beds = One Inpatient Unit as per these Guidelines.

340 .9.00 Facility design for swing beds will often require additional corridor doors and provision for switching patient/ nurse call operation from one Staff Station to another. Security is also an issue, for example, converting General/Medical beds to Paediatric beds.

Functional Areas

- 340 .10.00 The Inpatient Accommodation Unit will comprise the following Functional Areas or zones:
- Patient Areas - areas where patients are accommodated or facilities specifically serve patients
 - Staff Areas - areas accessed by staff, including utility and storage areas
 - Shared Areas - areas that may be shared by two or more Inpatient Units

Functional Relationships

- 340 .11.00 Optimum internal relationships include:
- Patient occupied areas as the core of the unit
 - The Staff Station and associated areas need direct access and observation of Patient Areas
 - Utility and storage areas need ready access to both patient and staff work areas
 - Public Areas should be on the outer edge of the Unit
 - Shared Areas should be easily accessible from the Units served

Principal relationships with other Units include:

- Easy access from the Main Entrance of a facility
- Inpatient Units must not be located so that access to one Unit is via another
- Ready access to diagnostic facilities such as Medical Imaging and Pathology
- Ready access to Emergency and Critical Care Units
- Surgical Units require ready access to Operating/ Day Procedures Units
- Ready access to staff amenities.

DESIGN

Space Standards and Components

340.12.00 ROOM CAPACITY AND DIMENSIONS

Maximum room capacity shall be four patients.

- 340.13.00 Minimum dimensions, excluding such items as ensuites, built-in robes, alcoves, entrance lobbies and floor mounted mechanical equipment shall be as follows:

ROOM TYPE		WIDTH	LENGTH
SINGLE BED ROOM		3450 mm	3600mm
TWO BED ROOM		3450 mm	5600 mm
FOUR BED ROOM		6100 mm	5600 mm

- 340.14.00 Minimum room dimensions are based on overall bed dimensions (buffer to buffer) of 2250 mm long x 1050 mm wide. Minor encroachments including columns and hand basins that do not interfere with functions may be ignored when determining space requirements.

Bed Spacing / Clearances

- 340.15.00 Bed dimensions become a critical consideration in ascertaining final room sizes. The dimensions noted in these Guidelines are intended as minimums and do not prohibit the use of larger rooms where required.
- 340.16.00 In multi-bed rooms there shall be a clearance of 1200 mm available at the foot of each bed to allow for easy movement of equipment and beds.
- 340.17.00 In multiple-bed rooms, the minimum distance between bed centre lines shall be 2400 mm.
- 340.18.00 Paediatric bedrooms that contain cots may have reduced bed centres, but consideration must be given to the spatial needs of visiting relatives. To allow for more flexible use of the room the 2400 mm centre line is still recommended. Consider allowing additional floor area within the room for the children to play.

Access, Mobility & OH&S

- 340.19.00 Patient wheelchair access bedrooms and ensuites should comply with AS 1428 to enable normalisation of activity for wheelchair dependant patients, as opposed to patients who are in a wheelchair as a result of their hospitalisation.

Infection Control

- 340.20.00 Hand-washing facilities shall not impact on minimum clear corridor widths. At least one is to be conveniently accessible to the Staff Station. Handbasins are to comply with Standard Components - Bay - Hand-washing and Part D - Infection Control.

Part B - Health Facility Briefing and Planning

Infection Control

- 340 .21.00 At least one 'Class S - Standard' Isolation Room shall be provided for each 32 bed Inpatient Unit. At least one 'Class N - Negative Pressure' Isolation Room shall be provided for each 100 beds in facilities of level 4 and above. These beds may be used for normal acute care when not required for isolation.

Building Service Requirements

- 340 .22.00 INFORMATION TECHNOLOGY/ COMMUNICATIONS

Unit design should address the following Information Technology/ Communications issues:

- Paperless records
- Hand-held computers
- PACS
- Paging and personal telephones replacing some aspects of call systems
- Data entry including scripts and investigation requests
- Email
- Bar coding for supplies and X-rays / Records.

- 340 .23.00 NURSE CALL

Hospitals must provide an electronic call system that allows patients and staff to alert nurses and other health care staff in a discreet manner at all times.

- 340 .24.00 Nurse call systems must be designed and installed to comply with AS 3811 - Hard wired Patient Alarm Systems.

Fixtures & Fittings

- 340 .25.00 BED SCREENS

In multiple-bed rooms, visual privacy from casual observation by other patients and visitors shall be provided for each patient. The design for privacy shall not restrict patient access to the entrance, toilet or shower.

- 340 .26.00 CURTAINS / BLINDS

Each room shall have partial blackout facilities (blinds or lined curtains) to allow patients to sleep easier during the daytime.

Safety and Security

- 340 .27.00 An Inpatient Unit shall provide a safe and secure environment for patients, staff and visitors, while remaining a non-threatening and supportive atmosphere conducive to recovery.

The facility, furniture, fittings and equipment must be designed and constructed in such a way that all users of the facility are not exposed to avoidable risks of injury.

- 340 .28.00 Security issues are important due to the increasing prevalence of violence and theft in health care facilities.

The arrangement of spaces and zones shall offer a high standard of security through the grouping of like functions, control over access and egress from the Unit and the provision of optimum observation for staff. The level of observation and visibility has security implications.

- 340 .29.00 DRUG STORAGE

Part B - Health Facility Briefing and Planning

340 .29.00

Each Inpatient Accommodation Unit shall have a lockable storage area or cupboard containing:

- Benches and shelving
- Lockable cupboards for the storage of restricted substances
- A lockable steel cabinet for the storage of drugs of addiction
- A refrigerator, as required; to store restricted substances, it must be lockable or housed within a lockable storage area
- Space for medication trolley

Note: Storage for dangerous drugs must be in accordance with the relevant legislation.

COMPONENTS OF THE UNIT

Introduction

- 340 .30.00 The Inpatient Unit will contain a combination of Standard Components and may contain Non-Standard Components, according to Level of Service and Unit specialty.

Standard Components must comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 340 .31.00 Provide the Standard Components as identified in the Generic Schedules of Accommodation.

Non-Standard Components

- 340 .32.00 There are no Non-Standard Components in this Unit

Part B - Health Facility Briefing and Planning

APPENDICES

Inpatient Accommodation Generic Schedule of Accommodation

340 .33.00 Schedule of Accommodation for a 32 Bed Inpatient Unit at Levels 3 to 6:

PATIENT AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED ROOM	yes		10 x 15	10 x 15	7 x 15	7 x 15	
1 BED ROOM - ISOLATION CLASS S/N	yes		1 x 15 optional	1 x 15 optional	2 x 15 optional	2 x 15 optional	Isolation Rooms Class S/N are provided as required by service demand
1 BED ROOM - SPECIAL	yes		1 x 18 optional	1 x 18 optional	1 x 18 optional	1 x 18 optional	
2 BED ROOM	yes		4 x 25 optional	4 x 25 optional	5 x 25 optional	5 x 25 optional	
4 BED ROOM	yes		3 x 42 optional	3 x 42 optional	3 x 42 optional	3 x 42 optional	
ENSUITE - STANDARD	yes		12 x 5	12 x 5	10 x 5	10 x 5	
ENSUITE - SHARED	yes		4 x 6 optional	4 x 6 optional	5 x 6 optional	5 x 6 optional	
ENSUITE - SPECIAL	yes		1 x 7 optional	1 x 7 optional	1 x 7 optional	1 x 7 optional	
LOUNGE - PATIENT	yes		1 x 15	1 x 15	1 x 15	1 x 15	Or Day Room
SHOWER - PATIENT	yes		3 x 4 optional	3 x 4 optional	3 x 4 optional	3 x 4 optional	For 4 Bed Rooms
TOILET - DISABLED	yes		1 x 5	1 x 5	1 x 5	1 x 5	Locate near Lounge - Patient
TOILET - PATIENT	yes		3 x 4 optional	3 x 4 optional	3 x 4 optional	3 x 4 optional	For 4 Bed Rooms
TOILET - PUBLIC	yes		1 x 3	1 x 3	1 x 3	1 x 3	

340 .34.00 STAFF AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - HANDWASHING	yes		2 x 1	2 x 1	2 x 1	2 x 1	In addition to handbasins in Bedrooms & service rooms
BAY - LINEN	yes		2 x 2	2 x 2	2 x 2	2 x 2	
BAY - MOBILE EQUIPMENT	yes		1 x 4	1 x 4	1 x 4	1 x 4	
BAY - RESUS TROLLEY	yes		1 x 2	1 x 2	1 x 2	1 x 2	
CLEANER'S ROOM	yes		1 x 4	1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes		1 x 12	1 x 12	1 x 12	1 x 12	May include medication storage
DIRTY UTILITY	yes		1 x 10	1 x 10	1 x 10	1 x 10	
DISPOSAL ROOM	yes		1 x 8	1 x 8	1 x 8	1 x 8	

Part B - Health Facility Briefing and Planning

OFFICE - CLINICAL/ HANDOVER	yes		1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional	For Handovers/ clerical activities
OFFICE - SINGLE PERSON 9M2	yes		1 x 9	1 x 9	1 x 9	1 x 9	Nurse Manager
OFFICE - SINGLE PERSON 9M2	yes			1 x 9 optional	1 x 9 optional	1 x 9 optional	CNC, Educator; provision according to Operational Policy and Staff Structure
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	Registrars, shared; Allow 6 m2 per person
PANTRY	yes		1 x 8	1 x 8	1 x 8	1 x 8	Add 2 m2 for meal trolley parking if required
STAFF STATION	yes		1 x 14	1 x 14	1 x 14	1 x 14	
STORE - EQUIPMENT	yes		1 x 20	1 x 20	1 x 20	1 x 20	
STORE - GENERAL	yes		1 x 9	1 x 9	1 x 9	1 x 9	
TOILET - STAFF	yes		1 x 2	1 x 2	1 x 2	1 x 2	
TREATMENT ROOM	yes		1 x 15 optional	1 x 15 optional	1 x 15 optional	1 x 15 optional	

340 .35.00 SHARED AREAS

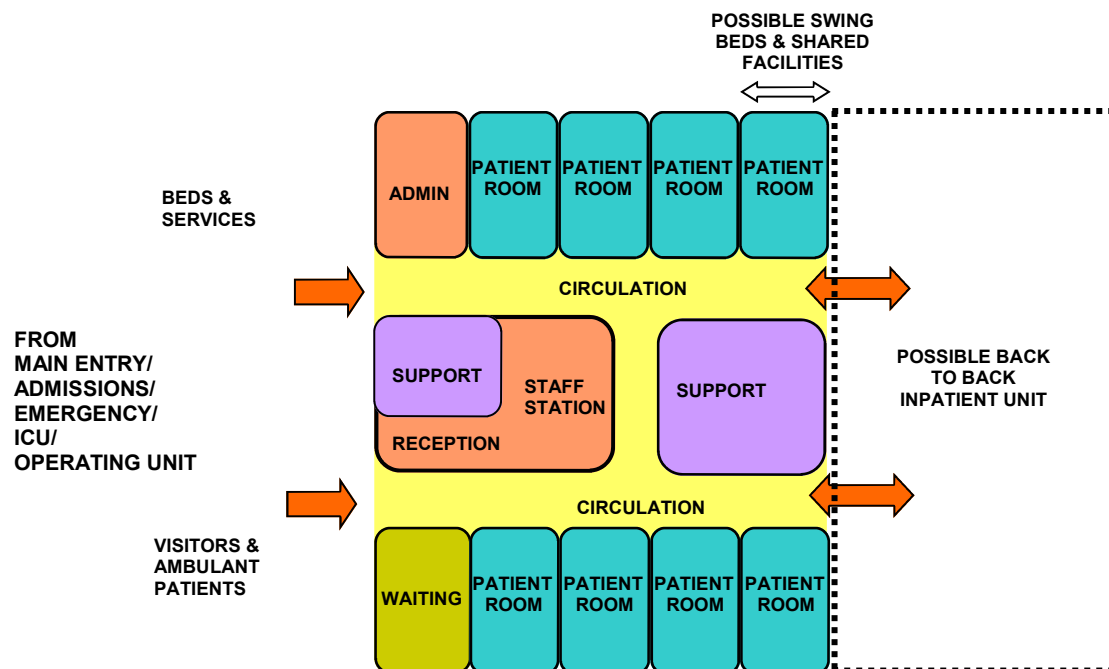
ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - FLOWER	yes		1 x 2	1 x 2	1 x 2	1 x 2	
BATHROOM	yes		1 x 10	1 x 10	1 x 10	1 x 10	
MEETING ROOM	yes		1 x 12	1 x 12	1 x 15	1 x 18	
PROPERTY BAY - STAFF	yes		1 x 6	1 x 6	1 x 6	1 x 6	
STAFF ROOM	yes			1 x 15	1 x 15	1 x 15	
CIRCULATION %			32	32	32	32	

References and Further Reading

- 340 .36.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Health Department of Western Australia, Private Hospital Guidelines, 1998.
 - Queensland Government Private Health Facilities Building Code, 2000.
 - Queensland Health Capital Works Guidelines, 1997.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - INPATIENT UNIT



350 INTEGRATED HEALTH CARE CENTRES

INDEX

Description

350 .1.00	INTRODUCTION Description
	PLANNING Planning Models Functional Areas Functional Relationships
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedules of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

350 .2.00	Service components in an Integrated Care Centre (ICC) can include primary health care and community support as well as acute health and aged residential care. Some services such as allied health, medicine and nursing may span more than one of these areas of care. It should be noted that the range of services in an ICC will depend on the local community needs. Some components will be considered essential to the particular community in which the ICC is to be situated.
350 .3.00	The types of services that may be considered for inclusion in an ICC are: <ul style="list-style-type: none">- Primary Health and Community Services- Allied Health Services- Bed-based Services:<ul style="list-style-type: none">- Aged Residential Care<ul style="list-style-type: none">- Low care (hostel)- High care (nursing home)- Respite- Inpatient Accommodation:<ul style="list-style-type: none">- Acute, lower level acute and post acute care- Palliative Care- Midwifery- Rehabilitation- Emergency and stabilisation- Ambulance Services.
350 .4.00	Integrated Care Centres will vary in size. Components and allocated spaces will depend on the outcome of a needs analysis and a service plan that is based on the location, size and the needs of the area in which an ICC is to be sited. Specific areas sizes will therefore be based on the throughput/occasions of service. These need to be well detailed in the service plan prior to the commencement of the capital planning process. An ICC will combine individual functional units with a philosophy of flexibility, shared resources and multiple use areas.

PLANNING

Planning Models

- 350 .5.00 An ICC may be sited in a new purpose-built facility, in an existing building that requires redevelopment or a combination of both. The selected design should always take into consideration the factors relating to integrating new designs within an existing old facility/ building.
- 350 .6.00 Building design must be flexible and adaptable to enable an ICC to cater for varying client and service needs and future service delivery changes. The design philosophy of an ICC, which is part of the local community, conveys a friendly and inviting environment and will encourage community members to utilise the available facilities for a variety of purposes.
- 350 .7.00 Buildings should be designed to cope with a wide range of possible conditions. The aim is to provide an environment that will allow the maximum mobility possible for each person. The ICC facility will include access for the disabled as required in the BCA.

Functional Areas

- 350 .8.00 The Integrated Care Centre will consist of a number of Functional Areas or zones as follows:
- Reception, Waiting and Administrative areas
 - Bed-based Services including Inpatient Accommodation Areas
 - Medical Procedures Areas
 - Emergency & Stabilisation Areas including Radiology
 - Primary Health, Allied Health Services and Day Centre Areas
 - Services and support areas
 - External spaces - parking, recreational, entrance canopies, and treatment areas

Functional Relationships

- 350 .9.00 The Integrated Health Care Centre requires ready access to public transport and carparking facilities. It should have easy access for emergency and service vehicles.

COMPONENTS OF THE UNIT

Introduction

- 350 .10.00 The Integrated Health Care Centre will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 350 .11.00 Provide the Standard Components as identified in the Schedules of Accommodation.

Non-Standard Components

- 350 .12.00 Provide the Non-Standard Components as identified in the Schedules of Accommodation, according to the Operational Policy and Functional Brief.

Part B - Health Facility Briefing and Planning

APPENDICES

ICC Generic Schedule of Accommodation

350 .13.00 Schedule of Accommodation for a 15, 30 and 45 Bed Integrated Care Centre:

PATIENT AREAS

ROOM / SPACE	Standard Component		15 Bed Qty x m2	30 Bed Qty x m2	45 Bed Qty x m2		Remarks
1 BED ROOM	yes		9 x 15	10 x 15	11 x 15		
1 BED ROOM - SPECIAL	yes		2 x 18 optional	2 x 18 optional	2 x 18 optional		As required by service demand
2 BED ROOM	yes		2 x 25	9 x 25	16 x 25		
ACTIVITY AREA			1 x 20 optional	1 x 30 optional	1 x 40 optional		For Aged Care Programs
BATHROOM	yes		1 x 10	1 x 10	1 x 10		
BAY - HANDWASHING	yes		2 x 1	3 x 1	4 x 1		In addition to Handwash Basins in Bedrooms
BAY - LINEN	yes		1 x 2	1 x 2	2 x 2		
BAY - RESUS TROLLEY	yes		1 x 2	1 x 2	1 x 2		
CLEANER'S ROOM	yes		1 x 4	1 x 4	1 x 4		
CLEAN UTILITY	yes		1 x 12	1 x 12	2 x 12		
DINING / LOUNGE			1 x 15	1 x 30	1 x 45		
DIRTY UTILITY	yes		1 x 10	1 x 10	2 x 10		
ENSUITE - SPECIAL	yes		2 x 7 optional	2 x 7 optional	2 x 7 optional		For 1 Bed - Special
ENSUITE - STANDARD	yes		7 x 5	15 x 5	23 x 5		
ENSUITE - SHARED	yes		4 x 6	4 x 6	4 x 6		
MEETING ROOM	yes		1 x 12	2 x 12	2 x 12		Quiet Sitting Room / Multipurpose
PANTRY	yes		1 x 8	1 x 8	1 x 8		May include area for Plating
PATIENT BAY	yes		4 x 9	4 x 9	4 x 9		Day Chairs - Multi-use
STORE - EQUIPMENT	yes		1 x 10	1 x 10	1 x 10		Dependent on equipment to be stored
STORE - GENERAL	yes		1 x 9	1 x 9	1 x 9		
THERAPY AREA				1 x 12 optional	1 x 14 optional		
TOILET - PATIENT	yes		1 x 4	2 x 4	3 x 4		
CIRCULATION %			30	30	30		

Part B - Health Facility Briefing and Planning

ICC Generic Schedule of Accommodation

350.14.00 ADMINISTRATION AND STAFF AREAS

Note: Provision of office accommodation will be according to Operational Policy and staffing establishment.

ROOM / SPACE	Standard Component		15 Bed Qty x m2	30 Bed Qty x m2	45 Bed Qty x m2		Remarks
BAY - MOBILE EQUIPMENT	yes		1 x 4	1 x 4	1 x 4		
CLINICAL RECORDS			1 x 10	1 x 12	1 x 14		
ENTRY / LOBBY			1 x 6	1 x 6	1 x 8		
INTERVIEW ROOM	yes		1 x 12	1 x 12	2 x 12		Large for family groups
MEDICATION STORAGE			1 x 6 optional	1 x 8 optional	1 x 10 optional		
MEETING ROOM - SMALL	yes		1 x 12 optional	1 x 12 optional	1 x 12 optional		
OFFICE - CEO	yes		1 x 15	1 x 15	1 x 15		CEO function may be combined with DON function
OFFICE - SINGLE PERSON 12 M2	yes		1 x 12	1 x 12	1 x 12		Director of Nursing
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9 optional	2 x 9 optional		Dependent on staffing establishment
OFFICE - 2 PERSON SHARED	yes		1 x 12 optional	1 x 12 optional	1 x 12 optional		Community Nurse
OFFICE - WORKSTATION	yes			3 x 6	4 x 6		General clerical functions; dependent on staffing establishment
RECEPTION	yes				1 x 10		
STAFF STATION	yes		1 x 20	1 x 25	1 x 25		May also serve as a Reception
STORE - PHOTOCOPY/ STATIONERY	yes		1 x 8	1 x 8	1 x 8		
TOILET - DISABLED	yes		1 x 5	1 x 5	1 x 5		
TOILET - PUBLIC	yes		1 x 4	1 x 4	2 x 4		
WAITING	yes		1 x 15	1 x 20	1 x 24		

350.15.00 SUPPORT SERVICES

For a 15, 30 and 45 Bed Integrated Care Centre

ROOM / SPACE	Standard Component		15 Bed Qty x m2	30 Bed Qty x m2	45 Bed Qty x m2		Remarks
CHANGE ROOM - STAFF	yes		1 x 12	2 x 8	2 x 12		Dependent on staffing establishment
CHEMICAL STORE			1 x 10	1 x 12	1 x 12		
CLEAN LINEN			1 x 12	1 x 15	1 x 18		
CLINICAL RECORDS ARCHIVES			1 x 15	1 x 20	1 x 25		

Part B - Health Facility Briefing and Planning

CLINICAL WASTE			1 x 4	1 x 4	1 x 6		
DIRTY LINEN			1 x 12	1 x 15	1 x 18		
HOLDING ROOM				1 x 10 optional	1 x 10 optional		Depending on availability of local alternative arrangements
KITCHEN			1 x 45 optional	1 x 60 optional	1 x 80 optional		
LAUNDRY			1 x 20 optional	1 x 24 optional	1 x 28 optional		For hospital supply, may use external service
MEDICAL GASES STORE			1 x 4	1 x 4	1 x 6		
MEDICAL SUPPLIES STORE			1 x 15	1 x 20	1 x 20		
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional		Engineer, as required
PHARMACY			1 x 10 optional	1 x 12 optional	1 x 14 optional		
PLANT ROOM			1 x 3	1 x 10	1 x 14		
SHOWER - STAFF	yes		1 x 2	2 x 2	2 x 2		
STAFF ROOM	yes		1 x 15	1 x 15	1 x 15		
STORE - EQUIPMENT	yes		1 x 20	2 x 20	2 x 20		Dependent on quantity of equipment to be stored
TOILET - STAFF	yes		2 x 2	2 x 2	4 x 2		
WORKSHOP			1 x 15 optional	1 x 20 optional	1 x 20 optional		
CIRCULATION %			20	20	20		

350.16.00 MEDICAL PROCEDURES

Additional areas that may be required based on Level of Service of the particular ICC.

ROOM / SPACE	Standard Component			Level 2 Qty x m2	Level 3 Qty x m2		Remarks
ANAESTHETIC INDUCTION ROOM	yes				1 x 15 optional		
CLEANER'S ROOM	yes			1 x 4	1 x 4		
CLEAN-UP ROOM	yes			1 x 10	1 x 10		
OFFICE - WORKSTATION	yes			1 x 6	1 x 6		Recovery
OPERATING ROOM - GENERAL	yes				1 x 42		
OPERATING ROOM - MINOR	yes			1 x 36			
PATIENT BAY	yes			1 x 9	1 x 9		Holding

Part B - Health Facility Briefing and Planning

PATIENT BAY	yes			2 x 9	2 x 9		Recovery
SCRUB-UP / GOWNING	yes			1 x 10	1 x 10		
SHOWER - STAFF	yes			2 x 2	2 x 2		Within Staff Change area
STAFF STATION	yes				1 x 14		
STERILE SET-UP				1 x 10 optional	1 x 14 optional		
STERILISING AREA				1 x 16	1 x 16		Depending on Service Profile
STORE - GENERAL	yes			1 x 9	1 x 9		
STORE - STERILE STOCK	yes			1 x 12	1 x 15		
TOILET - STAFF	yes			2 x 2	2 x 2		Dependent on staffing establishment
CIRCULATION %				30	30		

350.17.00 EMERGENCY AND STABILISATION / MEDICAL IMAGING:

Additional areas that may be required based on Level of Service of the particular ICC:

ROOM / SPACE	Standard Component		Level 1 Qty x m2	Level 2 Qty x m2	Level 3 Qty x m2		Remarks
1 BED BAY - CRITICAL CARE	yes				1 x 20		
AMBULANCE ENTRY / LOBBY				1 x 10	1 x 10		
BAY - MOBILE EQUIPMENT	yes		1 x 6 optional	1 x 6 optional	1 x 6 optional		Mobile X-ray Unit
ENSUITE - STANDARD	yes			1 x 5	1 x 5		
MEDICAL IMAGING AREA					1 x 40 optional		
PLASTER ROOM	yes				1 x 14 optional		
STORE - MOBILITY AIDS			1 x 4	1 x 4	1 x 6		
PATIENT BAY	yes		2 x 9	2 x 9	2 x 9		Treatment Cubicles
TREATMENT ROOM	yes			1 x 15	1 x 15		
WAITING	yes		1 x 4	1 x 6	1 x 10		
CIRCULATION %			30	30	30		

350.18.00 PRIMARY HEALTH CARE, ALLIED HEALTH & DAY CENTRE:

Additional areas that may be required depending on service to be provided by the particular ICC:

Part B - Health Facility Briefing and Planning

ROOM / SPACE	Standard Component				Level 3 Qty x m2		Remarks
ACTIVITY AREA					1 x 80 optional		For general use or Day Care patients
ADL KITCHEN	yes				1 x 12 optional		
CONSULT ROOM	yes				1 x 12		
CRAFT ROOM - DAY CARE					1 x 20 optional		
DENTAL ROOM					1 x 20 optional		Size allows for sterilising within the room
DINING ROOM - DAY CARE					1 x 30 optional		
ENTRY / LOBBY					1 x 6		
GYMNASIUM	yes				1 x 30		Physiotherapy exercise area
INTERVIEW ROOM	yes				1 x 12		Large for family groups
OFFICE - SINGLE PERSON 12 M2	yes				2 x 12		Co-ordinator/s
OFFICE - SINGLE PERSON 9 M2	yes				2 x 9 optional		Dependent on staffing establishment
OFFICE - WORKSTATION	yes				1 x 6 optional		Dependent on staffing establishment
ORTHOTICS WORK ROOM					1 x 6		
PHYSIOTHERAPY TREATMENT					1 x 10		
PODIATRY TREATMENT					1 x 15		
RECEPTION	yes				1 x 10		
TOILET - DISABLED	yes				1 x 5		
TOILET - PUBLIC	yes				4 x 3		
WAITING	yes				1 x 20		
CIRCULATION %				25	25		

350 .19.00 SHARED AREAS

Note: For Medical Procedures, Emergency Stabilisation, Medical Imaging, Primary Health Care and Allied Health components:

ROOM / SPACE	Standard Component		Level 1 Qty x m2	Level 2 Qty x m2	Level 3 Qty x m2		Remarks
CHANGE ROOM - STAFF	yes			1 x 10	1 x 15		Area dependent on staffing establishment

Part B - Health Facility Briefing and Planning

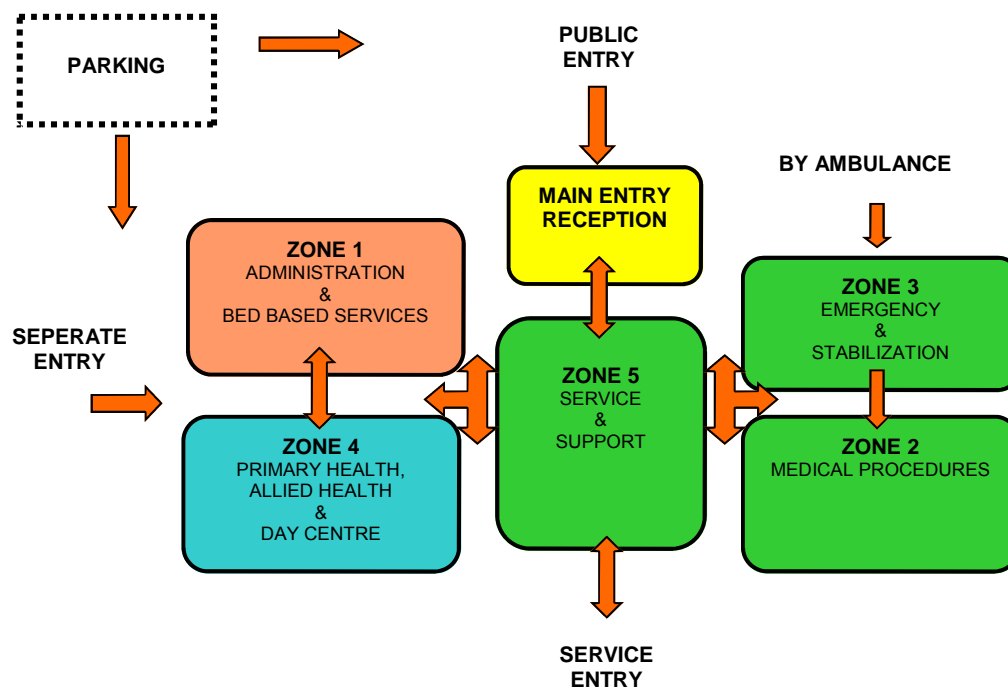
CLEANER'S ROOM	yes			1 x 4	1 x 4		
CLINICAL RECORDS					1 x 8		
DIRTY UTILITY	yes		1 x 10	1 x 10	1 x 10		
MEETING ROOM - MEDIUM	yes				1 x 25		
QUIET ROOM - DAY CARE					1 x 14		
RESOURCE LIBRARY					1 x 10		
STAFF ROOM	yes				1 x 15		
STORE - GENERAL	yes		1 x 9	1 x 9	1 x 9		
TOILET - STAFF	yes		1 x 2	2 x 2	2 X 2		Quantities dependent on staffing establishment

References and Further Reading

- 350 .20.00 - Department of Human Services, Aged, Community & Mental Health Division, Integrated Rural Health Services Generic Brief, 2000.
- NSW Health, Design Standard 35 Health Building Guidelines - Rural Health Service Building Guideline, 2000.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - INTEGRATED HEALTH CARE CENTRES



Part B - Health Facility Briefing and Planning

360 INTENSIVE CARE - GENERAL

INDEX

Description

360 .1.00	INTRODUCTION Description
	PLANNING Operational Models Functional Areas Functional Relationships
	DESIGN Clocks Communications Finishes Fixtures and Fittings Infection Control Space Standards and Components Building Service Requirements
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

360 .2.00	Intensive Care is a dedicated unit for critically ill patients who require invasive life support, high levels of medical and nursing care and complex treatment.
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PLANNING

Operational Models

360 .3.00	The level of Intensive Care available should support the delineated role of the particular hospital. The role of a particular ICU will vary, depending on staffing, facilities and support services as well as the type and number of patients it has to manage.
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Functional Areas

360 .4.00	The Intensive Care Unit will consist of the following Functional Areas: <ul style="list-style-type: none">- Reception/ Waiting Areas- Patient Treatment Areas including patient beds, ensuites and treatment rooms- Support Areas including Utility Rooms, Store Rooms, Linen, Disposal Room, Cleaner's Room, Pantry- Administrative / Office Areas- Staff Amenities Areas.
360 .5.00	EQUIPMENT MAINTENANCE

Part B - Health Facility Briefing and Planning

Dependent upon the size and intended use of the ICU, a dedicated electronic and pneumatic equipment maintenance service may have to be accommodated within the hospital or a 24 hour on-call emergency service made available. This same service would cover the Operating, Emergency and Medical Imaging Units.

- 360 .6.00 If a dedicated workshop is provided, its location should be in an area that is equally accessible to all of the above mentioned departments. The facility should have a degree of sound-proofing and be accessible from a non-sterile area.

360 .7.00 LABORATORY FACILITIES

All ICUs must have available 24-hr Clinical Laboratory services. When this service cannot be provided by the Central Hospital Laboratory, a satellite laboratory within or immediately adjacent to, the ICU must serve this function. Satellite facilities must be able to provide minimum chemistry and haematology testing, including arterial blood gas analysis.

360 .8.00 OVERNIGHT ACCOMMODATION

Depending upon the availability of nearby commercial accommodation, consideration should be given to the provision of overnight accommodation for relatives and staff, preferably near the unit. This will be dependent upon the size and intended function of the ICU. A motel type bed-sitter level of provision is recommended.

360 .9.00 SPECIAL PROCEDURES ROOM

A Special Procedures Room shall be provided if required by the Operational Policy.

- 360 .10.00 If a special Procedures Room is desired, it should be located within, or immediately adjacent to, the ICU. One special Procedures Room may serve several ICUs in close proximity. Consideration should be given to ease of access for patients transported from areas outside the ICU. Room size should be sufficient to accommodate the necessary equipment and personnel. Monitoring capabilities, equipment, support services, and safety considerations must be consistent with those services provided in the ICU proper. Work surfaces and storage areas must be adequate enough to maintain all necessary supplies and permit the performance of all desired procedures without the need for staff to leave the room.

360 .11.00 STAFF FACILITIES

A Staff Lounge shall be provided within the unit for staff to relax and prepare beverages. Inclusion of a window to the outside is desirable. Where only an Intensive Nursing facility is provided, the Hospital Staff Dining Room will suffice.

- 360 .12.00 A Library/ Reference area with an appropriate range of bench manuals, textbooks and journals for rapid access 24 hours a day should be available within the Intensive Care Unit.

360 .13.00 STORAGE AREAS

Mobile equipment such as cardiopulmonary resuscitation trolleys and mobile X-ray, that are used and located within the ICU, shall have storage areas that are out of traffic paths but conveniently located for easy access by staff.

Part B - Health Facility Briefing and Planning

Consideration should be given to the ever increasing amount of equipment used.

360 .14.00 VISITORS FACILITIES

As determined by the size of the ICU and hospital operating policy, a Reception and Visitor's / Relatives' Waiting Area shall be provided immediately outside the entry to the ICU, but away from patient and staff Traffic areas. It is desirable that this room has provision for a drink dispenser, radio, television and comfortable seating. A separate Interview Room and a separate area for distressed relatives should be available.

Functional Relationships

360 .15.00 The ICU should be a separate unit within the hospital with easy access to the Emergency Unit, Operating Unit and Medical Imaging.

360 .16.00 The location shall be arranged to eliminate the need for through traffic.

DESIGN

Clocks

360 .17.00 An analogue clock/s with a second sweep hand shall be provided and conveniently located for easy reference from all bed positions and the Staff Station.

Communications

360 .18.00 All ICUs should have an intercommunication system that provides voice linkage between the Staff Station, Patient Modules, Staff-Overnight Stay Rooms, Conference Rooms, and Staff Lounge. Supply Areas and the Visitors' Lounge / Waiting Room may also be included in the system. When appropriate, linkage to key departments such as Blood Bank, Pharmacy, and Clinical Laboratories should be included.

In addition to a standard telephone service for each ICU, which should provide hospital-wide and external communications capabilities, there should be a mechanism for emergency internal and external communications when normal systems fail.

Environmental Considerations

360 .19.00 ACOUSTICS

Signals from patient call systems, alarms from monitoring equipment, and telephones add to the sensory overload in critical care units. Without reducing their importance or sense of urgency, such signals should be modulated to a level that will alert staff members, yet be rendered less intrusive. For these reasons, floor coverings that absorb sound should be used while keeping infection control, maintenance, and equipment movement needs under consideration. Walls and ceilings should be constructed of materials with high sound absorption capabilities. Ceiling soffits and baffles help reduce echoed sounds. Doorways should be offset, rather than being placed in symmetrically opposed positions, to reduce sound transmission. Counters, partitions, and glass doors are also effective in reducing noise levels.

360 .20.00 BED AREAS

Part B - Health Facility Briefing and Planning

360.12.00

For an adult ICU the following is recommended:

- At least 22 m² floor area for single bed accommodation exclusive of service areas
- At least 20 m² floor area for multiple bed accommodation
- At least one clinical basin for every two beds is recommended; one handbasin per bed is preferred
- At least one single room should be available for every six open bedspaces
- A clinical basin for every single room
- An adequate number of service outlets depending on the purpose of the unit: A Level 3 unit will require at least three oxygen, two air, and three suction outlets and at least 16 power outlets for each bed space
- Electrical wiring and protection of Patient Treatment Areas must be Cardiac Protected to AS 3003
- Adequate and appropriate lighting for clinical observation
- Windows and bed access to an external area are desirable features for the psychological well being of patients and staff
- Design should take into account the need for patient privacy.

360.21.00 BEDSIDE MONITORING

Bedside monitoring equipment should be located to permit easy access and viewing, and should not interfere with the visualisation of, or access to the patient. The bedside nurse and/or monitor technician must be able to observe the monitored status of each patient at a glance. This goal can be achieved either by a central monitoring station, or by bedside monitors that permit the observation of more than one patient simultaneously. Neither of these methods are intended to replace bedside observation.

Weight-bearing surfaces that support the monitoring equipment should be sturdy enough to withstand high levels of strain over time. It should be assumed that monitoring equipment will increase in volume over time. Therefore, space and electrical facilities should be designed accordingly.

360.22.00 LIGHT AND WINDOWS

Every effort should be made to provide an environment that minimises stress to patients and staff. Therefore, ICU design should consider natural light and view. Windows are an important aspect of sensory orientation, and as many rooms as possible should have windows to reinforce day/night orientation. Drapes or shades of fireproof fabric can make attractive window coverings and absorb sound. Window treatments should be durable and easy to clean. If drapes or shades are not a viable option, consider the use of tinted glass, reflective glass, exterior overhangs or louvers to control the level of lighting. If windows cannot be provided in each room, an alternate option is to allow a remote view of an outside window or skylight.

360.23.00 PATIENT VISIBILITY

Patients must be situated so that healthcare providers have direct or indirect visualization, such as by video monitoring, at all times. This approach permits the monitoring of patient status under both routine and emergency circumstances. The preferred design is to allow a direct line of vision between the patient and the central Staff Station. In ICUs with a modular design, patients should be visible from their respective nursing sub-stations. Sliding glass doors and partitions facilitate this arrangement and increase access to the room in emergency situations

Finishes

360.24.00 In all areas where patient observation is critical, colours shall be chosen that

Part B - Health Facility Briefing and Planning

do not alter the observer's perception of skin colour.

Fixtures & Fittings

- 360 .25.00 **BEDSIDE STORAGE**
Each patient bed space shall include storage and writing provision for staff use.

Infection Control

- 360 .26.00 Clinical Hand-washing Facilities shall be provided convenient to the Staff Station and patient bed areas. The ratio of provision shall be one Clinical Hand-washing Facility for every three patient beds in open-plan areas and one in each Patient Bedroom or cubicle.
- 360 .27.00 At least one Isolation Room per ICU shall be provided in Level 5 and 6 facilities. Entry shall be through an airlock. Clinical hand-washing, gown and mask storage, and waste disposal shall be provided within the airlock. An Ensuite - Special, directly accessible from the Isolation Room, shall also be provided.

Space Standards and Components

- 360 .28.00 Where an open plan arrangement is provided, bed spaces shall be arranged so that there is a clearance of at least 1200 mm from the side of the bed to the nearest fixed obstruction (including bed screens) or wall. At the head of the bed, at least 900 mm clearance shall be allowed between the bed and any fixed obstruction or wall.
- 360 .29.00 When an open plan arrangement is provided, a circulation space of 2200 mm minimum clear width shall be provided beyond dedicated cubicle space.
- 360 .30.00 Separate cubicles and Single Patient Bedrooms including Isolation Rooms, shall have minimum dimensions of 3900 mm X 3900 mm.
- 360 .31.00 All entry points, doors or openings, shall be a minimum of 1200 mm wide, unobstructed. Larger openings may be required for special equipment, as determined by the Operational Policy.

Building Service Requirements

- 360 .32.00 The unit shall have appropriate air conditioning that allows control of temperature, humidity and air change.
- 360 .33.00 Refer to Services Sections for the specific requirements for Mechanical and Electrical provision.

COMPONENTS OF THE UNIT

Introduction

- 360 .34.00 The Intensive Care Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Part B - Health Facility Briefing and Planning

Standard Components

- 360 .35.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 360 .36.00 Provide the Non-Standard Components as identified in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

Part B - Health Facility Briefing and Planning

APPENDICES

ICU-General Generic Schedule of Accommodation

360 .37.00 Schedule of Accommodation for a 6 bed Intensive Care Unit at Level 4, a 12 bed Unit at level 5 and a 20 bed Unit at Level 6:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
				6 Bed	12 Bed	20 Bed	
1 BED BAY - CRITICAL CARE	yes			4 x 20	6 x 20	12 x 20	
1 BED ROOM - CRITICAL CARE	yes			1 x 22	4 x 22	6 x 22	
1 BED ROOM - ISOLATION	yes			1 x 22	2 x 22	2 x 22	refer to Standard Component - 1 Bed Room - Critical Care
ANTEROOM	yes			1 x 8	2 x 8	2 x 8	If Class N Isolation Room is required
BAY - HANDWASHING	yes			2 x 1	4 x 1	4 x 1	In addition to handbasins for bedspaces
BAY - LINEN	yes			1 x 3	1 x 3	1 x 3	Includes allowance for Blanket Warming cabinet
BAY - MOBILE EQUIPMENT	yes			1 x 4	1 x 4	2 x 4	
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	2 x 2	
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CLEAN-UP ROOM	yes			1 x 10	1 x 10	1 x 10	May also be used as a Sub-Pathology Room
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	
ENSUITE - SPECIAL	yes			3 x 7	6 x 7	8 x 7	
MEDICATION ROOM				1 x 10	2 x 12	2 x 16	
MEETING ROOM	yes			1 x 12	1 x 12	1 x 12	For Distressed Relatives
OFFICE - CLINICAL/ HANDOVER	yes				2 x 12	2 x 12	
PANTRY	yes			1 x 8 optional	1 x 8	1 x 8	
RESPIRATORY WORKROOM					1 x 20 optional	1 x 20 optional	
STAFF STATION	yes			1 x 14	1 x 14	1 x 20	
STORE - EQUIPMENT	yes			1 x 20	1 x 30	1 x 35	
STORE - GENERAL	yes			1 x 9	1 x 15	1 x 20	
STORE - RESPIRATORY					1 x 40 optional	1 x 40 optional	

Part B - Health Facility Briefing and Planning

X-RAY VIEWING & REPORTING	yes				1 x 12 optional	1 x 12 optional	
CIRCULATION %				40	40	40	

360.38.00 STAFF AND SUPPORT AREAS

Note: Provision of Office and Support Areas is dependent on the Operational Policy and management structure:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes			1 x 3	2 x 3	2 x 3	Located adjacent to Meeting / Staff Rooms
LIBRARY & RESOURCE ROOM					1 x 15 optional	1 x 15 optional	
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Medical Director
OFFICE - SINGLE PERSON 12 M2	yes				2 x 12 optional	3 x 12 optional	Staff Specialists, according to staffing establishment
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9	1 x 9	1 x 9	Unit Manager
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Medical Administration
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	CNC / Educators, Research functions
OFFICE - 4 PERSON SHARED	yes				1 x 20 optional	1 x 20 optional	Clerical functions, according to staffing establishment
OFFICE - 4 PERSON SHARED	yes				1 x 20 optional	1 x 20 optional	Registrars
OFFICE - WORKSTATION	yes				2 x 6 optional	3 x 6 optional	According to staffing establishment
RECEPTION	yes			1 x 10	1 x 10	1 x 10	
TOILET - PUBLIC	yes			1 x 3	2 x 3	2 x 3	
TOILET - STAFF	yes			1 x 2	2 x 2	2 x 2	
WAITING	yes			1 x 12	1 x 14	1 x 14	

360.39.00 SHARED AREAS

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BATHROOM	yes			1 x 10	2 x 10	2 x 10	
INTERVIEW ROOM	yes				1 x 12	1 x 12	Large for family groups
MEETING ROOM	yes			1 x 15	1 x 30	1 x 30	
PROPERTY BAY - STAFF	yes			1 x 6	1 x 10	1 x 10	
SHOWER - STAFF	yes			1 x 3	2 x 3	2 x 3	
STAFF ROOM	yes			1 x 15	1 x 15	1 x 20	

Part B - Health Facility Briefing and Planning

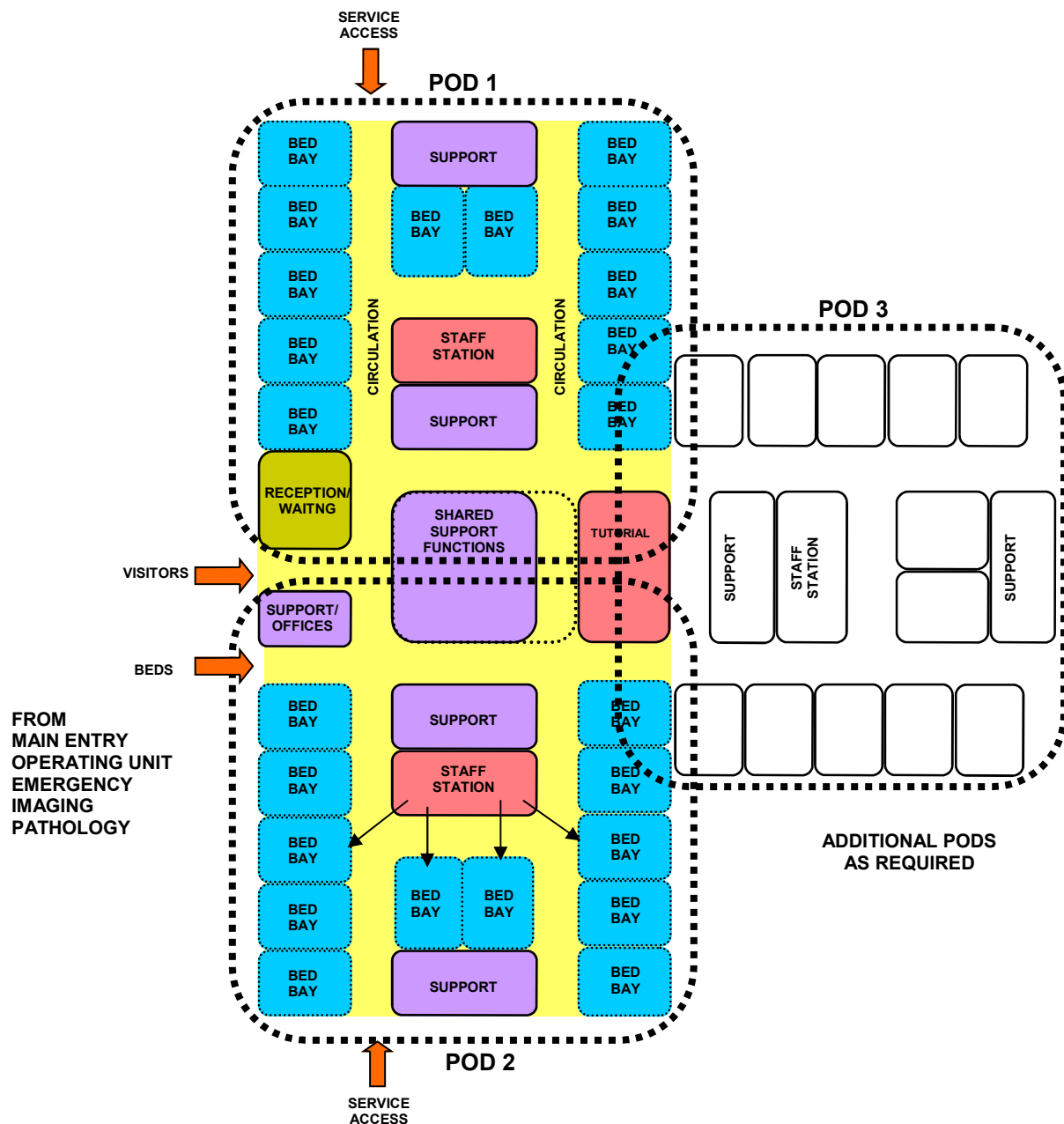
STORE - PHOTOCOPY / STATIONERY	yes			1 x 8	1 x 8	1 x 8	
TOILET - DISABLED	yes			1 x 5	1 x 5	1 x 5	

References and Further Reading

- 360.40.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- American College of Critical Care Medicine, Guidelines for Intensive Care Unit Design, 1998.
 - Australian and New Zealand Faculty of Intensive Care, Minimum Standards for Intensive Care Units, 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - INTENSIVE CARE (GENERAL)



NOTE: MAX 12 BEDS PER POD

Part B - Health Facility Briefing and Planning

370 INTENSIVE CARE - CORONARY

INDEX

Description

- 370 .1.00 INTRODUCTION
General
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Fixtures and Fittings
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

General

- 370 .2.00 Cardiac patients have special needs. They are often fully aware of their surroundings but still need immediate and critical emergency care. In addition to the standards for ICUs above, the following shall apply to the Coronary Care Unit (CCU).

PLANNING

Functional Areas

- 370 .3.00 PATIENT BEDS
- It is preferable that each cardiac patient has a separate room or cubicle for acoustic and visual privacy.
- 370 .4.00 A minimum of 50% of CCU patients shall be accommodated in One Bed Patient Rooms.
- 370 .5.00 PATIENT TOILETS
- Cardiac patients shall have access to a shared Ensuite - Special.

Functional Relationships

- 370 .6.00 The Intensive Care - Coronary may be co-located with Intensive Care - General. It should have ready access to the Operating Unit, Medical Imaging Units, Emergency Unit and Cardiac Inpatient Units.

Part B - Health Facility Briefing and Planning

DESIGN

Fixtures & Fittings

370 .7.00 MONITORING

Equipment for monitoring cardiac patients shall have provision for visual display at both the bed location and the Staff Station. Additional space requirements to be considered to allow for additional monitoring equipment.

APPENDICES

Schedule of Accommodation

370 .8.00 Refer to the Generic Schedule of Accommodation for ICU - General which also applies to ICU - Coronary.

References and Further Reading

- 370 .9.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

390 INTENSIVE CARE - NEONATAL / SPECIAL CARE NURSERY

INDEX

Description

390 .1.00	INTRODUCTION Description
	PLANNING Planning Models Functional Areas Functional Relationships
	DESIGN Doors Environmental Considerations Infection Control Lighting
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

390 .2.00	The Neonatal Intensive Care Unit (NICU) or Special Care Nursery (SCN) is an Intensive Care Unit equipped and staffed to care for sick neonates requiring long term life support eg ventilation and advanced life support.
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PLANNING

Planning Models

390 .3.00	The Neonatal Intensive Care (NICU) and Special Care Nursery (SCN) areas shall have a clearly identified Entrance and Reception Area for families. The area shall permit visual observation and contact with all traffic entering the unit.
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Functional Areas

390 .4.00	The Neonatal Intensive Care / Special Care Nurseries will consist of the following Functional Areas: <ul style="list-style-type: none">- Patient Treatment Areas including Cot Bays, Isolation Rooms as appropriate, Treatment Rooms- Support Areas including a Bathing/ Examination area, Feeding area, Formula room, Store areas, Utilities, Cleaner's Room, Disposal- Staff Areas including Staff Station, Offices, Meeting Rooms and Staff Amenities- Visitors' facilities which may include access to Lounge or Waiting areas, Public Amenities and Overnight Accommodation as appropriate.
390 .5.00	OVERNIGHT ACCOMMODATION Sleeping space may be needed for parents who may be required to spend

Part B - Health Facility Briefing and Planning

long hours with the neonate. This space may be separate from the NICU/ SCN, but must be in communication with the NICU/ SCN.

- 390 .6.00 Physicians' sleeping facilities, with access to a toilet and shower shall be provided. If not contained within the NICU / SCN itself, the area shall have a telephone or intercom connection to the patient care area.

390 .7.00 PATIENT TREATMENT AREAS

Each patient treatment area in the NICU is to be 12 m2 and the SCU is to be 10 m2 excluding sink and aisles. There shall be circulation adjacent to each cot bay.

Resuscitation Bay / Treatment Area as per NICU Patient Treatment area is to be included in the SCN.

A clinical handbasin is to be provided for every two NICU beds and every four SCN beds.

390 .8.00 SUPPORT AREAS

A Respiratory Therapy Work Area and Storage Room shall be provided as required by the Operational Policy.

Functional Relationships

- 390 .9.00 The Intensive Care - Neonatal/ Special Care Nursery should be a distinct Unit located with ready access to the Obstetric Unit, Operating Unit, Maternity Inpatient Unit and Pathology Unit. There shall be no traffic to other Units through this Unit.

There should be efficient and controlled access to the NICU / SCN from the Labour and Delivery Area, the Emergency Unit, or other referral entry points.

DESIGN

Doors

- 390 .10.00 At least one door to each room in the NICU/ SCN must be large enough to accommodate portable X-ray equipment. Both width and height must be considered.

Environmental Considerations

390 .11.00 ACOUSTICS

In the interest of noise control, sound attenuation shall be a design factor.

Infection Control

390 .12.00 ISOLATION ROOM/S

An Isolation Room (type N) is required in the NICU. The room shall be enclosed and separated from the Nursery Unit with provisions for observation of the infant from adjacent nurseries or control area/s.

Lighting

- 390 .13.00 Provisions shall be made for indirect lighting and high-intensity lighting in all nurseries.

Part B - Health Facility Briefing and Planning

Note: All general lighting shall be colour corrected to natural.

COMPONENTS OF THE UNIT

Introduction

- 390 .14.00 The Neonatal Intensive Care Unit/ Special Care Nursery will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 390 .15.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 390 .16.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 390 .17.00 CONSULT/ BREAST FEEDING AREA

DESCRIPTION AND FUNCTION

A Consult/ Breast Feeding Room shall be provided to be used for demonstrations, breast feeding or using breast pumps.

The Consult/ Breast Feeding Room shall be a minimum of nine m2.

- 390 .18.00 LOCATION AND RELATIONSHIPS

The Consult/ Breast Feeding Room/s shall be located with convenient access to the NICU/SCN.

- 390 .19.00 CONSIDERATIONS

The Consult/ Breast Feeding Room will require the following:

- A bench with an inset sink
- Comfortable chairs suitable for breastfeeding
- Refrigerator/ freezer
- Storage for pump and attachments
- General power outlets for use of a breast pump
- Access to educational material either within the room or conveniently located nearby.

The room will require visual and acoustic privacy.

Part B - Health Facility Briefing and Planning

APPENDICES

ICU-Neonatal/ SCN Generic Schedule of Accommodation

390 .20.00 Schedule of Accommodation for a Neonatal ICU/ Special Care Nursery at Levels 4, 5 and 6:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BATHING / EXAM AREA				1 x 8	1 x 12	1 x 12	
BAY - BEVERAGE	yes			1 x 3	1 x 3	1 x 3	Locate near Meeting Room
BAY - HANDWASHING	yes			6 x 1	12 x 1	12 x 1	
BAY - LINEN	yes			1 x 2	3 x 3	3 x 3	Levels 5 & 6 includes area allowance for Blanket Warmer
BAY - MOBILE EQUIPMENT	yes				1 x 4	2 x 4	
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	2 x 2	
CLEANER'S ROOM	yes				1 x 4	1 x 4	
CLEAN UTILITY	yes			1 x 12	1 x 12	2 x 12	
CONSULT / BREAST FEEDING				1 x 9	2 x 9	4 x 9	
ISOLATION ROOM	see remarks			1 x 12	2 x 12	4 x 12	Refer to Standard Component - 1 Bed- Isolation
DIRTY UTILITY - SUB	yes			1 x 8	2 x 8	2 x 8	May be co-located with Disposal Room
DISPOSAL ROOM	yes			1 x 8 optional	1 x 8	1 x 8	
FORMULA ROOM	yes			1 x 9	1 x 15	1 x 15	
MEETING ROOM	yes				1 x 15	1 x 15	Also for use as Parent's Lounge
NEONATAL BAY - ICU	yes					20 x 12	NICU
NEONATAL BAY - SPECIAL CARE	yes			10 x 10	20 x 10	40 x 10	SCN
OFFICE - CLINICAL/ HANDOVER	yes				1 x 12	2 x 12	
STAFF STATION	yes			1 x 14	1 x 14	2 x 14	
STORE - EQUIPMENT	yes				1 x 20	2 x 20	
STORE - GENERAL	yes			1 x 9	1 x 15	1 x 30	Size according to amount of stock/ medical supplies to be accommodated
UTILITY - EQUIPMENT CLEANING					1 x 20	1 x 20	
CIRCULATION %				40	40	40	

390 .21.00 STAFF AND SUPPORT AREAS

Note: Offices and Support Areas are dependent on the Operational Policy and management structure:

Part B - Health Facility Briefing and Planning

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes					1 x 3	Co-located with Staff Room
OFFICE - SINGLE PERSON 9 M2	yes				2 x 9	2 x 9	Unit Manager
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	2 x 9 optional	Nursing personnel, according to staffing establishment
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Social Worker, according to staffing establishment
RECEPTION	yes					1 x 10	
WAITING	yes				1 x 10	1 x 10	May be shared

390.22.00 SHARED AREAS

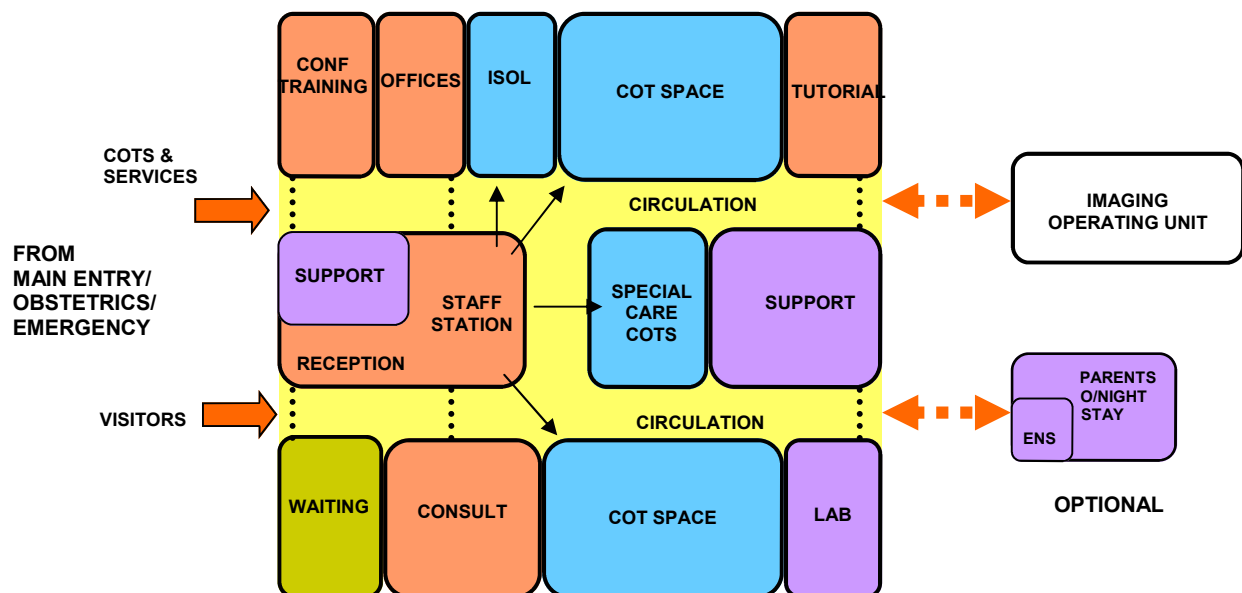
ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
INTERVIEW ROOM	yes				1 x 9	1 x 9	
INTERVIEW ROOM	yes				1 x 12	1 x 12	Large for family groups
MEETING ROOM	yes				1 x 30	1 x 30	
OVERNIGHT STAY - BEDROOM	yes			1 x 10	1 x 10	1 x 10	May be located within the Unit or nearby
OVERNIGHT STAY - ENSUITE	yes			1 x 4	1 x 4	1 x 4	
PROPERTY BAY - STAFF	yes			1 x 6	1 x 10	1 x 15	
STAFF ROOM						1 x 15	
TOILET - DISABLED	yes				1 x 5	1 x 5	
TOILET - PUBLIC	yes				2 x 3	2 x 3	
TOILET - STAFF	yes			1 x 2	2 x 2	2 x 2	

References and Further Reading

- 390.23.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997
 - Department of Human Services, Victoria, Neonatal Services Guidelines: Defining levels of care in Victorian hospitals, 2004.
 - NSW Health, Design Series 18; Health Building Guidelines - Obstetric Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - INTENSIVE CARE (NEONATAL)



Part B - Health Facility Briefing and Planning

400 INTENSIVE CARE - PAEDIATRIC

INDEX

Description

400 .1.00	INTRODUCTION Description
	PLANNING Planning Models Functional Areas Functional Relationships
	DESIGN Space Standards and Components
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

General

400 .2.00	Critically ill paediatric patients, from neonates to adolescents, have unique physical and psychological needs.
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PLANNING

Planning Models

400 .3.00	In addition to the standards previously listed for Intensive Care Units, each Paediatric Intensive Care Unit shall include space at each bedside for parents, and sleeping space for parents who may be required to spend long hours with the patient. If the sleeping area is separate from the patient area, it must be in communication with the Intensive Care Unit staff.
400 .4.00	The Paediatric ICU may be open-plan or may have all Single Patient Bedrooms or a mix of both. Where open-plan is provided, at least one in five beds must be located in a private room or cubicle for psychological needs, in addition to the medical isolation requirement.

Functional Areas

400 .5.00	The Intensive Care - Paediatric will consist of the following Functional Areas: <ul style="list-style-type: none">- Patient Treatment Areas including Patient Beds, Isolation Rooms as appropriate, Treatment Rooms- Support Areas including Formula Room, Linen bays, Utility Rooms, Store rooms, Cleaner's Room, Disposal- Staff Areas including Staff Station, Offices and access to Meeting Rooms and Staff Amenities- Visitors and Parents' Facilities which may include access to Lounge areas or Waiting Rooms, Public Amenities and Overnight Accommodation as appropriate.
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Part B - Health Facility Briefing and Planning

Functional Areas

400 .6.00 STORAGE

Each Paediatric Intensive Care Unit shall include separate storage cabinets or closets for toys and games for use by the paediatric patients.

Functional Relationships

- 400 .7.00 The Intensive Care - Paediatric Unit should have ready access to the Emergency Unit, Operating Unit, Medical Imaging Units, Pathology Unit and Pharmacy Unit. It should be located to avoid the need for through traffic.

DESIGN

Space Standards and Components

- 400 .8.00 The bassinets, incubators and warmers used for neonatal infants will need the same clearances as for adult beds.

COMPONENTS OF THE UNIT

Introduction

- 400 .9.00 The Paediatric Intensive Care Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 400 .10.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 400 .11.00 Provide the Non-Standard Components as identified in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

APPENDICES

ICU-Paediatric Generic Schedule of Accommodation

- 400 .12.00 Schedule of Accommodation for Intensive Care Unit - Paediatric:

In addition to the schedule identified for Intensive Care - General the following additional requirements will apply:

ROOM / SPACE	Standard Component					Level 6 Qty x m2	Remarks
STORE - GENERAL	yes					2 x 9	Including storage for cots and toys
TREATMENT ROOM	yes					1 x 15	With provisions for Paediatric patients
CIRCULATION %						40	

Part B - Health Facility Briefing and Planning

ICU-Paediatric Generic Schedule of Accommodation

400.13.00 SHARED AREAS

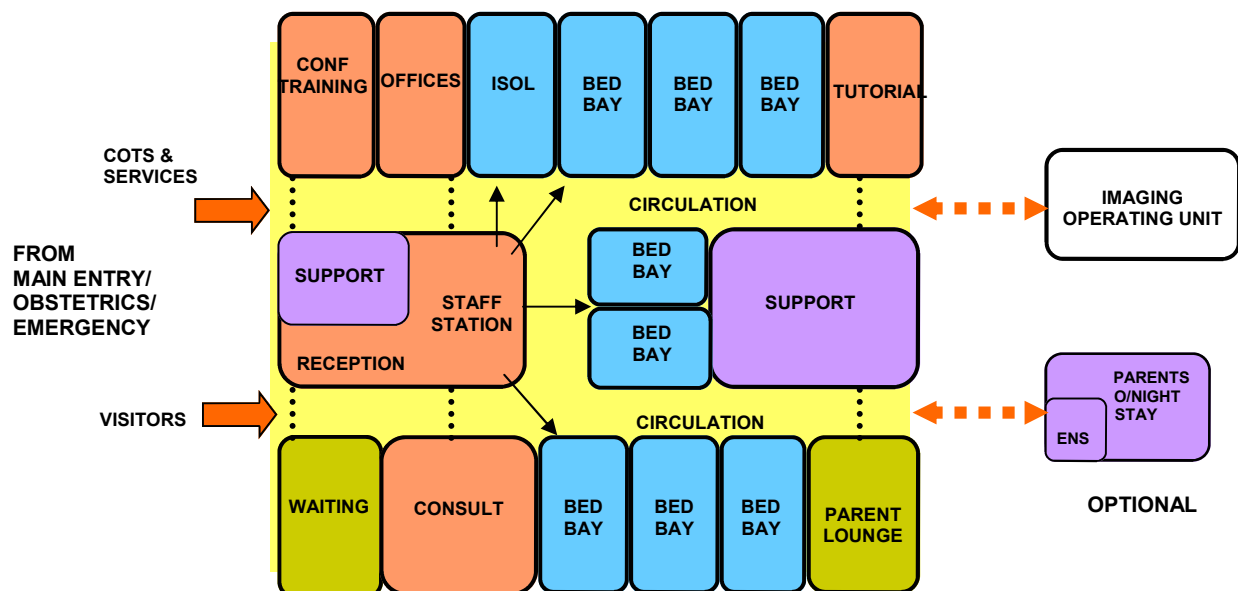
ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes					1 x 3	C-located with Lounge - Parent's
FORMULA ROOM	yes					1 x 15	
LOUNGE - PARENT'S						1 x 20	
OVERNIGHT STAY - BEDROOM	yes					1 x 10	For parents; may be located within the Unit or nearby
OVERNIGHT STAY - ENSUITE	yes					1 x 4	

References and Further Reading

- 400.14.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - INTENSIVE CARE (PAEDIATRIC)



Part B - Health Facility Briefing and Planning

410 LAUNDRY / LINEN HANDLING UNIT

INDEX

Description

- 410 .1.00 INTRODUCTION
General
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Generic Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

General

- 410 .2.00 Linen processing may be done within the hospital facility, or off-site in a commercial or shared laundry, depending on the Operational Policy.
- 410 .3.00 Each facility shall have provisions for storage and exchange of clean and soiled linen for appropriate patient care.

PLANNING

Functional Areas

- 410 .4.00 As a minimum, the following elements shall be provided:
- A separate room for receiving and holding soiled linen until ready for pick up or processing
 - A central, clean linen storage and issuing room/s that has the central storage capacity sufficient for the efficient operation of the hospital, in addition to the linen storage required at individual patient units
 - Trolley storage areas with separate storage of clean and soiled linen trolleys out of traffic paths
 - A clean linen inspection and mending room or area, located on or off the site, as part of the main linen service, as determined by the system identified in the hospital's Operational Policy
 - Hand-washing facilities shall be provided in each area where soiled linen is handled.
- 410 .5.00 LAUNDRY OFF-SITE
- If linen is processed outside the building, provisions shall be made for:
- A service entrance, protected from inclement weather, for loading and unloading of linen
 - An area for pick-up and receiving.
- 410 .6.00 LAUNDRY ON-SITE
- If linen is processed in a laundry facility which is part of the hospital, the

Part B - Health Facility Briefing and Planning

following shall be provided:

- Laundry processing room with commercial type equipment that can process at least a seven day supply within the regular scheduled work week
- Storage for laundry supplies
- Employee hand-washing facilities in each separate room where clean or soiled linen is processed and handled
- Arrangement of equipment shall permit an orderly work flow with a minimum of cross traffic
- Convenient access to Staff Amenities, usually shared facilities
- Compliance with all of the relevant statutory requirements and regulations is required, in particular AS 4146.

Functional Relationships

- 410 .7.00 The linen exchange area should be situated to allow direct access to and from wards through corridors, passages, covered ways, etc. and have or be adjacent to, an external doorway.

COMPONENTS OF THE UNIT

Introduction

- 410 .8.00 The Laundry/ Linen Handling Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 410 .9.00 Provide the Standard Components as identified in the Generic Schedule of accommodation.

Non-Standard Components

- 410 .10.00 Provide the Non Standard Components as described in the Schedule of Accommodation, according to Operational Policy and Functional Brief.

Part B - Health Facility Briefing and Planning

APPENDICES

Linen Handling Generic Schedule of Accommodation

410.11.00 Schedule of Accommodation for Linen Handling Unit providing an exchange linen service only, in a Hospital at levels 2 to 6:

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CLEAN LINEN HOLDING		1 x 15	1 x 30	1 x 45	1 x 80	1 x 100	
DIRTY LINEN HOLDING		1 x 12	1 x 20	1 x 20	1 x 40	1 x 60	
INSPECTION / MENDING				1 x 15 optional	1 x 15 optional	1 x 15 optional	May be provided off-site by the Linen Service provider
LAUNDRY - DOMESTIC		1 x 6 optional	1 x 6 optional	1 x 10 optional	1 x 10 optional	1 x 10 optional	For staff use
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9	1 x 9	Unit Manager or Supervisor
TROLLEY STORAGE			1 x 15	1 x 15	1 x 20	1 x 20	
CIRCULATION %		10	10	10	10	10	

410.11.10 SHARED AREAS

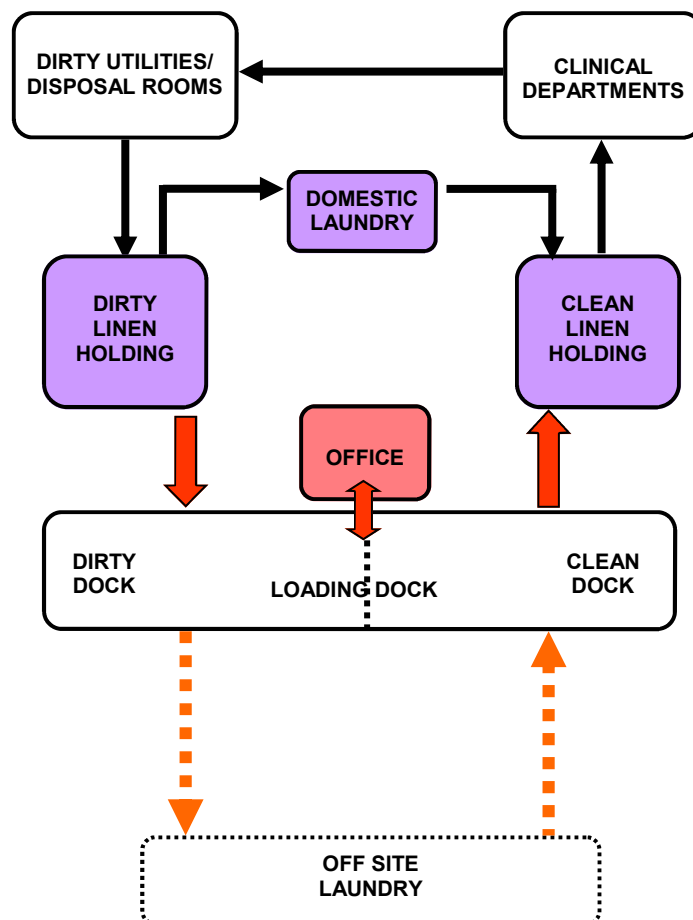
ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
LOADING DOCK		1 x 20	1 x 20	1 x 20	1 x 25	1 x 25	Shared with other service Units

References and Further Reading

- 410.13.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Department of Human Services, Victoria, Design Guidelines for Private Hospital Buildings, 1987.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - LAUNDRY/LINEN HANDLING UNIT



Part B - Health Facility Briefing and Planning

430 MAIN ENTRANCE UNIT

INDEX

Description

- 430 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Environmental Considerations
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Generic Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 430 .2.00 The Main Entrance Unit provides for the following functions:
- Entry to the hospital
 - Drop off and collection area
 - Patient reception
 - Patient and visitor enquiries

PLANNING

Functional Areas

- 430 .3.00 The Main Entrance shall include the following features:
- Reception desk, which may be shared with Admissions Unit
 - Waiting Area, which may be shared with Admissions and other adjacent hospital units
 - Holding area for wheelchairs.
- 430 .4.00 The provision of the following features is optional:
- Airlock to the entrance lobby
 - Undercover drop-off and collection point.

Functional Relationships

- 430 .5.00 The Main Entrance may be co-located with the Admissions Unit to share Reception and Waiting Areas. Ready access to Public Amenities is required.

Part B - Health Facility Briefing and Planning

DESIGN

Environmental Considerations

430 .6.00 ENTRY AREA

The entrance shall be at grade level, sheltered from inclement weather, and accessible to the disabled.

430 .7.00 SIGNPOSTING

Particular attention must be given to signposting the Main Entrance and the hospital for the disabled under the requirements of the DDA (Disability Discrimination Act).

COMPONENTS OF THE UNIT

Introduction

430 .8.00 The Main Entrance Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

430 .9.00 Provide the Standard Component as identified in the Generic Schedule of Accommodation.

Non-Standard Components

430 .10.00 Provide the Non-Standard Components as identified in the Generic Schedule of Accommodation, according to the Operational Policy and Functional Brief.

APPENDICES

Main Entrance Generic Schedule of Accommodation

430 .11.00 A Schedule of Accommodation for a Main Entrance suitable for a Level 4 Hospital of 120 Beds:

ROOM / SPACE	standard Component			Level 4 Qty x m2			Remarks
AIRLOCK				1 x 12 optional			
BAY - MOBILE EQUIPMENT	yes			1 x 4			For wheelchairs
LOBBY				1 x 30 optional			
RECEPTION	yes			1 x 10			May be shared with Admissions
WAITING	yes			1 x 20			May be shared with Admissions
CIRCULATION %				20			

References and Further Reading

Part B - Health Facility Briefing and Planning

430.12.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.

Part B - Health Facility Briefing and Planning

440 MEDICAL IMAGING - GENERAL

INDEX

Description

440 .1.00	INTRODUCTION Description
	PLANNING Planning Models Functional Areas Functional Relationships
	DESIGN Infection Control Space Standards and Components Standards and Codes Building Service Components
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

440 .2.00	The Medical Imaging Unit is a discrete unit of the hospital which provides for General X-ray diagnostic investigations. Depending on the level of service the unit may also provide for diagnostic screening (fluoroscopy), ultrasound, mammography, computed tomography (CT) or interventional radiographic procedures.
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PLANNING

Planning Models

440 .3.00	The layout of a Medical Imaging Unit should be developed in compliance with manufacturer's recommendations, because area requirements may vary from machine to machine. Since technology changes frequently and from manufacturer to manufacturer, rooms should be sized larger to allow upgrading of equipment in the future.
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Functional Areas

440 .4.00	The Medical Imaging Unit may consist of the following Functional Areas depending on the Operational Policy and service demand: <ul style="list-style-type: none">- Reception and Waiting Areas- X-ray and screening rooms with access to patient change areas and toilets- Support areas including preparation areas, storage, disposal and utility rooms- Film processing areas - both daylight and darkroom areas as required- Film storage areas- Viewing and reporting areas- Administrative and Office areas- Staff Amenities areas including Staff Room, Staff change rooms and toilets
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Part B - Health Facility Briefing and Planning

and access to Meeting Rooms

440 .5.00 CLEAN UTILITY / PREPARATION AREAS

The Clean Utility / Preparation Room shall provide for preparation and mixing of contrast media, storage of medications and sterile supplies. The Clean Utility / Preparation Room, if conveniently located, may serve any number of rooms. The Clean Utility / Preparation Room shall comply with requirements identified in Standard Components - Clean Utility. When pre-prepared media is used, additional storage shall be provided for the media.

440 .6.00 DIAGNOSTIC X-RAY AREAS

Diagnostic X-ray may include Tomography and Radiography / Fluoroscopy Rooms. Rooms for Diagnostic X-ray will need to be larger than standard X-ray Rooms to accommodate additional equipment and personnel. Diagnostic X-ray Rooms will require a scrub basin, preferably located adjacent to the room.

440 .7.00 FILM PROCESSING AREAS

A Darkroom shall be provided for processing film unless the processing equipment normally used does not require a Darkroom for loading and transfer. When daylight processing is used, the Darkroom may be minimal for emergency and special uses. Film processing shall be located convenient to the Imaging Rooms and to the quality control area. The darkroom will require special attention to lighting and ventilation.

440 .8.00 FILM STORAGE

A room with cabinets or shelves to file patient film for immediate retrieval shall be provided.

440 .9.00 A room or area that provides storage for archived film shall be provided. It may be outside the Imaging Unit, but must be properly secured to protect films against loss or damage.

440 .10.00 Storage facilities for unexposed film shall include protection of film against exposure of damage and shall not be warmer than the air of adjacent occupied spaces.

440 .11.00 OFF-SITE SERVICES

In smaller hospitals that cannot justify a full Medical Imaging Unit, access to off-site services is an important consideration in the planning phase, in particular, the selection of the site.

Functional Relationships

440 .12.00 The location of the Medical Imaging Unit, if provided, is variable. Consideration must be given to its proximity to Accident and Emergency, and to the Operating Unit where dedicated in-theatre X-ray is not provided. The requirement for an Outpatient X-ray Service may also dictate where in the facility it is located. In most instances, a compromise between travelling distance for inpatients (minor role) and convenience for outpatients (major role) will be made.

DESIGN

Infection Control

- 440 .13.00 Hand-washing facilities shall be provided for each Imaging Room, located outside the entry to the room.

Space Standards and Components

- 440 .14.00 Rooms shall be sized to suit the design requirements of the equipment to be used, to provide a safe working environment and to allow the effective movement of staff and patients.
- 440 .15.00 Ceiling heights shall suit the equipment, but shall not be less than 3000 mm for ceiling tube mount installations.
- 440 .16.00 Special consideration should also be given to the width and height of doorways to ensure delivery and removal of equipment is not impeded or prevented, and that patient trolley and bed movement is not hampered.

Standards & Codes

- 440 .17.00 Radiological facilities are to comply with relevant State legislation, regulations and statutory requirements.

Building Service Requirements

- 440 .18.00 Special attention is to be given to the following in the design of a Medical Imaging Unit:
- Structural support for equipment
 - Level floor for equipment positioning and safe patient movement
 - The impact on room space of large diameter electrical cable support tray (in floor and surface mounted)
 - Equipment ventilation
 - Radiation protection (lead shielding)
 - Procedure timing (clocks)
 - Task lighting/dimming
 - Room blackout, as required.
- 440 .19.00 Construction Standards for a Medical Imaging Unit include the following:
- Flooring shall be adequate to meet load requirements for equipment, patients, and personnel.
 - Provision for cable trays, ducts or conduits should be made in floors, walls, and ceilings as required.
 - Ceiling heights may be higher than normal.
 - Ceiling mounted equipment should have properly designed rigid support structures located above the finished ceiling.
 - A lay-in type ceiling should be considered for ease of installation, service, and remodelling.

440 .20.00 RADIATION PROTECTION

Most Medical Imaging requires radiation protection. Plans and specifications will require assessment for radiation protection by a certified physicist or other qualified expert as required by the Australian Radiation and Nuclear Safety Agency. The radiation protection assessment will specify the type, location and amount of radiation protection required according to the final equipment selections and layout. Radiation protection requirements shall be incorporated into the final specifications and the building plans.

Part B - Health Facility Briefing and Planning

COMPONENTS OF THE UNIT

Introduction

- 440 .21.00 The Medical Imaging - General Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 440 .22.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 440 .23.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 440 .24.00 MAMMOGRAPHY ROOM

DESCRIPTION AND FUNCTION

The Mammography Room provides specialised equipment for Mammography examinations.

A Mammography Room, if provided, should be a minimum of 12 m2.

- 440 .25.00 LOCATION AND RELATIONSHIPS

The Mammography Room should be located with ready access to patient change facilities either within the room or in close proximity and waiting areas.

- 440 .26.00 CONSIDERATIONS

The Mammography Room requires a staff handwashing basin within the room. Visual and acoustic privacy is required.

- 440 .27.00 ULTRASOUND ROOM

DESCRIPTION AND FUNCTION

The Ultrasound Room provides specialised equipment for ultrasound imaging. The Ultrasound Room, where provided, shall be a minimum of 12 m2.

- 440 .28.00 LOCATION AND RELATIONSHIPS

The Ultrasound Room should be located with access to patient toilet facilities from within the room and from the corridor. The Ultrasound Room requires ready access to patient change facilities and Waiting areas.

- 440 .29.00 CONSIDERATIONS

The Ultrasound Room requires the following fittings and fixtures:

- Patient examination/ procedure table or couch, patient privacy screens
- Desk and chair for clerical activities
- Staff hand-washing basin
- Storage cupboards.

Part B - Health Facility Briefing and Planning

APPENDICES

Med Imag.-Gen Generic Schedule of Accommodation

440 .30.00 Schedule of Accommodation for a Medical Imaging Unit at Levels 2 to 6:

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes				1 x 3 optional	1 x 3 optional	
BAY - HANDWASHING	yes	1 x 1	1 x 1	2 x 1	4 x 1	6 x 1	
BAY - LINEN TROLLEY	yes			1 x 2	2 x 2	2 x 2	
BAY - MOBILE EQUIPMENT	yes			1 x 4	2 x 4	2 x 4	
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	1 x 2	
CHANGE CUBICLE - PATIENT	yes		2 x 2	8 x 2	10 x 2	10 x 2	
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	
COMPUTER PROCESSING AREA					1 x 50 optional	1 x 50 optional	
DARK ROOM				1 x 8	1 x 10	1 x 10	
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	
FILM PROCESSING		1 x 9	1 x 9	1 x 20	1 x 40	1 x 40	For Daylight processing
FILM STORAGE				1 x 25	1 x 60	1 x 60	
FLUOROSCOPY IMAGING ROOM			1 x 40 optional	1 x 40	2 x 40	2 x 40	
FLUOROSCOPY PREPARATION / STORE					1 x 10	1 x 10	For preparation of imaging media
FLUOROSCOPY VIEWING					1 x 10	1 x 10	
GENERAL X-RAY ROOM		1 x 38	1 x 38	2 x 38	4 x 38	4 x 38	
MAMMOGRAPHY ROOM				1 x 12	1 x 20	1 x 20	
PATIENT BAY	yes			2 x 9	4 x 9	6 x 9	For Holding
RECEPTION	yes		1 x 6	1 x 10	2 x 10	2 x 10	
REPORTING ROOM		1 x 6	1 x 10	1 x 10	2 x 35	2 x 35	
STORE - GENERAL	yes			1 x 10	2 x 10	2 x 10	Including Barium preparation supplies
TOILET - DISABLED	yes			1 x 5	1 x 5	1 x 5	
TOILET - PATIENT	yes		1 x 4	3 x 4	4 x 4	4 x 4	
ULTRASOUND ROOM				1 x 12	2 x 12	2 x 12	

Part B - Health Facility Briefing and Planning

CIRCULATION %		35	35	35	35	35	

440.31.00 STAFF AND SUPPORT AREAS

Note: Offices & Support Areas are dependent on the Operational Policy:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
LIBRARY					1 x 40 optional	1 x 40 optional	
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional	1 x 9 optional	1 x 9 optional	Radiologist
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional	2 x 9 optional	2 x 9 optional	Radiographer, Quality Assurance Radiographer
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Nursing personnel
OFFICE - 4 PERSON SHARED	yes				1 x 20 optional	1 x 20 optional	Transcription
OFFICE - WORKSTATION	yes				6 x 6 optional	6 x 6 optional	Information Technology, General Clerical
OFFICE - WORKSTATION	yes				1 x 6 optional	1 x 6 optional	Secretary to Director
OFFICE - WORKSTATION	yes				4 x 6 optional	6 x 6 optional	Registrars

440.32.00 SHARED AREAS

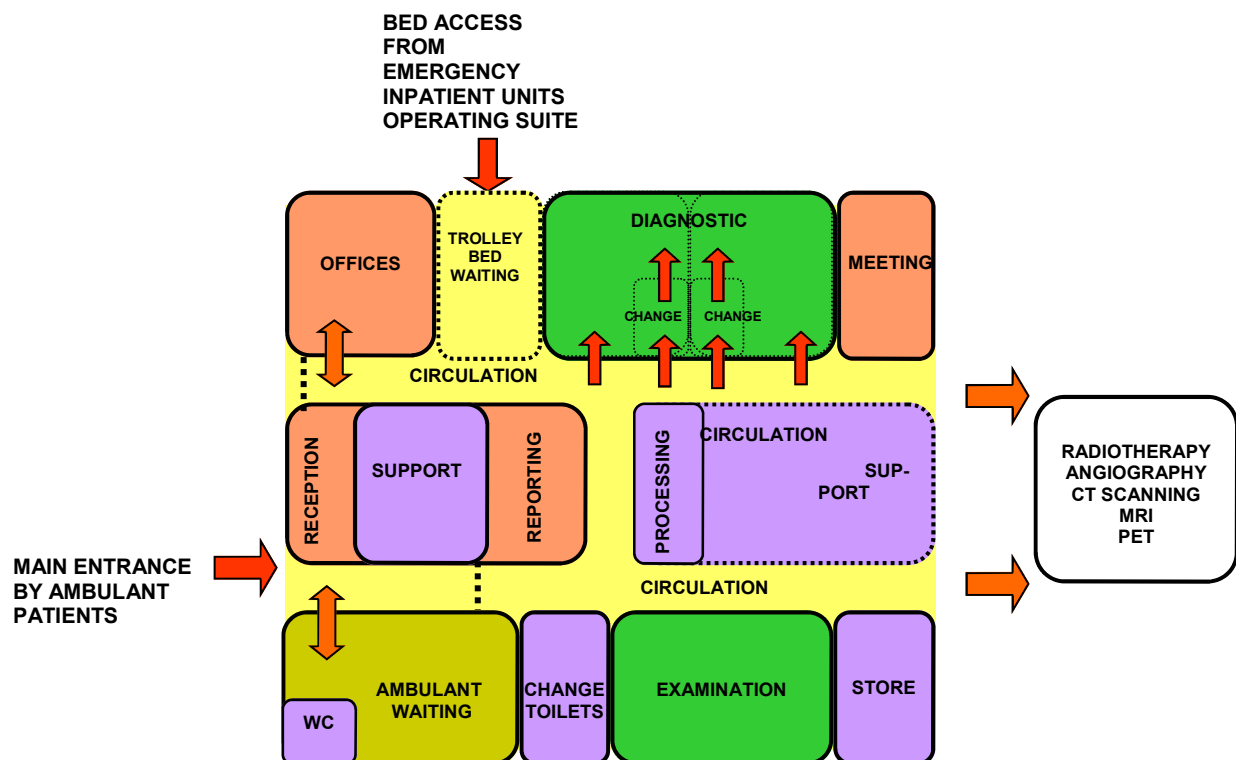
ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	May be combined with Dirty Utility
MEETING ROOM - MEDIUM	yes				1 x 20	1 x 20	
MEETING ROOM - LARGE	yes				2 x 30	2 x 30	
PROPERTY BAY - STAFF	yes			1 x 6	2 x 6	2 x 6	
STAFF ROOM	yes			1 x 15	1 x 30	1 x 30	Area dependent on staffing establishment
TOILET - STAFF	yes			1 x 2	2 x 2	2 x 2	
WAITING	yes			1 x 20	1 x 45	1 x 45	

References and Further Reading

- 440.33.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- Health Department Western Australia, Private Hospital Guidelines, 1998.
- NSW Health, Design Standard 15, Health Building Guidelines - Medical Imaging Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - MEDICAL IMAGING (GENERAL)



Part B - Health Facility Briefing and Planning

450 MEDICAL IMAGING - ANGIOGRAPHY

INDEX

Description

- 450 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 450 .2.00 The Angiography Unit may be an additional space within the Medical Imaging Unit or a separate Unit which provides facilities for diagnostic X-ray investigations of the heart and blood vessels.

PLANNING

Functional Areas

- 450 .3.00 If the Angiography Unit is provided as a freestanding facility, the following additional facilities/ requirements will be applicable:
- Reception
 - Film Storage
 - Clean Utility
 - Dirty Utility
 - Patient Toilet / Change
 - Staff Toilet / Change
 - Radiation Protection.

Functional Relationships

- 450 .4.00 The Angiography Imaging Unit should be located with ready access to the Emergency Unit, Operating Unit and Intensive Care/ Coronary Care Units

COMPONENTS OF THE UNIT

Introduction

- 450 .5.00 The Medical Imaging - Angiography Unit will contain a combination of Standard Components and Non-Standard Components, according to the Level of Service.
- Standard Components must comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 450 .6.00 Provide the Standard Components as identified in the Generic Schedules of Accommodation.

Non-Standard Components

- 450 .7.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

450 .8.00 ANGIOGRAPHY ROOM

DESCRIPTION AND FUNCTION

The Angiography Room provides an area and equipment for Angiography examinations.

If provided, the Angiography Room should be a minimum of 38 m2.

450 .9.00 LOCATION AND RELATIONSHIPS

The Angiography Room should be located adjacent to the Control Room, and should have ready access to patient holding areas and Staff Change facilities.

450 .10.00 CONSIDERATIONS

A scrub sink is required for use by staff, and shall be located outside the staff entry to the Angiography Room.

For additional room details and requirements refer to Standard Component - Catheter Laboratory.

450 .11.00 CONTROL ROOM

DESCRIPTION AND FUNCTION

The Control Room provides for remote operation of the Angiography equipment and requires a viewing window to permit full view of the patient. The Control Room may be combined with a Reporting Room.

450 .12.00 LOCATION AND RELATIONSHIPS

The Control Room shall be located with direct access to the Angiography procedure room and may have external access to a circulation corridor.

450 .13.00 CONSIDERATIONS

For room details and requirements refer to Standard Components - Catheter Laboratory Control / Reporting Room.

Part B - Health Facility Briefing and Planning

APPENDICES

Med Imag.-Angio.Generic Schedule of Accommodation

450.14.00 Schedule of Accommodation for an Angiography Unit at Levels 4, 5 & 6
(Note: Level 6 is similar to Level 5 with the addition of research and teaching):

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
ANAESTHETIC INDUCTION ROOM	yes			1 x 15 optional	2 x 15 optional	3 x 15 optional	
ANGIOGRAPHY ROOM	see remarks			1 x 38	2 x 38	3 x 38	Refer to Standard Component - Catheter Laboratory
BAY - HANDWASHING	yes			2 x 1	3 x 1	4 x 1	
CHANGE ROOM - STAFF	yes			1 x 8	2 x 8	2 x 8	May be shared
COMPUTER EQUIPMENT ROOM				1 x 6	2 x 6	3 x 6	May be co-located for multiple rooms
CONTROL ROOM	see remarks			1 x 8	2 x 8	3 x 8	Refer to Standard Component - Catheter Laboratory Control / Reporting
OFFICE - SINGLE PERSON 9 M2	yes				2 x 9 optional	2 x 9 optional	Nursing personnel, Radiographer; according to staffing establishment
PATIENT BAY	yes			3 x 9	5 x 9	6 x 9	For Holding / Recovery; Minimum of 2 Bays per Procedure Room
SCRUB-UP / GOWNING	yes			1 x 8	1 x 8	2 x 8	
STORE - STERILE STOCK	yes			1 x 6	1 x 12	1 x 12	May be combined with Clean Utility
TOILET - PATIENT	yes			1 x 4	2 x 4	2 x 4	Including Change facilities
TOILET - STAFF	yes			1 x 2	2 x 2	2 x 2	
CIRCULATION %				35	35	35	

450.15.00 SHARED AREAS

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	1 x 2	
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	Also for preparation of contrast media
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	
RECEPTION	yes			1 x 10	1 x 10	1 x 10	
STORE - FILM				1 x 8	1 x 16	1 x 16	
TOILET - DISABLED	yes			1 x 5	1 x 5	1 x 5	

Part B - Health Facility Briefing and Planning

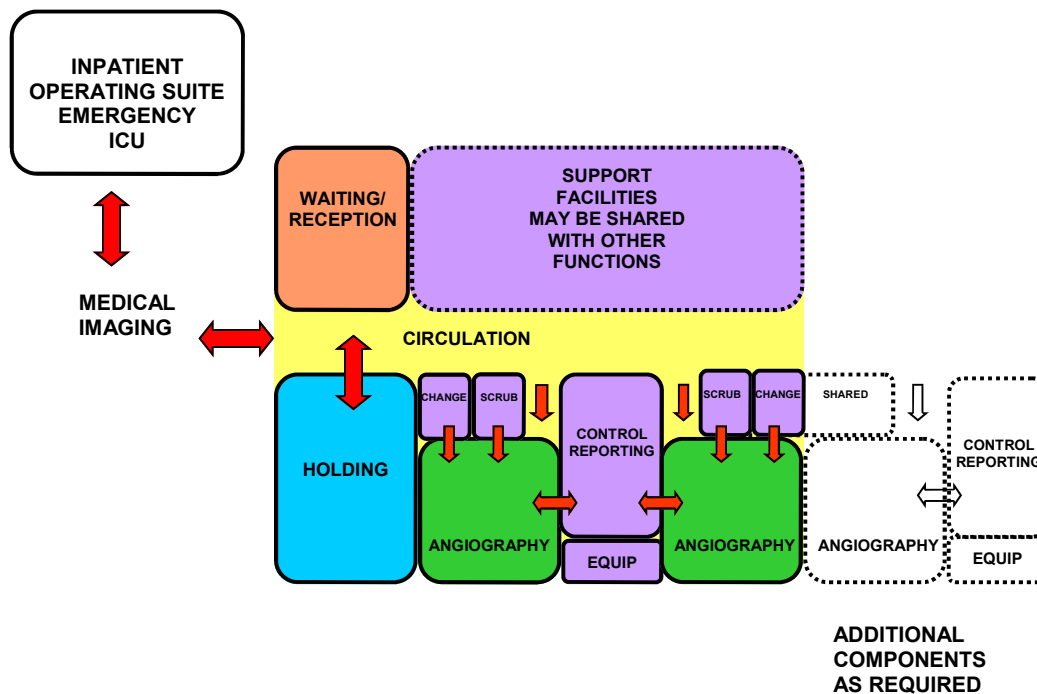
VIEWING AND REPORTING				1 x 8	1 x 25	1 x 25	
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References and Further Reading

- 450.16.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- NSW Health, Design Standard 15 Health Building Guidelines - Medical Imaging Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - MEDICAL IMAGING (ANGIOGRAPHY)



Part B - Health Facility Briefing and Planning

460 MEDICAL IMAGING - CT SCANNING

INDEX

Description

- 460 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 460 .2.00 The CT Scanning area is an additional space within the Medical Imaging Unit for Computerised Tomography (CT) examinations involving cross sectional imaging of the human body.

PLANNING

Functional Areas

- 460 .3.00 The CT Scanning Area will consist of the following Functional Areas:
- CT Imaging Room, Control Room and Equipment Room
 - Scrub-up / Gowning Area
 - Patient Holding Area
 - Patient Toilet and Change facilities
 - Access to Staff Change and toilet facilities
 - Support Area including preparation, utilities and storage, which may be shared.

- 460 .4.00 PATIENT TOILET

Access to a Patient Toilet will be required for CT Scanning. It shall be convenient to the CT Scanning Room, and if directly accessible to the scanning room, arranged so that a patient may leave the toilet without having to re-enter the Scanning Room.

Functional Relationships

- 460 .5.00 The CT Scanning area should be located with ready access to the Emergency Unit, Operating Unit and Critical Care Units.

COMPONENTS OF THE UNIT

Introduction

- 460 .6.00 The Medical Imaging - CT Scanning will contain a combination of Standard Components and Non-Standard Components, according to the Level of Service.

Standard Components must comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 460 .7.00 Provide the Standard Components as identified in the Generic Schedules of Accommodation.

Non-Standard Components

- 460 .8.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 460 .9.00 CT SCANNING ROOM

DESCRIPTION AND FUNCTION

The CT Scanning room provides an area and equipment for CT examinations.

CT Scanning Rooms shall be sized as required to accommodate the equipment. The minimum area required will be 38 m².

- 460 .10.00 LOCATION AND RELATIONSHIPS

The CT Scanning Room should be located adjacent to the Control Room and should have ready access to patient holding areas, patient toilet/ change facilities, preparation and storage areas.

- 460 .11.00 CONSIDERATIONS

The CT Scanning Room will require clinical scrub facilities immediately adjacent to the room.

- 460 .12.00 CT CONTROL ROOM

DESCRIPTION AND FUNCTION

A Control Room shall be provided that is designed to accommodate the computer and other controls for the equipment. A viewing window shall be provided to permit full view of the patient. The angle between the Control Room and equipment centroid shall permit the control operator to see the patient's head.

- 460 .13.00 LOCATION AND RELATIONSHIPS

The Control Room shall be located with direct access to the CT Imaging room and ready access to film processing areas.

- 460 .14.00 CONSIDERATIONS

For additional room details and requirements refer to Standard Component -

Part B - Health Facility Briefing and Planning

Cath Lab Control / Reporting room.

460 .15.00 CT COMPUTER ROOM

DESCRIPTION AND FUNCTION

The Computer Room provides an area for the computer and generator modules associated with the CT Scanning equipment.

460 .16.00 LOCATION AND RELATIONSHIPS

The Computer Room should be located adjacent to the CT Scanning and Control Rooms.

460 .17.00 CONSIDERATIONS

The Computer Room will require adequate ventilation for the computer equipment.

APPENDICES

CT Scanning Generic Schedule of Accommodation

460 .18.00 Schedule of Accommodation for CT Scanning: If CT Scanning facilities are required, the rooms identified are to be added to the Schedule of Accommodation for Medical Imaging - General.

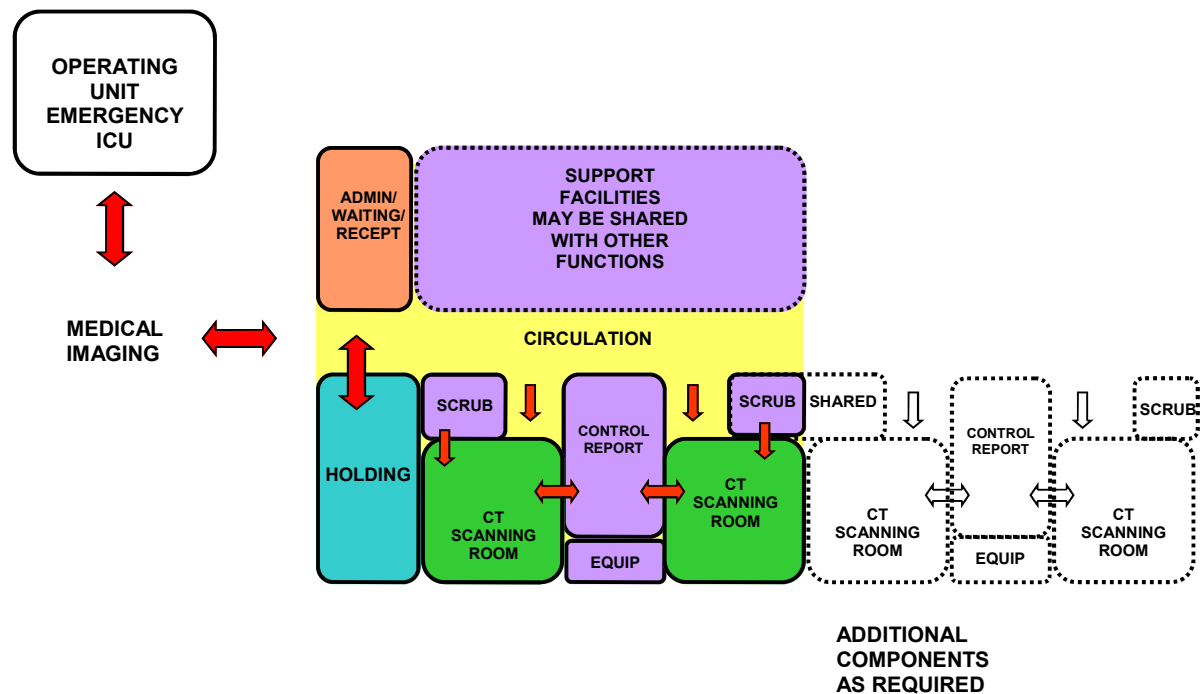
ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CT SCANNING ROOM				1 x 38	2 x 42	2 x 42	
CT CONTROL ROOM	see remarks			1 x 6	2 x 8	2 x 8	Refer to Standard Component Catheter Laboratory Control/ Reporting
CT COMPUTER ROOM				1 x 6	2 x 6	2 x 6	
SCRUB-UP / GOWNING	yes			1 x 6	1 x 8	1 x 8	May be shared between Scanning Rooms
TOILET - PATIENT	yes			1 x 4	2 x 4	2 x 4	Including Change facilities
PATIENT BAY	yes			3 x 9	4 x 9	4 x 9	For Holding / Recovery; 2 Bays per Scanning Room
CIRCULATION %				35	35	35	

References and Further Reading

- 460 .19.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- NSW Health, Design Standard 15 Health Building Guidelines - Medical Imaging Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - MEDICAL IMAGING (CT SCANNING)



Part B - Health Facility Briefing and Planning

470 MEDICAL IMAGING - MRI

INDEX

Description

- 470 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Building Service Components
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

General

- 470 .2.00 MRI may be provided as a section of Medical Imaging or as a separate or freestanding unit. If MRI is provided as a freestanding unit, the following additional facilities/requirements will be applicable:
- Reception
 - Film Storage
 - Clean Utility
 - Dirty Utility
 - Patient Toilet / Change
 - Staff Toilet / Change
 - Radiation Protection

PLANNING

Functional Areas

- 470 .3.00 The MRI Unit may consist of the following Functional Areas:
- Reception and Waiting Areas
 - MRI Scanning Room with Control and Equipment Room
 - Film processing and storage areas
 - Anaesthetic Room (if applicable)
 - Patient Holding area and toilets
 - Support Rooms including Clean & Dirty Utilities and Preparation areas
 - Staff Areas including Reporting Rooms, Offices, Staff Toilets and Change areas.
- 470 .4.00 PROCESSING AREA
- A Darkroom may be required for processing cassettes and shall be located near the Control Room.

Functional Relationships

- 470 .5.00 The MRI Unit should be located with ready access to the Emergency Unit, Operating Unit and Critical Care Areas. It requires easy access for ambulant patients and beds/ stretchers. A Ground Floor location is preferred.

DESIGN

Building Service Requirements

- 470 .6.00 CRYOGEN FACILITIES

Cryogen storage may be required in areas where service to replenish supplies is not readily available. Cryogen venting is required.

COMPONENTS OF THE UNIT

Introduction

- 470 .7.00 The Medical Imaging - MRI will contain a combination of Standard Components and Non-Standard Components, according to the Level of Service.

Standard Components must comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 470 .8.00 Provide the Standard Components as identified in the Generic Schedules of Accommodation.

Non-Standard Components

- 470 .9.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 470 .10.00 MRI ROOM

DESCRIPTION AND FUNCTION

The MRI Room provides the area and equipment for MRI scanning procedures.

The MRI Room may range from 38 m2 depending on the vendor and magnet strength.

- 470 .11.00 LOCATION AND RELATIONSHIPS

The MRI Room should be located with direct access to the Control Room and ready access to patient waiting areas, patient holding, preparation and utility areas.

When Spectroscopy is proposed, caution should be exercised in locating it in relation to the magnetic fringe fields.

- 470 .12.00 CONSIDERATIONS

Power conditioning and voltage regulation equipment as well as direct current (DC) may be required.

Magnetic shielding may be required to restrict the magnetic field plot. Radio

Part B - Health Facility Briefing and Planning

frequency shielding is required to attenuate stray radio frequencies.

470 .13.00 MRI COMPUTER ROOM

DESCRIPTION AND FUNCTION

A Computer Room shall be provided to accommodate computer equipment. A room of up to 35 m2 may be required depending on the equipment vendor and magnet strength.

470 .14.00 LOCATION AND RELATIONSHIPS

The MRI Computer Room shall be located adjacent to the MRI Scanning Room and Control Room.

470 .15.00 CONSIDERATIONS

The Computer room will require adequate ventilation/ air-conditioning for the computer equipment.

470 .16.00 MRI CONTROL ROOM

DESCRIPTION AND FUNCTION

The Control Room shall be provided that is designed to accommodate the computer and other controls for the equipment. The Control Room requires a full view of the MRI Room.

The Control Room should be a minimum of 9 m2, but may be larger depending on the vendor and magnet size.

470 .17.00 LOCATION AND RELATIONSHIPS

The MRI Control Room shall be located with direct access to the MRI Scanning Room.

470 .18.00 CONSIDERATIONS

The Control Room will require:

- Workbench
- MRI Scanner computer screens
- Telephones, computers, printers for staff use.

Part B - Health Facility Briefing and Planning

APPENDICES

Med Imag.-MRI Generic Schedule of Accommodation

470.19.00 Schedule of Accommodation for an MRI Unit at levels 4, 5 and 6:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
ANAESTHETIC INDUCTION ROOM	yes			1 x 15 optional	1 x 15 optional	2 x 15 optional	
BAY - HANDWASHING	yes			2 x 1	4 x 1	4 x 1	
MRI SCANNING ROOM				1 x 38	1 x 42	2 x 42	Depending on Operational Policy
MRI CONTROL				1 x 9	1 x 10	2 x 10	
MRI COMPUTER ROOM				1 x 10	1 x 10	2 x 10	
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Senior Radiographer, according to staffing establishment
OFFICE - SINGLE PERSON 9 M2	yes				2 x 9 optional	2 x 9 optional	Nursing personnel, Registrar, according to staffing establishment
PATIENT BAY	yes			2 x 9	2 x 9	4 x 9	Holding - Allow 2 Bays per MRI Room
TOILET - PATIENT	yes			1 x 4	1 x 4	2 x 4	With Change facilities
CIRCULATION %				35	35	35	

470.20.00 SHARED AREAS

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - LINEN	yes			1 x 2	1 x 2	1 x 2	
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	1 x 2	
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	Also used for Preparation
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	
PROPERTY BAY - STAFF	yes			1 x 6	1 x 6	1 x 6	
RECEPTION	yes			1 x 10	1 x 10	1 x 10	
STORE - FILM				1 x 8	1 x 12	1 x 12	
TOILET - STAFF	yes			1 x 2	2 x 2	2 x 2	
X-RAY VIEWING AND REPORTING	yes			1 x 8	1 x 8	1 x 16	
WAITING	yes				1 x 12	1 x 12	

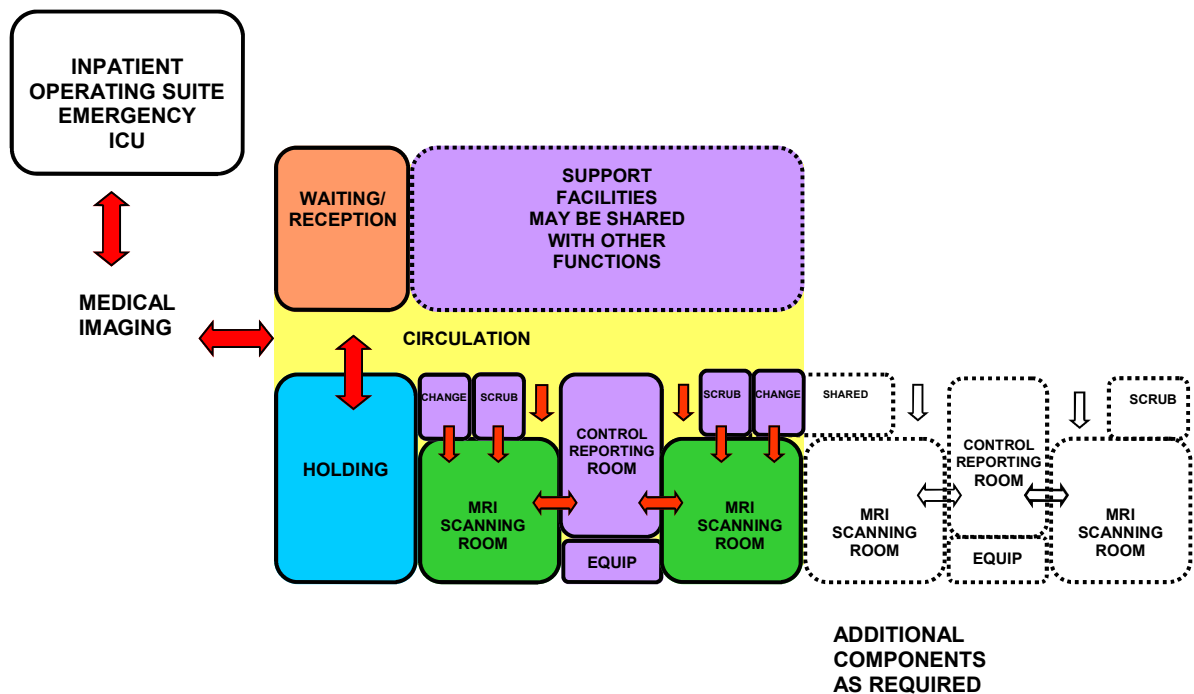
Part B - Health Facility Briefing and Planning

References and Further Reading

- 470 .21.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- NSW Health, Design Standard 15 Health Building Guidelines - Medical Imaging Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - MEDICAL IMAGING (MRI)



Part B - Health Facility Briefing and Planning

480 MEDICAL IMAGING - PET

INDEX

Description

- 480 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 480 .2.00 The Positron Emission Tomography (PET) Unit may be provided as a section of a Medical Imaging Unit or as a separate unit for PET imaging procedures using radiopharmaceutical agents.

PLANNING

Functional Areas

- 480 .3.00 The PET Unit may consist of the following Functional Areas:
- PET Camera Room and Control Room
 - Cyclotron Room and Control Room (optional)
 - Laboratory areas including hot lab/ radiochemistry and quality control laboratory
 - Anaesthetic Room (optional)
 - Patient Holding area and Toilet
 - Support Areas including Clean Utility, Dirty Utility, Stores, Cleaner's Room
 - Staff Areas including Staff Station, Offices and Reporting areas, Change areas and Toilets.

480 .4.00 TOILET - INJECTED PATIENTS

A Patient Toilet is required for injected patients. Radiation shielding requirements will need to be assessed by a Radiation Consultant. Patient toilet provisions are to comply with Standard Components - Toilet - Patient.

480 .5.00 WAITING AREAS

BED WAITING (INJECTED PATIENTS)

A Patient Bay Area is required for patients on beds or trolleys who have received an injection of imaging agent and are awaiting the scanning procedure.

As the imaging agents emit a low level radiation, the Patient Bed Waiting Area may require radiation protection screening, the extent to be determined by a Radiation Consultant.

480 .6.00 SUB-WAITING (INJECTED PATIENTS)

A Sub-waiting Area with chairs and provisions for wheelchairs is required for patients who have received an injection of imaging agent and are awaiting the scanning procedure.

As the imaging agents emit a low level radiation, the waiting area may require radiation protection screening, the extent to be determined by a Radiation Consultant.

Functional Relationships

480 .7.00 The PET Unit ideally will be located with close access to:

- Nuclear Medicine Unit
- Medical Imaging Unit
- Emergency Unit (direct, non-public access is preferred)
- Intensive Care Unit (direct, non-public, vertical or horizontal access is preferred)
- Operating Unit (direct, non-public, vertical or horizontal access is preferred)
- Outpatient Consulting Unit.

480 .8.00 The PET Unit will require a ground level location due to the weight of the nuclear medical and PET equipment and for ease of installation and replacement.

COMPONENTS OF THE UNIT

Introduction

480 .9.00 The Medical Imaging - PET Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

480 .10.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

480 .11.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

480 .12.00 CYCLOTRON

DESCRIPTION AND FUNCTION

The Cyclotron is a device that is used to produce beams of charged particles that can be directed at a specific target. Cyclotrons are used for cancer treatment (proton therapy) and radioisotope production (FDG primarily for cancer diagnosis and Palladium 103 for prostate cancer implants).

Hospitals may prefer to install a Cyclotron to produce their own supplies of FDG or other radioisotopes; these agents however, may be outsourced.

The room size will be dependent on the equipment to be installed. The minimum room size will be 47 m² based on the smallest available machine.

480 .13.00 LOCATION AND RELATIONSHIPS

The Cyclotron, if installed should be located with ready access to the PET Camera Room, Hot Laboratory/ Radiochemistry and Quality Control Laboratory.

480 .14.00 CONSIDERATIONS

The Cyclotron equipment has specialised requirements and installation will be according to manufacturer's recommendations based on model and size. The following is an overview of room requirements:

- Weight loading of cyclotron and ancillary equipment exceeds 36000 kg and structural assessment may be required
- Air-conditioning:
 - room climate control is essential for equipment functioning
 - air pressure in the Cyclotron Room should be negative pressure relative to the surrounding areas
 - the cyclotron will have a filtered exhaust system
- Radiation protection requirements will need to be assessed by a Radiation Consultant
 - some Cyclotron machines are self shielding
 - the non-shielded machines will require concrete bunker walls to a thickness specified by the Radiation Consultant
- A dedicated, three phase power supply will be required
- Floor drains and a sink
- A chilled water supply
- Gas bottle storage
- Compressed air supply or cylinder.

480 .15.00 CYCLOTRON CONTROL ROOM

DESCRIPTION AND FUNCTION

The Cyclotron Control Room consists of terminals and printers from which the user controls the operation of the Cyclotron.

The Control Room shall be a minimum of 10 m².

480 .16.00 LOCATION AND RELATIONSHIPS

The Cyclotron Control Room should have direct access to the Cyclotron Room and may be co-located with the PET Camera Control Room.

480 .17.00 CONSIDERATIONS

Room requirements will be according to manufacturer's specifications and will include:

- Uninterrupted power supply to computer equipment
- Voice/data connections.

480 .18.00 HOT LABORATORY/ RADIOCHEMISTRY

DESCRIPTION AND FUNCTION

The Hot Laboratory will be used for preparation and storage of radiopharmaceuticals used in procedures.

Non-Standard Components

480 .19.00 LOCATION AND RELATIONSHIPS

The Hot Laboratory/ Radiochemistry should be located with ready access to the Quality Control Laboratory, the Preparation Room and the PET Camera Room.

480 .20.00 CONSIDERATIONS

The Hot Laboratory room will require:

- Smooth impervious laboratory benches with cupboards and sink
- Radiation protection assessment by a Radiation Consultant and may include radiopharmaceuticals storage areas within the room such as cupboards.

480 .21.00 LABORATORY - QUALITY CONTROL/ BLOOD COUNTING

DESCRIPTION AND FUNCTION

The Quality Control Laboratory will be required for preparation of radionuclides, quality control procedures involved in the production process and performance of blood testing procedures.

480 .22.00 LOCATION AND RELATIONSHIPS

The Quality Control Laboratory should be located with ready access to the Hot Laboratory and Preparation Room.

480 .23.00 CONSIDERATIONS

The Quality Control Laboratory will require:

- Smooth impervious laboratory benching
- Cupboards and shelving
- Sink
- Radiation protection assessment by a Radiation Consultant and may include radiopharmaceuticals storage areas within the room such as cupboards.

480 .24.00 PET CAMERA ROOM

DESCRIPTION AND FUNCTION

The PET Camera Room provides an area and equipment for PET Camera Scanning procedures.

The minimum room size will be 38 m2 based on the smallest available scanner.

480 .25.00 LOCATION AND RELATIONSHIPS

The PET Camera Room should be located with ready access to patient waiting areas, Holding and Anaesthetic Room if provided, as well as Preparation Room and Laboratories. The Camera Room will require direct access to the Control Room.

480 .26.00 CONSIDERATIONS

The PET scanning equipment has specialised requirements and installation will be according to manufacturer's recommendations based on model and size. The following is an overview of room requirements:

Part B - Health Facility Briefing and Planning

- Floor covering to be antistatic
- Weight loading of scanner and ancillary equipment exceeds 3000 kg and structural assessment may be required
- Room lighting should be controllable and glare free
- Air-conditioning:
 - room climate control is essential for equipment functioning
 - air pressure in the scanning area should be negative pressure relative to the surrounding areas
- Radiation protection requirements will need to be assessed by a Radiation Consultant
- Ancillary equipment includes water/air chillers and transformers
- A dedicated, noise free, uninterrupted power supply will be required.

Additional room requirements will include:

- Access for beds/trolleys
- Medical gases, oxygen, medical air and suction
- Patient call, staff assist and emergency call system
- Visibility between Camera Room and Control Area
- Handsfree intercom facility between Camera Room and Control Area.

480 .27.00 PET CONTROL ROOM

DESCRIPTION AND FUNCTION

The PET Control Room provides for the computer and control for the PET equipment. The Control Room will require direct visibility of the Camera Room with intercom and microphone facilities. The PET Control Room shall be a minimum of 10 m2.

480 .28.00 LOCATION AND RELATIONSHIPS

The Control Room will require direct access to the PET Camera Scanning Room and may serve more than one PET scanning room if co-located.

480 .29.00 CONSIDERATIONS

Room fittings will include:

- Workbench
- Camera control module and imaging screens
- PET camera computer and generator modules
- Computer, printer and telephone for staff use.

480 .30.00 PREPARATION ROOM

DESCRIPTION AND FUNCTION

A Preparation room is required for preparing radiopharmaceuticals and injecting patients.

The Preparation Room shall be a minimum of 12 m2.

480 .31.00 LOCATION AND RELATIONSHIPS

The Preparation Room may be co-located with the Clean Utility and should have ready access to Patient Waiting areas and Laboratories.

480 .32.00 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

The Preparation Room will require:

- Laboratory type bench, impervious to moisture and spills, with cupboards and sink
- Handbasin with paper towel and soap dispenser fittings
- Examination couch and footstool
- Patient chair
- A minimum of six body protected GPOs
- Patient call, staff assist and emergency call points
- Radiation protection to be assessed by a Radiation Consultant and may include radiopharmaceutical storage areas within the room such as cupboards.

APPENDICES

PET Generic Schedule of Accommodation

480.33.00 Schedule of Accommodation for a PET Unit at level 6:

ROOM / SPACE	Standard Component					Level 6 Qty x m2	Remarks
ANAESTHETIC INDUCTION ROOM	yes					1 x 15 optional	
BAY - HANDWASHING	yes					2 x 1	
CONTROL ROOM						2 x 10	PET Camera Room Control and Cyclotron Control Rooms may be co-located
CYCLOTRON						1 x 50	
HOT LABORATORY/ RADIOCHEMISTRY						1 x 20	
LABORATORY - QC/ BLOOD COUNTING						1 x 10	
PATIENT BAY	yes					3 x 9	Waiting - injected patients; may require radiation shielding
PET CAMERA ROOM						1 x 50	
PET COMPUTER ROOM						1 x 10	
TOILET - PATIENT	yes					1 x 4	May require radiation shielding
WAITING	yes					1 x 12	Injected patients; may require radiation shielding
CIRCULATION %						35	

480.34.00 STAFF AREAS

Note: Staff Offices are dependent on the Operational Policy and management structure, additional Offices may be required:

ROOM / SPACE	Standard Component					Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 9 M2	yes					1 x 9 optional	Chief Operator
OFFICE - SINGLE PERSON 9 M2	yes					1 x 9 optional	Radiochemist

Part B - Health Facility Briefing and Planning

480 .35.00 SHARED AREAS

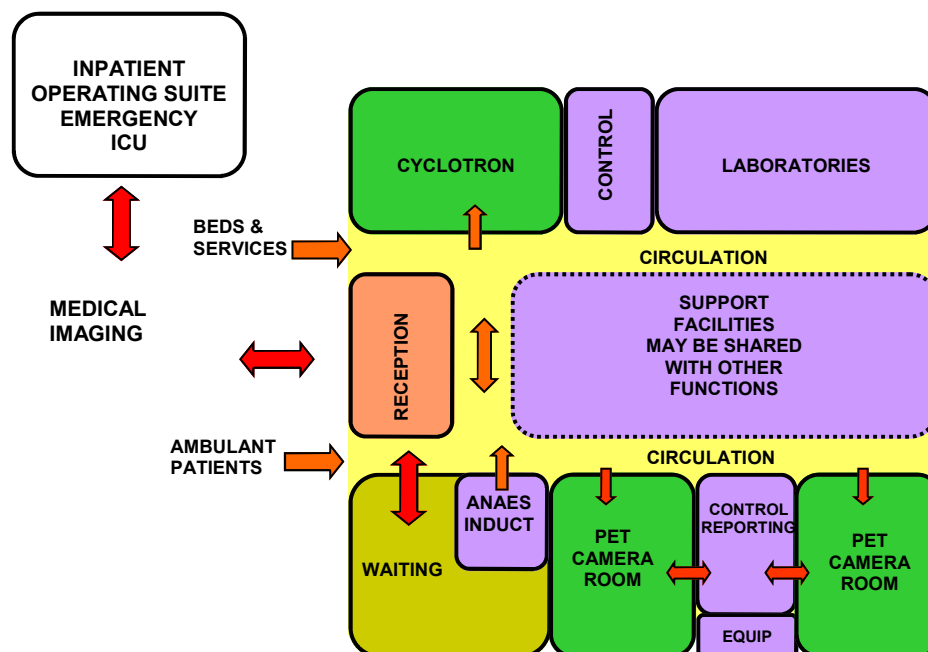
ROOM / SPACE	Standard Component					Level 6 Qty x m2	Remarks
BAY - LINEN	yes					1 x 2	
BAY - MOBILE EQUIPMENT	yes					1 x 4	
BAY - RESUS TROLLEY	yes					1 x 2	
CLEANER'S ROOM	yes					1 x 4	
CLEAN UTILITY	yes					1 x 12	May be co-located with Preparation Room
DIRTY UTILITY	yes					1 x 10	
PREPARATION ROOM						1 x 12	
PROPERTY BAY - STAFF	yes					1 x 6	
RECEPTION	yes					1 x 10	
STAFF STATION	yes					1 x 14	
STORE - GENERAL	yes					1 x 9	
TOILET- STAFF	yes					1 x 2	
WAITING	yes					1 x 15	Non-injected patients and visitors
XRAY VIEWING AND REPORTING	yes					1 x 12	

References and Further Reading

- 480 .36.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - NSW Health, Design Standard 15 Health Building Guidelines - Medical Imaging Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - MEDICAL IMAGING (PET)



Part B - Health Facility Briefing and Planning

490 MORTUARY UNIT

INDEX

Description

- 490 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 490 .2.00 A Mortuary Unit is a facility for the holding of bodies, and for the viewing of bodies by authorised persons. The conducting of Post Mortems/Autopsies may or may not be included, depending on the Operational Policy of the hospital.

PLANNING

Functional Areas

- 490 .3.00 The Mortuary Unit will consist of the following Functional Areas depending on the size of the facility and the Operational Policy:
- Entry and clerical area
 - Body Holding area
 - Clean-Up Area
 - Waiting
 - Viewing Area.

490 .4.00 AUTOPSY FACILITIES

The following elements shall be provided when autopsies are performed in the hospital:

- Refrigerated facilities for body-holding
- An Autopsy Room containing the following
 - a work counter with a sink and handbasin
 - storage space for supplies, equipment, and specimens
 - an autopsy table
 - a deep sink for washing of specimens
- A cleaner's sink and storage of cleaning supplies.

Functional Relationships

- 490 .5.00 Mortuary / Holding facilities shall be accessible through an exterior entrance and shall be located to avoid the need for transporting bodies through public areas.

COMPONENTS OF THE UNIT

Introduction

- 490 .6.00 The Mortuary Unit will contain a combination of Standard Components and Non-Standard Components, according to the Level of Service.

Standard Components must comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 490 .7.00 Provide the Standard Components as identified in the Generic Schedules of Accommodation.

Non-Standard Components

- 490 .8.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 490 .9.00 BODY HOLDING ROOM

DESCRIPTION AND FUNCTION

As a minimum, every Hospital shall have a Holding Room for deceased patients that is not less than 1800 mm wide x 2400 mm deep.

- 490 .10.00 LOCATION AND RELATIONSHIPS

The Holding Room shall have or be located adjacent to an external doorway giving access to a driveway. It should have ready access to the Viewing Area and Autopsy area if provided.

- 490 .11.00 CONSIDERATIONS

The Holding Room shall include a handbasin and storage facilities for gowns and bags.

The room shall be fitted with permanent ventilation.

- 490 .12.00 VIEWING ROOM

DESCRIPTION AND FUNCTION

A Viewing Room or area is recommended, and should allow for discreet viewing of bodies by relatives or other authorised personnel.

The Viewing Room shall be a minimum of 10 m².

- 490 .13.00 LOCATION AND RELATIONSHIPS

The Viewing Room should be located with ready access to Waiting Areas, Public Amenities and Body Holding areas.

- 490 .14.00 CONSIDERATIONS

The room should contain a viewing window with privacy screening.

Part B - Health Facility Briefing and Planning

APPENDICES

Mortuary Generic Schedule of Accommodation

490.15.00 Schedule of Accommodation for a Mortuary / Holding area at levels 2 to 6:

ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
AUTOPSY ROOM				1 x 25 optional	2 x 25 optional	2 x 25 optional	Levels 5/6 areas include space for 2 mortuary tables
BODY HOLDING ROOM		1 x 12	1 x 12	1 x 20	1 x 35	1 x 50	Allow 3.5 m2 per Body Holding Bay; include space for trolley hoist and weighing equip
CHANGE ROOM - STAFF	yes		1 x 8 optional	1 x 8	1 x 8	1 x 8	
CLEANER'S ROOM	yes		1 x 4 optional	1 x 4 optional	1 x 4	1 x 4	
CLEAN-UP ROOM	yes			1 x 10	1 x 10	1 x 10	
ENTRY LOBBY			1 x 7 optional	1 x 7	1 x 7	1 x 7	
EXIT LOBBY				1 x 7 optional	1 x 7 optional	1 x 7 optional	
OFFICE - WORKSTATION	yes		1 x 6 optional	1 x 6 optional	1 x 6 optional	1 x 6 optional	May be located near entry
POLICE / PATHOLOGY AREA					1 x 9 optional	1 x 9 optional	
RECEPTION	yes				1 x 10	1 x 10	
VIEWING ROOM			1 x 10 optional	1 x 10 optional	1 x 10	1 x 10	
WAITING	yes				1 x 10	1 x 10	
CIRCULATION %		15	15	15	15	15	

490.16.00 SHARED AREAS

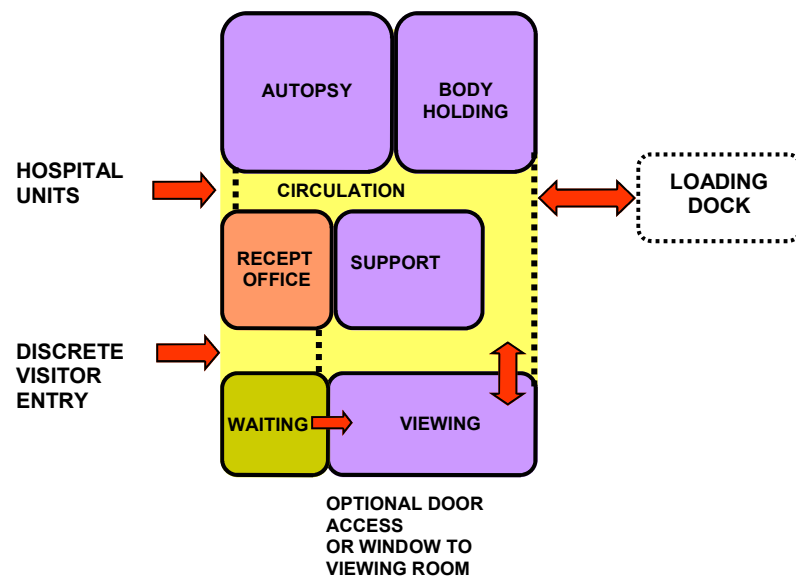
ROOM / SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
SHOWER - STAFF	yes			1 x 2	1 x 2	1 x 2	
TOILET - PUBLIC	yes				1 x 3	1 x 3	
TOILET - STAFF	yes			1 x 2	1 x 2	1 x 2	

References and Further Reading

- 490.17.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Department of Human Services, Victoria, Design Guidelines for Private Hospital Buildings, 1987.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - MORTUARY UNIT



Part B - Health Facility Briefing and Planning

500 NUCLEAR MEDICINE UNIT

INDEX

Description

- 500 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Infection Control
Building Service Components
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 500 .2.00 The Nuclear Medicine Unit provides facilities for the administration of radiopharmaceutical agents to patients and patient imaging for diagnostic purposes. The Nuclear medicine Unit may be provided within the Medical Imaging Unit or as a freestanding Unit.

PLANNING

Functional Areas

- 500 .3.00 The Nuclear Medicine Unit requires facilities for the following:
- Gamma camera equipment
 - Patient holding
 - Exercise equipment including treadmill and/or bicycle
 - Radiopharmaceutical handling and storage.
- 500 .4.00 Nuclear medicine may include Positron Emission Tomography (P.E.T.), which is not common to most facilities.
- 500 .5.00 FILM STORAGE
- Film storage with cabinets or shelves to file patient film for immediate retrieval shall be provided.
- 500 .6.00 Storage for archived film which is properly secured to protect film against loss or damage, should be provided.

Functional Relationships

- 500 .7.00 The Nuclear Medicine Unit should be located with ready access to the Medical

Part B - Health Facility Briefing and Planning

Imaging Unit, PET Unit if provided, Emergency Unit, Operating Unit and Critical Care areas. It requires easy access for ambulant patients and beds/stretchers.

DESIGN

Building Service Requirements

500 .8.00 AIR CONDITIONING

Special attention is required for cooling and ventilation of Gamma Camera Rooms as the equipment is sensitive to excessive ambient heat. Additional cooling and ventilation will be required.

500 .9.00 CONSTRUCTION

Construction Standards for a Nuclear Medicine Unit include the following:

- Flooring shall be adequate to meet load requirements for equipment, patients, and personnel.
- Floors and walls should be constructed of materials that are easily decontaminated in case of radioactive spills.
- Walls should contain necessary support systems for either built-in or mobile oxygen and vacuum, and vents for radioactive gases.
- Provision for cable trays, ducts or conduits should be made in floors, walls, and ceilings as required.
- Ceiling height should be a minimum of 3 metres.
- Ceiling mounted equipment should have properly designed rigid support structures located above the finished ceiling.
- A lay-in type ceiling should be considered for ease of installation, service and remodelling.

500 .10.00 RADIATION PROTECTION

Plans and specifications will require assessment for radiation protection by a certified physicist or other qualified expert, as required by the appropriate state authorities. The radiation protection assessment will specify the type, location and amount of radiation protection required according to the final equipment selections and layout. Radiation protection requirements shall be incorporated into the final specifications and the building plans.

COMPONENTS OF THE UNIT

Introduction

500 .11.00 The Nuclear Medicine Unit will contain a combination of Standard Components and Non-Standard Components, according to the Level of Service.

Standard Components must comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

500 .12.00 Provide the Standard Components as identified in the Generic Schedules of Accommodation.

Non-Standard Components

500 .13.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

Part B - Health Facility Briefing and Planning

500 .14.00 COMPUTER EQUIPMENT ROOM

DESCRIPTION AND FUNCTION

Provision shall be made for computer equipment, preferably in a separate room with access terminals available within the imaging Rooms. The Computer Equipment Room shall be a minimum of six m2.

500 .15.00 LOCATION AND RELATIONSHIPS

The Computer Room shall be located adjacent to the Gamma Camera Imaging Rooms and Control Room and may be co-located for multiple imaging rooms.

500 .16.00 CONSIDERATIONS

The Computer Equipment Room will require adequate ventilation/ air conditioning for the computer equipment.

500 .17.00 CONTROL ROOM

DESCRIPTION AND FUNCTION

Space should be provided for the gamma camera computer control and display terminals. The Control Room or area should be a minimum of six m2.

500 .18.00 LOCATION AND FUNCTION

The Control Room shall be located with direct access to the Gamma Camera Imaging Room and adjacent to the Computer Equipment Room.

500 .19.00 CONSIDERATIONS

A viewing window may be required, depending on the location of the Control Room. The Control Room will require:

- Workbench
- Gamma Camera Computer screens
- Computer, Printer and telephones for staff use.

500 .20.00 DARKROOM

DESCRIPTION AND FUNCTION

A Darkroom on-site may be required for film processing. The Darkroom shall be a minimum of six m2.

500 .21.00 LOCATION AND RELATIONSHIPS

The Darkroom should be located with ready access to Daylight processing areas, imaging rooms and reporting areas.

500 .22.00 CONSIDERATIONS

The Darkroom should contain protective storage facilities for unexposed film to protect the film against exposure or damage. Room requirements will include:

- Sink and bench
- Safe light

Part B - Health Facility Briefing and Planning

- Film processing equipment
- Floor waste
- Light proof door seals and grilles.

500 .23.00 GAMMA CAMERA ROOM

DESCRIPTION AND FUNCTION

The Gamma Camera Rooms will need to accommodate the imaging equipment and permit entry and exit of patient trolleys. The room size will be determined by the equipment model and supplier. A minimum room size of 25 m2 is recommended.

500 .24.00 LOCATION AND RELATIONSHIPS

The Gamma Camera Rooms should be located with direct access to the Control room and ready access to the Equipment Room, patient waiting areas, preparation and utility areas.

500 .25.00 CONSIDERATIONS

The Gamma Camera equipment has specialised requirements and installation will be according to manufacturer's recommendations. Room requirements will include:

- Adequate ventilation and air conditioning for equipment functioning.
- Radiation protection requirements will need to be assessed by a Radiation Consultant.

500 .26.00 HOT LABORATORY

DESCRIPTION AND FUNCTION

If radiopharmaceutical preparation is performed on-site, a Hot Laboratory adequate to house a radiopharmacy shall be provided with appropriate shielding.

The Hot Laboratory shall be a minimum of six m2.

500 .27.00 LOCATION AND LATIONSHPIS

The Hot Laboratory should be located with ready access to the Gamma Camera Imaging rooms, preparation and dosing areas.

500 .28.00 CONSIDERATIONS

The Hot Laboratory room requirements are as follows:

- Adequate space for storage of radionuclides, chemicals for preparation, dose calibrators, and record-keeping.
- The floors and walls should be constructed of a material that is easily decontaminated, that has no gaps or crevices.
- Vents and traps for radioactive gases should be provided if such are used.
- Hoods for pharmaceutical preparation shall meet applicable standards, if used.
- If pre-prepared materials are used, storage and calculation areas may be considerably smaller than for on-site preparation.
- Space shall provide adequately for dose calibration, and quality assurance activities.
- The hot laboratory shielding may include the room walls and radionuclide storage areas within the room.

Part B - Health Facility Briefing and Planning

APPENDICES

Nuclear Medicine Generic Schedule of Accommodation

500.29.00 Schedule of Accommodation for a Nuclear Medicine Unit at levels 4, 5 and 6:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - HANDWASHING	yes			4 x 1	6 x 1	6 x 1	
BAY - LINEN	yes			1 x 2	1 x 2	1 x 2	
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	1 x 2	
BONE DENSITOMETER ROOM					1 x 12	1 x 12	
CONSULT ROOM	yes			1 x 12	2 x 12	2 x 12	
CONTROL ROOM				1 x 6	2 x 6	2 x 6	
COMPUTER EQUIPMENT ROOM				1 x 6	2 x 6	2 x 6	
EXERCISE / STRESS TESTING				1 x 10	1 x 15	1 x 15	
GAMMA CAMERA ROOM/S				1 x 25	2 x 25	2 x 25	Room size will depend on equipment model and supplier
HOT LABORATORY				1 x 6	1 x 12	1 x 12	
LABORATORY - MEDICAL PHYSICS					1 x 20	1 x 20	
LABORATORY - RADIOPHARMACY					1 x 15	1 x 15	
PATIENT BAY	yes			4 x 9	8 x 9	8 x 9	Holding Bays Pre-Procedure
TOILET - PATIENT	yes			1 x 4	2 x 4	2 x 4	With Change facilities
WARM LABORATORY					1 x 20	1 x 20	
CIRCULATION %				30	30	30	

500.30.00 STAFF AREAS

Note: Offices are dependent on the Operational Policy and management structure:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional	1 x 9 optional	1 x 9 optional	Nursing personnel
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Radiochemist
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Radiopharmacist

Part B - Health Facility Briefing and Planning

OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional	1 x 9 optional	1 x 9 optional	Registrar
OFFICE - SINGLE PERSON 9 M2	yes				3 x 9 optional	3 x 9 optional	Technologists
OFFICE - WORKSTATION	yes				4 x 6 optional	4 x 6 optional	Reporting
OFFICE - WORKSTATION	yes				1 x 6 optional	1 x 6 optional	Secretary

500 .31.00 SHARED AREAS

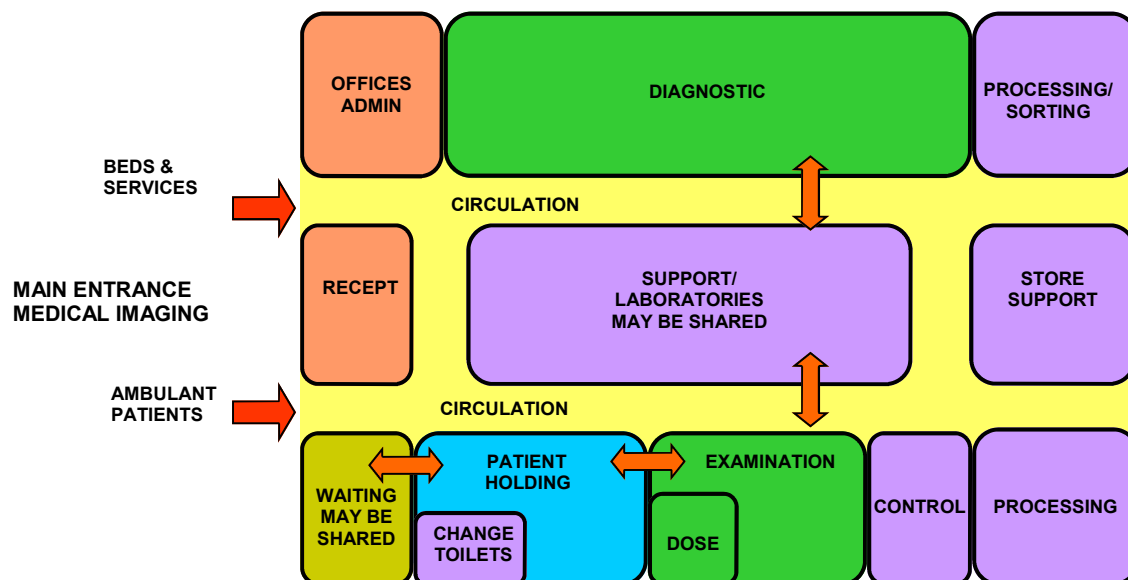
ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
DARK ROOM				1 x 6	1 x 6	1 x 6	
PROCESSING AREA					1 x 16	1 x 16	
RECEPTION	yes			1 x 10	1 x 10	1 x 10	
STORE - DIGITAL / VIDEO TAPES					1 x 10	1 x 10	
STORE - FILES	yes				1 x 10	1 x 10	
STORE - FILM				1 x 6	1 x 20	1 x 20	
STORE - PHOTOCOPY/ STATIONERY	yes				1 x 8	1 x 8	
WAITING	yes			1 x 9	2 x 9	2 x 9	Waiting for non-injected patients may be shared with adjacent Units

References and Further Reading

- 500 .32.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - NSW Health, Design Standard 15 Health Building Guidelines - Medical Imaging Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - NUCLEAR MEDICINE



Part B - Health Facility Briefing and Planning

510 OBSTETRIC UNIT

INDEX

Description

510 .1.00	INTRODUCTION General
	PLANNING Planning Models Functional Areas Functional Relationships
	DESIGN Doors
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

General

510 .2.00	The Obstetric Unit is a discreet Unit providing facilities for the safe pre and post natal care of mothers and their babies
510 .3.00	The number of birthing preparation rooms and the size of the associated service areas shall be as required by the proposed obstetrical workload as outlined in the Operational Policy.

PLANNING

Planning Models

510 .4.00	The preferred design for an Obstetric Unit includes a number of self contained rooms allowing for the total birthing process. The processes involved are: <ul style="list-style-type: none">- Labour- Delivery / Birthing- Recovery- Postnatal (or Post-Partum) <p>The design model combining Labour, Delivery and Recovery in one room will be referred to as LDR. The design model combining all four processes will be referred to as LDRP.</p>
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Functional Areas

510 .5.00	The Obstetric Unit consists of the following functional areas: <ul style="list-style-type: none">- Reception and arrival area including provisions for visitors and administrative activities- Inpatient areas- Birthing Areas- Neonatal Nursery Area - general care- Shared and Support areas including facilities that can be shared between
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Part B - Health Facility Briefing and Planning

zones or Units

510 .6.00 OPERATING ROOM

An Obstetric Unit shall have access to an Operating Room and support rooms. The minimum facilities required are:

- Operating Room to comply with Standard Components Operating Room - Minor, 36 m²
- Scrub-up/ Gowning Bay to comply with Standard Components Scrub-up/ Gowning, 6 m²
- Sterilising Area including a flash steriliser
- Two Patient Bed Bays for Recovery - to comply with Standard Components Patient Bay 9 m².

The distance to the Operating Room should not exceed three minutes of travel. Such travel should take into consideration:

- 1 metre per second travel speed
- Lifts (if any) to be lockable
- Lift delay and travel included in the time
- Distance measured from Birthing Room to Operating Room.

510 .7.00 WATER BIRTHING

If water birthing is included in the Operational Policy, the Unit will require access to a dedicated Bathroom. The Bathroom will require a large peninsular bath, with access to both sides of the bath. The Bathroom shall have a minimum area of 15 m². and comply with all other requirements noted in Standard Components - Bathroom.

Note: These Guidelines do not imply endorsement of Water Birthing as a safe or appropriate operational model.

Functional Relationships

510 .8.00 The Obstetric Unit shall be located and designed to prohibit non-related traffic through the unit. When Birthing and Operating Rooms are in close proximity, access and service arrangements shall be such that neither staff nor patients need to travel through one area to reach the other.

510 .9.00 It is highly desirable that, if an Intensive Care facility is to be provided for Obstetric use, then it be located as near as possible to the Obstetric Unit.

DESIGN

Doors

510 .10.00 Appropriately sized and located doors shall be provided for emergency bed transfer to the Birthing or Operating Units.

COMPONENTS OF THE UNIT

Introduction

510 .11.00 The Obstetric Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 510 .12.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 510 .13.00 Provide the Non-Standard Components identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

510 .14.00 DESCRIPTION AND FUNCTION

NURSERY - NEONATAL

The Neonatal Nursery will provide facilities for the care of well babies away from their mother's bed area and for the following functions:

- Bathing of babies using controlled temperature water
- Changing, cleaning and drying of babies
- Feeding of babies in comfortable chairs
- Hand-washing facilities
- Parent and staff education
- Phototherapy
- Resuscitation including oxygen, medical air and suction
- Sleeping of babies in daytime using partial blackout curtains
- Storage of supplies such as nappies, towels, creams and powders
- Waste and dirty linen disposal
- Weighing of babies
- Use of staff assistance call and emergency call.

A Neonatal Nursery in a hospital must have:

- A minimum floor area of 2.8 m² per bassinet and a minimum of one metre clear and unobstructed passageway between each bassinet with a minimum of one bassinet to every two obstetric beds.

510 .15.00 LOCATION AND RELATIONSHIPS

The Neonatal Nursery should be located centrally to patient Bedrooms with direct observation from the Staff Station.

510 .16.00 CONSIDERATIONS

The Neonatal Nursery will require the following:

- Natural and artificial lighting, colouring corrected to natural
- At least one clinical handbasin per four Neonatal Bays
- Clear glazed partitions installed complying with AS 1288, where provided
- General comfort air-conditioning
- An emergency call system complying with AS 3811
- A dedicated area within or adjacent to the nursery to allow easy examination and changing of the baby, and storage of necessary linen and equipment
- An area within the Nursery that can be made available for stabilisation prior to transport by a transport team.

Refer to Standard Components - Neonatal Bay - General Care for a description and room details required for each Neonatal Bay within the Nursery.

Part B - Health Facility Briefing and Planning

APPENDICES

Obstetric Unit Generic Schedule of Accommodation

510.17.00 Schedule of Accommodation for an Obstetric Unit at Levels 3, 4, 5 & 6:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
			2 Rms	4 Rms	10 Rms	12 Rms	
BAY - LINEN	yes			1 x 3	2 x 3	2 x 3	Includes space for Blanket/ Fluid Warming Cabinet
BAY - MOBILE EQUIPMENT	yes				2 x 4	2 x 4	
BAY - RESUS TROLLEY	yes		1 x 2	1 x 2	1 x 2	1 x 2	
BIRTHING ROOM	yes		2 x 28	4 x 28	10 x 28	12 x 28	Labour, Delivery, Recovery, Postnatal
CLEANER'S ROOM	yes		1 x 4 optional	1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes		1 x 12 optional	1 x 12	1 x 12	1 x 12	
DIRTY UTILITY	yes		1 x 10 optional	1 x 10	1 x 10	1 x 10	
DISPOSAL ROOM	yes		1 x 8 optional	1 x 8	1 x 8	1 x 8	
ENSUITE - SPECIAL	yes		2 x 7	4 x 7	10 x 7	10 x 7	If spa bath is required additional area may be required
EXAMINATION / ASSESSMENT	see remarks		1 x 28 optional	1 x 28 optional	2 x 28 optional	2 x 28 optional	Refer to Standard Component - Birthing Room
LOUNGE - PATIENT	yes		1 x 15 optional	1 x 15	1 x 20	1 x 20	
MEDICATION ROOM					1 x 6 optional	1 x 6 optional	May be incorporated into Clean Utility
PANTRY	yes		1 x 8 optional	1 x 8	1 x 8	1 x 8	
RECEPTION	yes		1 x 10 optional	1 x 10	1 x 10	1 x 10	
SCRUB-UP/ GOWNING	yes		1 x 6	2 x 6	5 x 6	6 x 6	May be located at Birthing Room entry; Shared between 2 Birthing Rooms
STAFF STATION	yes		1 x 14 optional	1 x 14	1 x 14	1 x 14	
STORE - BIRTHING ROOM			2 x 3 optional	4 x 3 optional	10 x 3 optional	10 x 3 optional	May be accommodated within the Birthing Room
STORE - EQUIPMENT	yes				1 x 20	1 x 20	
STORE - GENERAL	yes		1 x 9	1 x 9	2 x 9	2 x 9	
WAITING	yes		1 x 15 optional	1 x 15	1 x 20	1 x 20	
CIRCULATION %			35	35	35	35	

510.18.00 STAFF AND SUPPORT AREAS

Staff and Support Areas are dependent on the Operational Policy and management structure:

Part B - Health Facility Briefing and Planning

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9	1 x 9	1 x 9	Unit Manager
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Nursing Educator, according to staffing establishment
OVERNIGHT STAY - BEDROOM	yes		1 x 10 optional	1 x 10 optional	1 x 10 optional	1 x 10 optional	For Medical staff on close call
OVERNIGHT STAY - ENSUITE	yes		1 x 3 optional	1 x 3 optional	1 x 3 optional	1 x 3 optional	
TOILET - STAFF	yes		1 x 2 optional	1 x 2	2 x 2	2 x 2	

510.19.00 SHARED AREAS - STAFF & SUPPORT AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes		1 x 3	1 x 3	1 x 3	1 x 3	Co-located with Staff Room
CHANGE ROOM - STAFF	yes		1 x 8	1 x 8	2 x 8	2 x 8	Area dependent on staffing establishment
MEETING ROOM - MEDIUM	yes		1 x 15	1 x 15	1 x 20	1 x 20	
OFFICE - CLINICAL/ HANDOVER	yes				1 x 12	1 x 12	
SHOWER - STAFF	yes		1 x 2	1 x 2	1 x 2	1 x 2	
STAFF ROOM	yes			1 x 15	1 x 15	1 x 15	

510.20.00 SHARED AREAS - OPERATING UNIT

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OPERATING ROOM - MINOR	yes		1 x 36	1 x 36	1 x 36	1 x 36	
SCRUB-UP/ GOWNING	yes		1 x 6	1 x 6	1 x 6	1 x 6	
STERILISING AREA			1 x 6	1 x 6	1 x 6	1 x 6	
PATIENT BAY	yes		2 x 9	2 x 9	2 x 9	2 x 9	Recovery

510.21.00 NURSERY AREAS - GENERAL CARE

Note: Refer to Intensive Care - Neonatal/ Special Care Nursery for NICU/ Special Care Nursery requirements:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - LINEN	yes		1 x 2	1 x 2	2 x 2	2 x 2	
NURSERY - NEONATAL	see remarks		1 x 15	1 x 20	1 x 30	1 x 40	Refer to Standard Component Neonatal Bay-General Care for individual bays

Part B - Health Facility Briefing and Planning

Obstetric Unit Generic Schedule of Accommodation

510 .22.00 SHARED AREAS - NURSERY

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BATHING / EXAMINATION			1 x 10	1 x 10	1 x 10	1 x 10	
FEEDING AREA			1 x 12	1 x 12	1 x 15	1 x 15	
FORMULA ROOM	yes		1 x 9	1 x 9	1 x 15	1 x 15	
STAFF STATION	yes		1 x 14	1 x 14	1 x 14	1 x 14	
STORE - GENERAL	yes		1 x 9	1 x 9	1 x 9	1 x 9	

Maternity Inpatient Generic Schedule of Accommodation

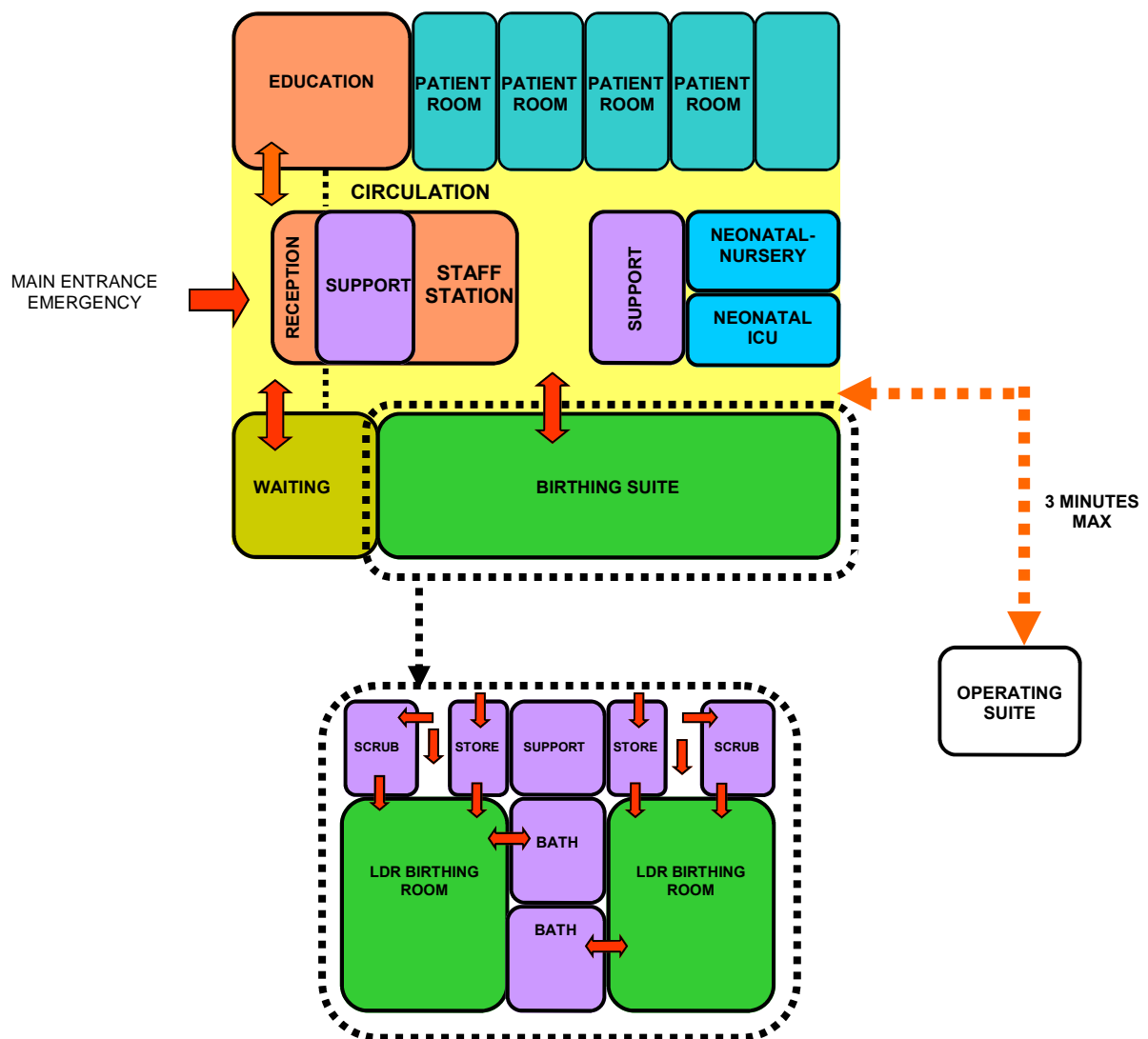
510 .23.00 Refer to Inpatient Accommodation Unit Generic Schedule of Accommodation for requirements applicable to Maternity Inpatient Unit.

References and Further Reading

- 510 .24.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities. 1997.
 - Department of Human Services, Victoria, Neonatal Services Guidelines: defining levels of care in Victorian hospitals, 2004.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.
 - NSW Health, Design Series 18, Health Building Guidelines - Obstetric Unit, 1992.
 - Queensland Government, Private Health Facilities Building Code, 2000.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - OBSTETRIC UNIT



Part B - Health Facility Briefing and Planning

520 OPERATING UNIT

INDEX

Description

- 520 .1.00 INTRODUCTION
Description
- PLANNING
Planning Model
Functional Areas
Functional Relationships
- DESIGN
Finishes
Fixtures and Fittings
Infection Control
Lighting
Standards and Codes
Building Service Requirements
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagrams

INTRODUCTION

Description

- 520 .2.00 The Operating Unit provides a controlled climatic environment for the operative and peri-operative care of patients undergoing diagnostic and surgical procedures under anaesthesia.

PLANNING

Planning Models

- 520 .3.00 The number of Operating Rooms and Recovery beds and the sizes of the service areas shall be based on the expected surgical workload. In the brief, the size, location, and configuration of the surgical suite and support service departments shall reflect the projected volume of patients. This may be achieved by designing either a separate Day Procedures facility or a combined Inpatient-Day Surgical Unit. The Operating Unit shall be located and arranged to prevent non-related traffic through the suite.
- 520 .4.00 An Operating Unit design with a sterile core must provide for no cross traffic of staff and supplies from the decontaminated/soiled areas to the sterile/clean areas. The use of facilities outside the Operating Room for soiled decontaminated processing and clean assembly and sterile processing will be designed to move the flow of goods and personnel without compromising universal precautions or aseptic techniques in both departments.

Functional Areas

- 520 .5.00 The Operating Unit consists of the following functional areas:

Part B - Health Facility Briefing and Planning

- Admissions and Reception Area for receipt and admission of patients to the Unit, with general overseeing of day to day operations, control of entry and exit from the Unit and completion of general administrative tasks
- Holding areas for holding and management of patients prior to their operation or procedure
- Operating Rooms area where procedures are carried out
- Support Areas including storage and management of stock and sterile supplies, disposal of waste and sterilisation of smaller items
- Recovery Areas where patients are assisted through the process of recovering from the effects of anaesthetic
- Administrative and Staff Areas including Change Rooms, Staff Room, Offices and administrative space for clinical staff.

520 .6.00 DENTAL SURGERY

In addition to the normal equipment required for surgical procedures such as an operating table, anaesthetic machine and trolleys, items considered essential for dental procedures are as follows:

- One compressed dental air outlet situated close to the service panels for medical gases, suction and electrical outlets, with the provision of a regulated bottle of appropriate compressed air as emergency backup or secondary use
- Access to a minimum of six power outlets with an additional four available for emergencies
- Facilities for dental X-ray.

520 .7.00 LABORATORY AREAS

Depending on the Operational Policy, an area for preparation and examination of frozen sections may be provided. This may be part of the general Pathology Laboratory if immediate results are obtainable without unnecessary delay in the completion of surgery.

520 .8.00 STAFF AMENITIES

CHANGE ROOMS

Appropriate Change Rooms shall be provided for male and female personnel (nurse, doctors and technicians) working within the Operating Unit. The Change Rooms shall contain adequate lockers, showers, toilets, handbasins and space for donning surgical attire and booting. These Staff Change Rooms shall be arranged to encourage a one-way traffic pattern so that personnel entering from outside the surgical suite can change and move directly into the Operating Unit.

Alternatively, the entrance to the Change Rooms may be planned in direct view of a Staff Station at the entrance to the Operating Unit.

The Change Room entrance door shall be provided with locks or electronic access devices to prevent the entry of unauthorised persons into the Operating Unit.

Toilets shall be provided at the minimum ratio of one per Operating Room but no fewer than two. Showers shall be provided at the minimum ratio of one per two Operating Rooms but no fewer than two. The above toilets and showers are to be divided equally between male and female change rooms.

Notes:

- It is desirable but not mandatory to increase the number of facilities for female change rooms by approximately 30%.
- In male change rooms urinals shall be avoided.
- Warm air hand dryers shall be avoided.

Functional Areas

520 .9.00 STERILISING FACILITIES

Sterilising facilities with high-speed sterilisers or other sterilising equipment for immediate or emergency use must be grouped to several Operating Rooms for convenient, efficient use. A work space and hand-washing facility shall be included. Such facilities shall be provided at the ratio of one per four Operating Rooms.

Other facilities for processing and sterilizing reusable instruments may be located in another hospital unit such as Central Sterilising Supply Department (CSSD) or Theatre Sterile Supply Unit (CSSU).

520 .10.00 STORAGE

Adequate Equipment Store room/s for equipment and supplies used in the Operating Unit shall be provided. Equipment Stores shall be provided at the minimum rate of 10 m² per Operating Room.

Notes:

- Store Rooms do not necessarily require doors.
- Store Rooms are best designed in an elongated rectangular shape to allow easy access to all items.

520 .11.00 Storage Bays shall be provided for equipment such as portable X-ray equipment, stretchers, fracture tables, warming devices and auxiliary lamps. Storage Bays shall be provided at the minimum rate of five m² per Operating Room and minimum dimension of 0.8 metre (one metre preferred). These areas shall be out of corridors and traffic. This can be satisfied by recessing the bay into the corridor walls or adding the minimum Storage Bay width to the corridor width.

Note: Mobile Equipment Bays are best designed as elongated rectangular shapes and combined as far as possible.

520 .12.00 An area for testing operating equipment also requires consideration in the planning stage of an Operating Unit to determine on-site facility needs. Part of the Operating Unit General Store may be used for this function, or a dedicated room for this purpose may be necessary.

Note: Such a dedicated room is sometimes referred to as the Biomedical Engineering Room.

520 .13.00 The design of the Operating Unit should allow for ease of access to the storage areas for delivery of Operating Unit consumables. Controlled access from an external corridor is highly desirable.

Functional Relationships

520 .14.00 Certain facilities may be shared with the Obstetric/Birthing Unit if the brief reflects this concept. Service areas, when shared with Delivery Rooms, shall be designed to avoid the passing of patients or staff between the Operating Room and the Delivery Room areas.

DESIGN

Finishes

- 520 .15.00 Operating Units shall have the following finishes:
- Floors that are smooth, non-slip impervious material laid in a continuous washable material and graded where necessary to fall to floor waste
 - Floor and wall finishes which are seamless, impervious, welded and washable
 - Ceilings which are smooth and impervious
 - Intersections of walls and architraves to be rendered watertight junctions.
- 520 .16.00 In all areas where patient observation is critical such as Operating Room/s, Anaesthetic Room/s, Recovery Area/Room, Holding Area/Room, colours shall be chosen that do not alter the observer's perception of skin colour.

Fixtures & Fittings

- 520 .17.00 An ice machine shall be provided to provide ice for treatments and patient use. Ice intended for human consumption shall be from self-dispensing ice makers.

Infection Control

- 520 .18.00 An Isolation Room is not required in a Recovery Area/Room. Provision for the recovery of a potentially infectious patient with an airborne infection shall be determined by the infection control risk assessment.

Lighting

- 520 .19.00 Operating Rooms shall have artificial lighting complying with AS 1680.1 and AS 1680.2.5.

Building Service Requirements

- 520 .20.00 MEDICAL GASES
- Main storage of medical gases must be outside the facility and reticulated internally to gas outlets. Provision shall be made for additional separate storage of reserve gas cylinders necessary to complete at least one day's procedures.

COMPONENTS OF THE UNIT

Introduction

- 520 .21.00 The Operating Unit will consist of a combination of Standard Components and Non-Standard Components.
- Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 520 .22.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 520 .23.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

Part B - Health Facility Briefing and Planning

520 .24.00 ANAESTHETIC WORKROOM

DESCRIPTION AND FUNCTION

An Anaesthetic Workroom may be provided for cleaning, testing and storing of anaesthesia equipment. The Anaesthetic Workroom should provide space for Anaesthetic trolleys and other anaesthesia equipment.

520 .25.00 LOCATION AND RELATIONSHIPS

The Anaesthetic Room should be located with direct access to circulation corridors and ready access to the Operating Rooms.

520 .26.00 CONSIDERATIONS

The Anaesthetic Workroom shall contain workbenches, sink/s and racks for cylinders. Provisions shall be made for separate storage of clean and soiled items. The room will require sufficient power and data outlets and a medical gas panel for testing of equipment.

A clinical handwashing basin shall be provided within the room.

520 .27.00 BLOOD STORE

DESCRIPTION AND FUNCTION

There shall be adequate provisions for refrigerated blood storage. This may be a blood storage refrigerator in a dedicated room or in a shared space.

520 .28.00 LOCATION AND RELATIONSHIPS

The Blood Store area should be located with ready access to the Operating Rooms and may be combined with a Pathology Room.

520 .29.00 CONSIDERATIONS

The blood refrigerator requires essential power supply.

520 .30.00 SET-UP ROOM

DESCRIPTION AND FUNCTION

The Set-up Room is the Clean Workroom in the Operating Unit where clean or sterile materials are held and arranged prior to use in the Operating Rooms.

The main functions for which facilities shall be provided are:

- Flash sterilisation of dropped or specialised instruments:
 - where a Theatre Sterile Supply Unit (TSSU) service is available, this function may be omitted
 - alternatives to flash sterilisation shall be sought
- Storage of instruments and materials
- Holding of sterile supplies and packs
- Storage of lotions in a special purpose warming cabinet
- Preparation of dressing and instrument trolleys
- Storage of drugs including scheduled drugs
- Dry waste disposal
- Use of telephone

520 .31.00 A Set-Up Room, with direct access to the operating room may be provided. Sharing of one Set-up Room between two or more Operating Rooms is

Part B - Health Facility Briefing and Planning

acceptable provided layout and size of the room facilitates such sharing. Set-up Rooms may be combined with the Sterile Stock Store with direct access to the Operating Room.

If provided, the Set-up Room should be a minimum of 20 m².

Note: This room is not mandatory, but its provision can improve throughput in the Operating Rooms.

520 .32.00 LOCATION AND RELATIONSHIPS

The Set-up Room should be located so that it has direct access to Operating Rooms and Central Sterile Supply / Theatre Sterile Supply Unit.

520 .33.00 CONSIDERATIONS

Storage is required for sterile packs and items used in the Operating Unit. Consideration may be given to mobile, adjustable open shelving systems.

Space is required for assembled trolleys prior to delivery to the Operating Room.

A clinical handwashing basin shall be provided within the room.

The Set-up Room shall be positively pressured relative to adjoining rooms.

APPENDICES

Operating Unit Generic Schedule of Accommodation

520 .34.00 Schedule of Accommodation for an Operating Unit at Levels 3, 4, 5 and 6:

RECEPTION & OPERATING ROOM AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m ²	Level 4 Qty x m ²	Level 5 Qty x m ²	Level 6 Qty x m ²	Remarks
ANAESTHETIC INDUCTION ROOM	yes		2 x 15 optional	4 x 15 optional	8 x 15 optional	10 x 15 optional	
EXIT BAY			2 x 6 optional	4 x 6 optional	8 x 10 optional	10 x 10 optional	From Operating Rooms
OPERATING ROOM - GENERAL	yes		1 x 42	3 x 42	5 x 42	6 x 42	
OPERATING ROOM - LARGE	yes				1 x 50	2 x 50	
OPERATING ROOM - MINOR	yes		1 x 36 optional	1 x 36 optional	2 x 36 optional	2 x 36 optional	
PATIENT BAY	yes		1 x 9 optional	1 x 9 optional	8 x 9 optional	10 x 9 optional	Holding Area - may be reduced if Anaesthetic induction rooms provided
PORTERS AREA					1 x 10 optional	1 x 10 optional	
RECEPTION	yes		1 x 10	1 x 10	2 x 10	2 x 10	
SCRUB-UP / GOWNING	yes		2 x 6	4 x 6	8 x 6	10 x 6	May be co-located between Operating Rooms
CIRCULATION %			40	40	40	40	

Part B - Health Facility Briefing and Planning

Operating Unit Generic Schedule of Accommodation

520 .35.00 SUPPORT AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
ANAESTHETIC WORK ROOM			1 x 10 optional	1 x 10 optional	1 x 15 optional	1 x 15 optional	
BAY - LINEN	yes		1 x 3	2 x 3	4 x 3	5 x 3	Includes allowance for Blanket/Fluid Warmer
BAY - MOBILE EQUIPMENT	yes		4 x 4	4 x 4	10 x 4	10 x 4	
BLOOD STORE			1 x 4 optional	1 x 4	1 x 4	1 x 4	
CLEANER'S ROOM	yes		1 x 4	1 x 4	2 x 4	3 x 4	
CLEAN-UP ROOM	yes		1 x 10	1 x 10	2 x 10	3 x 10	
DISPOSAL ROOM	yes		1 x 8	1 x 8	2 x 8	2 x 8	
FLASH STERILISING			1 x 6	1 x 6	2 x 5	3 x 5	
LABORATORY / FROZEN SECTION			1 x 4 optional	1 x 4 optional	1 x 12 optional	1 x 12 optional	may be co-located with Clean Workroom or Blood Store
PERFUSION ROOM					1 x 50 optional	1 x 50 optional	
SET-UP ROOM			1 x 20 optional	1 x 20 optional			
STORE - ANAESTHETIC					1 x 20	1 x 20	
STORE - EQUIPMENT MAJOR	see remarks		1 x 20	1 x 30	1 x 50	1 x 60	Refer to Standard Component - Store - Equipment
STORE - EQUIPMENT MINOR	see remarks				1 x 40 optional	1 x 50 optional	Refer to Standard Component - Store - Equipment
STORE - NON STERILE/ DEBOXING			1 x 15	1 x 20	1 x 30	1 x 30	
STORE - STERILE STOCK	yes		1 x 20	1 x 40	1 x 80	1 x 100	Area allows for 10 m2 per Operating Room

520 .36.00 RECOVERY AREA

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - HANDWASHING	yes		2 x 1	3 x 1	4 x 1	5 x 1	
BAY - LINEN	yes		1 x 3	1 x 3	2 x 3	2 x 3	Includes allowance for Blanket Warmer
BAY - RESUS TROLLEY	yes		1 x 2	1 x 2	2 x 2	2 x 2	
CLEAN UTILITY	yes		1 x 12	1 x 12	1 x 12	1 x 12	
DIRTY UTILITY	yes		1 x 10	1 x 10	1 x 10	1 x 10	
PATIENT BAY	yes		3 x 9	6 x 9	12 x 9	15 x 9	Allow 2 bays per Operating Room
STAFF STATION	yes		1 x 6	1 x 6	1 x 14	1 x 14	

Part B - Health Facility Briefing and Planning

Operating Unit Generic Schedule of Accommodation

520 .37.00 ADMINISTRATIVE AND STAFF AREAS

Note: Offices and Support Areas are dependent on Operational Policy and management structure:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes		1 x 3	1 x 3	2 x 3	2 x 3	Co-located with Staff Room
CHANGE ROOM - STAFF	yes		2 x 10	2 x 15	2 x 30	2 x 40	May need to be apportioned for Male & Female users
MEETING ROOM - MEDIUM	yes		1 x 12 optional	1 x 12 optional	1 x 20	1 x 20	
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9	1 x 9	1 x 9	1 x 9	Unit Manager
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9 optional	2 x 9 optional	3 x 9 optional	According to staffing establishment
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Nurse Educator/ s
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9	1 x 9	Recovery Unit Manager
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Radiographer
OFFICE - WRITE-UP BAY	yes		1 x 2 optional	2 x 2 optional	4 x 2 optional	5 x 2 optional	Dictation Area
SHOWER - STAFF	yes		2 x 2	2 x 2	4 x 2	4 x 2	
STAFF LOUNGE	see remarks		1 x 10	1 x 15	1 x 30	1 x 40	Refer to Standard Component - Staff Room; size according to staffing establishment
STORE - FILES	yes				1 x 10	1 x 10	
STORE - PHOTOCOPY/ STATIONERY	yes			1 x 8	1 x 8	1 x 8	
TOILET - STAFF	yes		2 x 2	3 x 2	4 x 2	4 x 2	

520 .38.00 SHARED AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BIOMEDICAL ENGINEERING					1 x 25	1 x 25	
INTERVIEW ROOM	yes		1 x 9	1 x 9	1 x 9	1 x 9	
MEETING ROOM - LARGE	yes				1 x 30	1 x 30	
STORE - GENERAL	yes		1 x 9	1 x 9	1 x 9	1 x 9	
WAITING	yes				1 x 4	1 x 4	

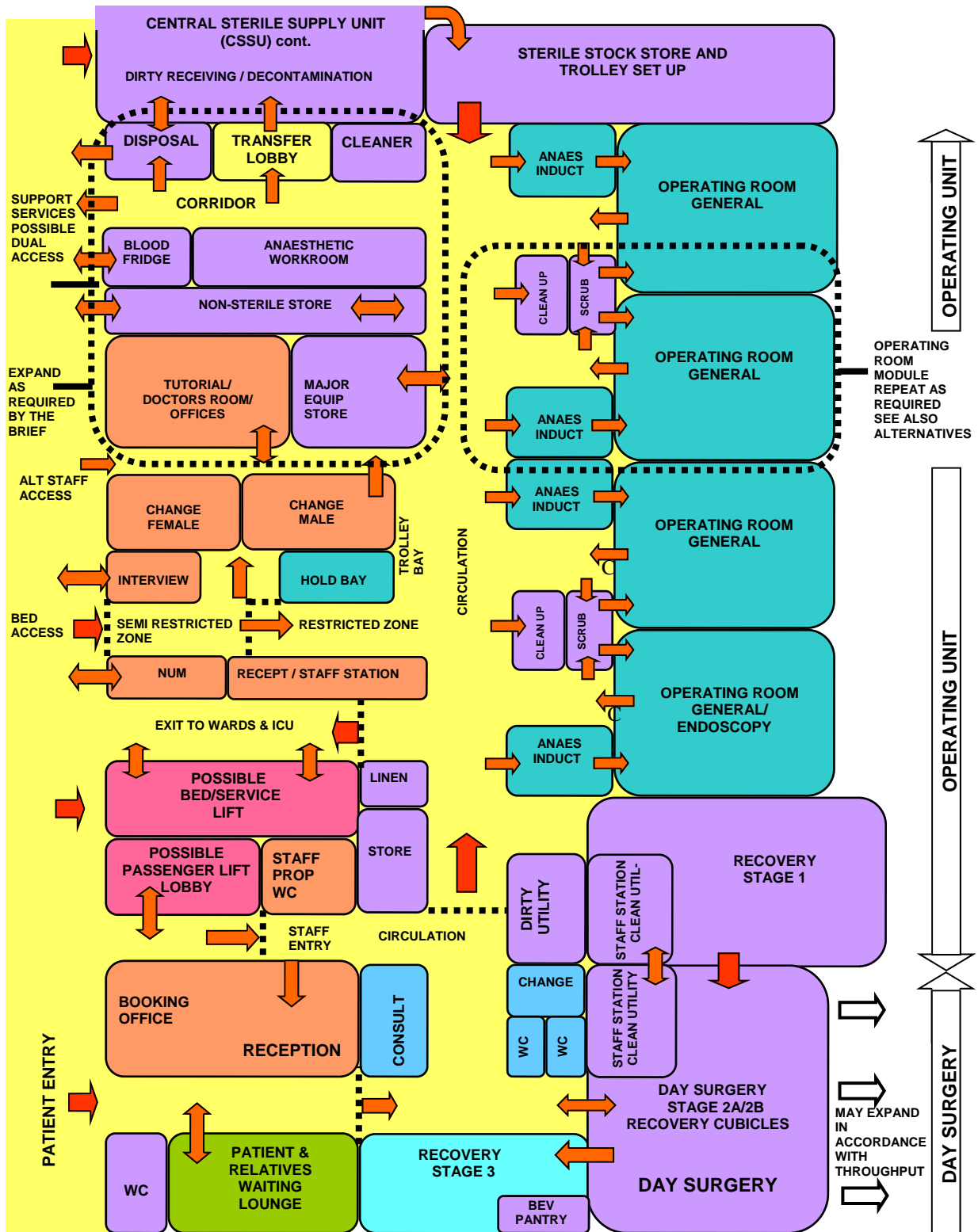
References and Further Reading

- 520 .39.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities. 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - OPERATING UNIT Alternative Single Corridor Model Sheet 1 of 4

NOTE 1 ONLY THE MOST IMPORTANT FUNCTIONS ARE SHOWN FOR CLARITY
NOTE 2 CSSU MAY BE CONNECTED TO OPERATING SUITE VIA CLEAN/DIRTY HOISTS
NOTE 3 IF STERILE STOCK IS REMOTE FROM OPERATING ROOM, A CASE CART SYSTEM SHOULD BE USED
NOTE 4 ANAESTHETIC INDUCTION ROOM IS OPTIONAL AND MAY BE CONSIDERED A HOLDING ROOM

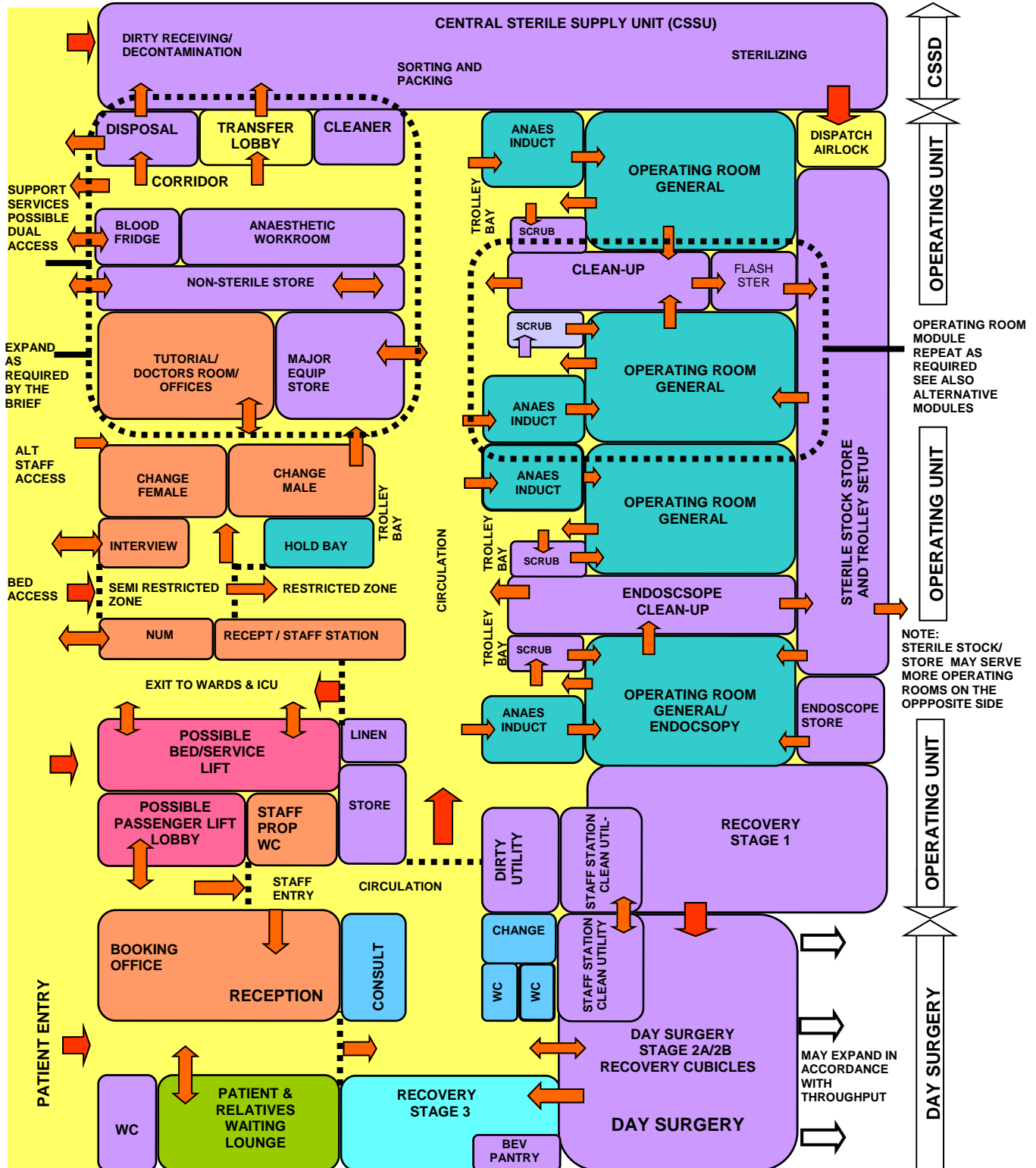


Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - OPERATING UNIT Dual Corridor Model

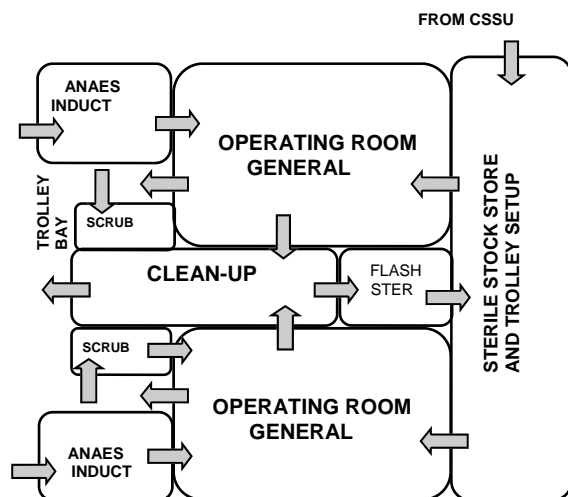
Sheet 2 of 4

- NOTE 1 ONLY THE MOST IMPORTANT FUNCTIONS ARE SHOWN FOR CLARITY
 NOTE 2 CSSU MAY BE CONNECTED TO OPERATING SUITE VIA CLEAN/DIRTY HOISTS
 NOTE 3 OPERATING ROOM MODULE MAY BE MIRRORED AGAINST STERILE STOCK STORE TO DOUBLE THE NUMBER OF OPERATING ROOMS
 NOTE 4 ANAESTHETIC INDUCTION ROOM IS OPTIONAL AND MAY BE CONSIDERED A HOLDING ROOM

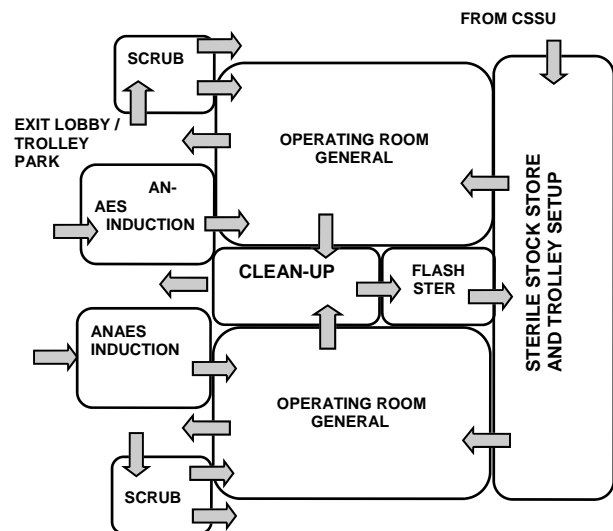


Operating Room Modules

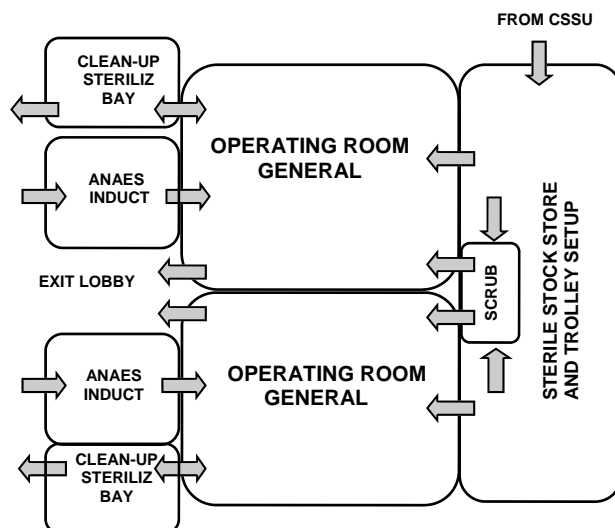
- NOTE 1 ONLY THE MOST IMPORTANT FUNCTIONS ARE SHOWN FOR CLARITY
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 NOTE 4 ANAESTHETIC INDUCTION ROOM IS OPTIONAL AND MAY BE CONSIDERED A HOLDING ROOM



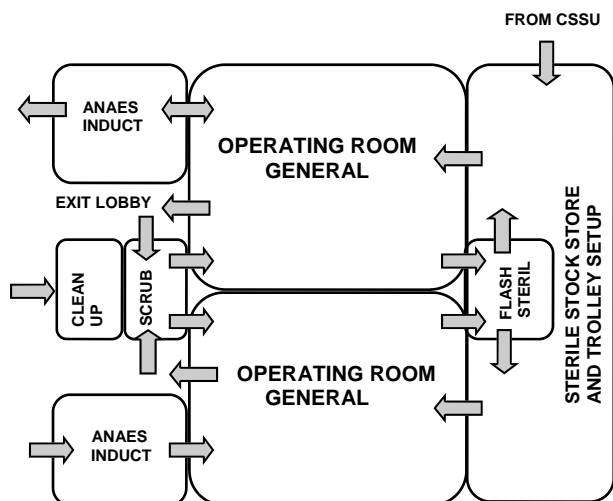
**Operating Room
Module Type A**



**Operating Room
Module Type B**



**Operating Room
Module Type C**



**Operating Room
Module Type D**

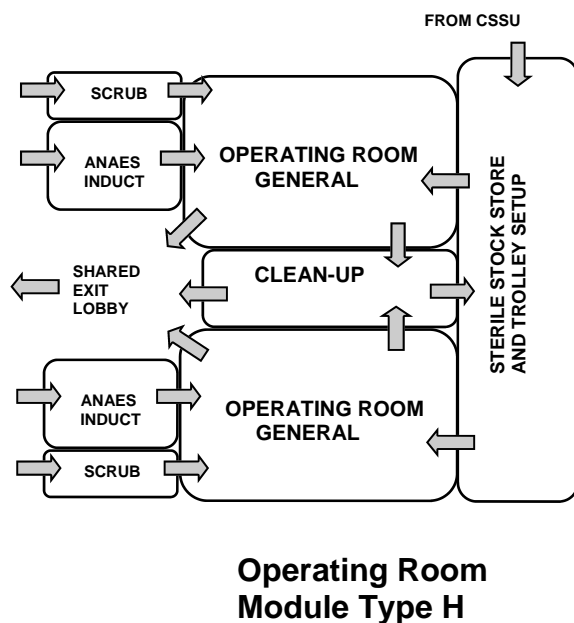
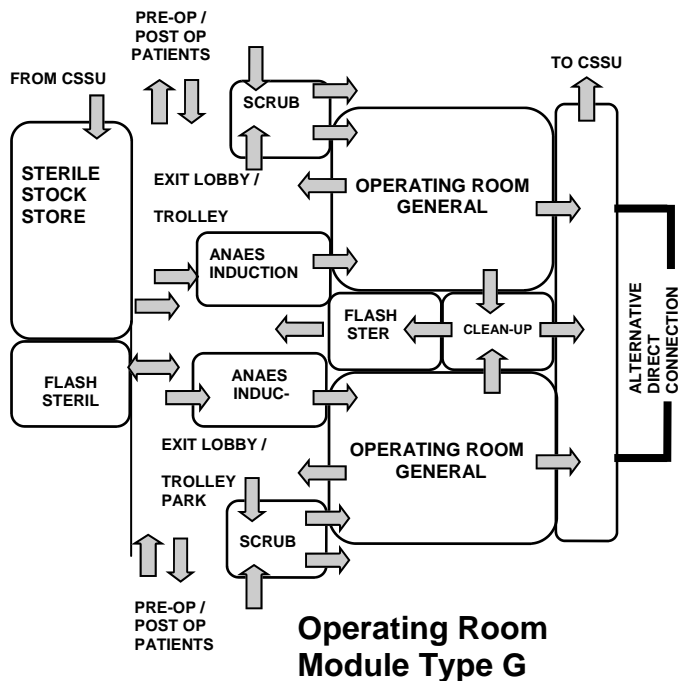
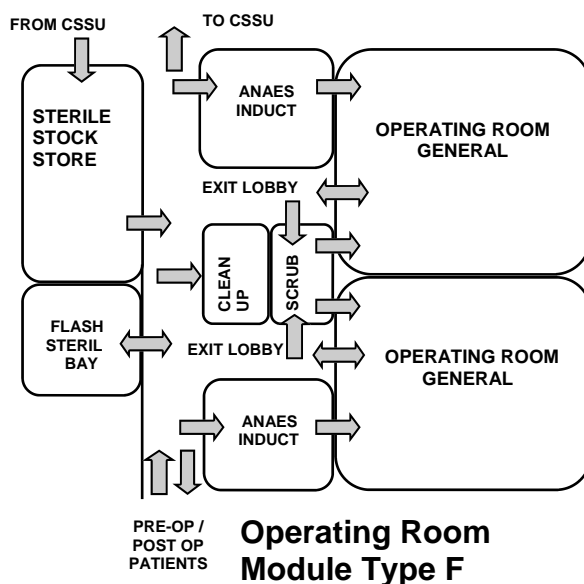
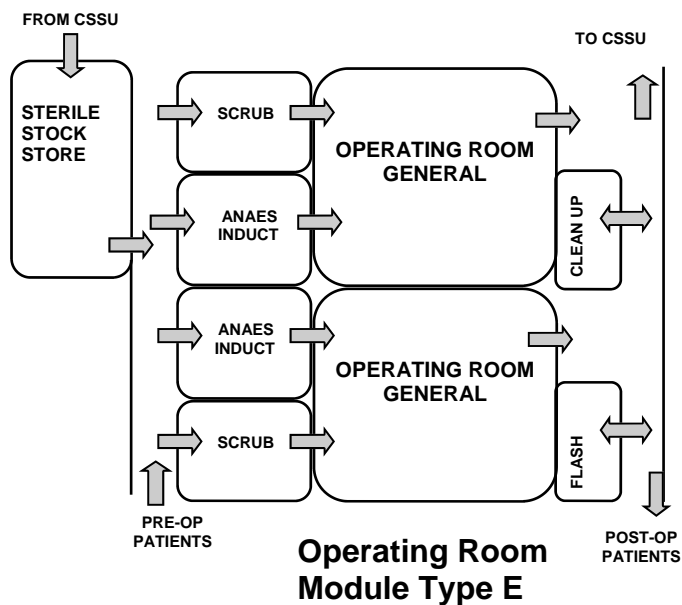
Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - OPERATING UNIT

Sheet 4 of 4

Operating Room Modules

- NOTE 1 ONLY THE MOST IMPORTANT FUNCTIONS ARE SHOWN FOR CLARITY
 NOTE 2 CSSU MAY BE CONNECTED TO OPERATING SUITE VIA CLEAN/DIRTY HOISTS
 NOTE 3 OPERATING ROOM MODULE MAY BE MIRRORED AGAINST STERILE STOCK STORE TO DOUBLE THE NUMBER OF OPERATING ROOMS
 NOTE 14 ANAESTHETIC INDUCTION ROOM IS OPTIONAL AND MAY BE CONSIDERED A HOLDING ROOM



- NSW Health, Design Series 19, Health Building Guidelines - Operating Suite / Day Procedures Unit, 1992.
- Queensland Government, Private Health Facilities Building Code, 2000.

Functional Relationships Diagram/s

520 .40.00 The relationships between the various components within an Operating Unit are best described by functional relationships diagrams. The requirements for infection control and patient management result in a number of planning 'models' that have proved successful through numerous built examples and many years of practice. Most Operating Unit plans are a variation of one of these 'models'.

These have been provided in the enclosures to these Guidelines.

A plan substantially based on one of these diagrams is 'deemed to satisfy' the requirements of these Guidelines. A plan that is significantly different to these diagrams should be carefully examined against all the individual requirements of these Guidelines, especially those of Infection Control to determine if it is acceptable.

520 .41.00 The enclosed Operating Unit functional relationships diagrams also show the relationships between typical adjoining units such as CSSU and possibly Day Surgery. For separate diagrams for CSSU, please refer to enclosures attached to CSSU Sheets 1 to 6. For Operating Unit functional relationships diagrams refer to attached enclosures Sheets 1 to 3. Functional relationships diagrams CSSU Sheet 6 and Operating Unit Sheet 1 in combination create one complete surgical floor.

520 .42.00 In reviewing and using the enclosed Operating Unit flow diagrams, designers should carefully consider a number of issues:

- Each flow diagram represents a method of managing the patient access, clean/dirty flow, air pressurisation, sterilisation of dropped instruments etc.
- The diagrams are different but each addresses the issues involved in a satisfactory manner. Each option may suit a different management mode or building configuration.
- Designers are strongly cautioned against creating hybrid options by combining features of various diagrams. This may result in wrong clean/dirty flows or other unacceptable features. If in doubt, designers should seek advice from specialist Operating Room consultants and Infection Control nurses.

520 .43.00 The functional relationship diagram in enclosure Sheet 1 shows a base model. This is a linear model. It can be stretched to create the number of Operating Rooms desired. The support facilities required also grow with the number of Operating Rooms. This base model integrates fully with the CSSU simple model in CSSU Enclosure Sheet 1.

520 .44.00 Enclosure Sheet 2 shows alternatives to a typical Operating Room Module. Each module includes the configuration of:

- Operating Rooms
- Anaesthetic Induction Rooms
- Scrub Bays or Rooms
- Sterile Stock Store / Set-up Room
- Clean-up Room
- Flash Sterilising Bay

Enclosure Sheet 2 includes four alternatives that can be designed to work with

Part B - Health Facility Briefing and Planning

the base Operating Unit model shown in Enclosure Sheet 1.

- 520 .45.00 Enclosure Sheet 3 shows three more Operating Room Modules that represent a reversal of the flows compared with those in Enclosure Sheet 2. These modules can be designed to work with the basic features of the Operating Unit diagram shown in Sheet 1. Designers using these modules should adjust the connections to units such as Day Surgery / CSSU to suit the planning configuration.

Part B - Health Facility Briefing and Planning

530 ORTHOTICS UNIT

INDEX

Description

- 530 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 530 .2.00 The Orthotics Unit provides a comprehensive range of custom made and ready to fit orthoses for patients either as an outpatient service or an inpatient service. This includes the following functions:
- Providing in/outpatient assessment
 - Prescription advice
 - Orthotic treatment
 - Treatment planning and review
 - Measurement, casting, design manufacture, fitting and adjustment of orthoses.
- 530 .3.00 Orthotists from the Orthotics Unit will attend Outpatient Clinics, team meetings, ward rounds and other activities to enhance patient care. The Orthotics Unit will also provide in-service training and lectures to other health care personnel and raise awareness of orthotics in the local community.

PLANNING

Functional Areas

- 530 .4.00 The modern Orthotics Unit will have a number of different areas of activity that have different functional and environmental requirements including:
- Patient Assessment and Treatment Rooms
 - Cast modification areas
 - Orthotics manufacturing and finishing.
- Dust and fume extraction will be required to manufacturing areas. Sound isolation will be required between manufacturing and patient assessment and staff office areas.
- 530 .5.00 Design considerations will include:
- Restriction of clients to Waiting, Reception and Patient Assessment and Treatment Areas only - no access for patients to Laboratory or Workshop Areas
 - Wheelchair access for clients
 - Goods Delivery dock in close proximity for delivery of components and

Part B - Health Facility Briefing and Planning

- materials, many of which are bulky or heavy
- Extraction of fumes and dust from Laboratory / Workshop Areas
- Control of excessive noise from Laboratory or Workshop Areas.

Functional Relationships

- 530 .6.00 The Orthotics Unit should be located adjacent to Inpatient Units, Outpatient Clinics and Physiotherapy Unit. It is also desirable that the unit be close to Occupational Therapy Units and the Social Work Unit.

COMPONENTS OF THE UNIT

Introduction

- 530 .7.00 The Orthotics Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 530 .8.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 530 .9.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

530 .10.00 GAIT ANALYSIS

DESCRIPTION AND FUNCTION

A Gait Analysis Area will be required to enable gait assessment and recording.

The Gait Analysis area should be a minimum length of five metres.

530 .11.00 LOCATION AND RELATIONSHIPS

The Gait Analysis Area should be located with ready access to patient waiting areas, Casting and Consult Room.

530 .12.00 CONSIDERATIONS

The Gait Analysis area may include the following:

- Parallel bars
- Patient change area with privacy screens
- Video camera and television for recording gait.

530 .13.00 LEATHER FINISHING WORKSHOP

DESCRIPTION AND FUNCTION

A Leather Finishing Workshop is required for processing, finishing and storing of leather.

The size of the room will be dependent on the quantity and placement of

Part B - Health Facility Briefing and Planning

equipment.

530 .14.00 LOCATION AND RELATIONSHIPS

The Leather Finishing Workshop should be located with other workshop areas and away from patient areas in the Orthotics Unit.

530 .15.00 CONSIDERATIONS

The Leather Finishing Workshop may include the following fittings and equipment:

- Heavy duty workbenches
- Leather cutting table/s
- Rivet pressing bench
- Heat gun equipment
- Sewing machines
- Drill press
- Large deep sink.

The room will require:

- Special exhaust and extraction for glue fumes
- Sufficient power for the equipment to be located in this room.

530 .16.00 LOADING DOCK

DESCRIPTION AND FUNCTION

A Loading Dock Area is required for the supplies and deliveries to the Orthotics Unit.

530 .17.00 LOCATION AND RELATIONSHIPS

The Loading Dock should be located with close access to the Main Store for direct transfer of heavy and bulky materials.

530 .18.00 CONSIDERATIONS

The Loading Dock will require access for stock delivered on pallets and large supply vehicles.

530 .19.00 MACHINE / DIRTY WORKSHOP

DESCRIPTION AND FUNCTION

The Machine / Dirty Workshop will be required to accommodate the following equipment:

- Bandsaw
- Grinders
- Disc cutter
- Routing machine
- Buffing machines.

530 .20.00 LOCATION AND RELATIONSHIPS

The Machine / Dirty Workshop should be located with other workshop areas and away from patient areas within the Orthotics Unit.

530 .21.00 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

The following fittings and room requirements will be included:

- Bench for grinding and cutting equipment
- Special exhaust and extraction for dust and fumes, particularly adjacent to equipment
- Sufficient power for the equipment to be located in this area
- Enhanced level of lighting over machinery.

530 .22.00 MAIN WORKSHOP

DESCRIPTION AND FUNCTION

The Main Workshop will be a heavy manufacturing area and may include the following equipment:

- Metal guillotine
- Pedestal drill and drill bench
- Metal work anvil
- Lathe
- Welding equipment.

530 .23.00 LOCATION AND RELATIONSHIPS

The Main Workshop should be located with other workshop areas and away from patient areas within the Orthotics Unit. It should have ready access to the Loading Dock for delivery of bulky supplies.

530 .24.00 CONSIDERATIONS

Room requirements will include the following:

- Timber workbenches
- Storage racks for casts and metal lengths
- Deep sink
- Sufficient power suitable for the equipment to be located in this area
- Sealed concrete floor and concrete ceiling
- Acoustic treatment to adjacent rooms
- Special exhaust for fumes and dust located near to equipment.

530 .25.00 PATIENT CASTING

DESCRIPTION AND FUNCTION

A Patient Casting Room is required for measuring and fitting patient casts.

The Casting Room should be a minimum of 16 m2.

530 .26.00 LOCATION AND RELATIONSHIPS

The Patient Casting Room should be located with ready access to Consult and Gait Analysis Rooms.

530 .27.00 CONSIDERATIONS

The Patient Casting Room will require access for wheelchairs and lifting frame. The room may include the following:

- Benches and cupboards for preparation and storage of casting materials
- Handwashing basin
- Sink and drainer with plaster trap
- Casting frame
- Examination couch with privacy screening.

Non-Standard Components

530 .28.00 PLASTER MODIFICATION

DESCRIPTION AND FUNCTION

A Plaster Workshop will be required for manufacture and modification of casts.

530 .29.00 LOCATION AND RELATIONSHIPS

The Plaster Modification Workshop should be located with ready access to the Patient Casting and Gait Analysis Rooms.

530 .30.00 CONSIDERATIONS

Room requirements will include the following:

- Workbenches
- Stainless steel sinks with plaster traps
- Storage racks for plaster tools
- Handwashing basin
- Drying cabinet for plaster casts
- Special exhaust and extraction for plaster dust
- Sufficient power for equipment to be located in this room
- Drainage to floor
- Easily cleanable surfaces and finishes.

530 .31.00 PLASTER STORE

DESCRIPTION AND FUNCTION

A separate storage area may be required for plaster supplies.
The Plaster Store, if provided, should be a minimum of eight m2.

530 .32.00 LOCATION AND RELATIONSHIPS

The Plaster Store should be located with ready access to the Loading Dock area, Plaster Modification Room and Casting Rooms.

530 .33.00 CONSIDERATIONS

The room or area will require heavy duty shelving.

530 .34.00 PLASTICS HEAT ROOM

DESCRIPTION AND FUNCTION

The Plastics Heat Room is required to accommodate plastic manufacturing equipment and supplies. The size of the room be dependent on the quantity of equipment and the placement.

530 .35.00 LOCATION AND RELATIONSHIPS

The Plastics Heat Room should be located with other workshop areas and away from patient areas within the Orthotics Unit.

530 .36.00 CONSIDERATIONS

The Plastics Heat room requirements may include the following:

- Benches and shelving
- Plastic guillotine
- Tracing and cutting table/s

Part B - Health Facility Briefing and Planning

- Plastics processing oven
- Special exhaust and extraction for glue fumes and plastics
- Sufficient power for the equipment to be located in this area
- Special ventilation for control of heat from oven/s
- Acoustic privacy to adjacent rooms.

530 .37.00 STORE - MAIN

DESCRIPTION AND FUNCTION

A Main Store is required to accommodate the supplies and consumables used in the Orthotics Unit.

530 .38.00 LOCATION AND REALTIONSHPIS

The Main Store should be located with close access to the Loading Dock area.

530 .39.00 CONSIDERATIONS

The Main Store should be lockable and will require:

- Racking for storage of sheet materials
- Pallet racking for storage of palletted materials
- Shelving, heavy duty.

Part B - Health Facility Briefing and Planning

APPENDICES

Orthotics Generic Schedule of Accommodation

530 .40.00 Schedule of Accommodation for a Level 5 and 6 Orthotics Unit:

PATIENT AND WORKSHOP AREAS

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	
BAY - LINEN	yes				1 x 2	1 x 2	
CONSULT ROOM	yes				2 x 12	2 x 12	For Consult and Fittings
GAIT ANALYSIS					1 x 20 optional	1 x 20 optional	
LOADING DOCK					1 x 15	1 x 15	
PATIENT CASTING					1 x 16 optional	1 x 16 optional	
STORE - MAIN					1 x 30	1 x 30	
STORE - PLASTER					1 x 8 optional	1 x 8 optional	
WORKSHOP - LEATHER FINISHING					1 x 40 optional	1 x 40 optional	
WORKSHOP - MACHINE / DIRTY					1 x 25 optional	1 x 25 optional	
WORKSHOP - MAIN					1 x 100 optional	1 x 100 optional	
WORKSHOP - PLASTER MODIFICATION					1 x 30 optional	1 x 30 optional	
WORKSHOP - PLASTIC HEAT					1 x 45 optional	1 x 45 optional	
CIRCULATION %					20	20	

530 .41.00 STAFF AND SUPPORT AREAS

Note: Offices and Support areas are dependent on the Operational Policy and Management Structure:

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9	1 x 9	Manager
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	According to staffing establishment
TOILET - STAFF	yes				1 x 2	1 x 2	

530 .42.00 SHARED AREAS

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks

Part B - Health Facility Briefing and Planning

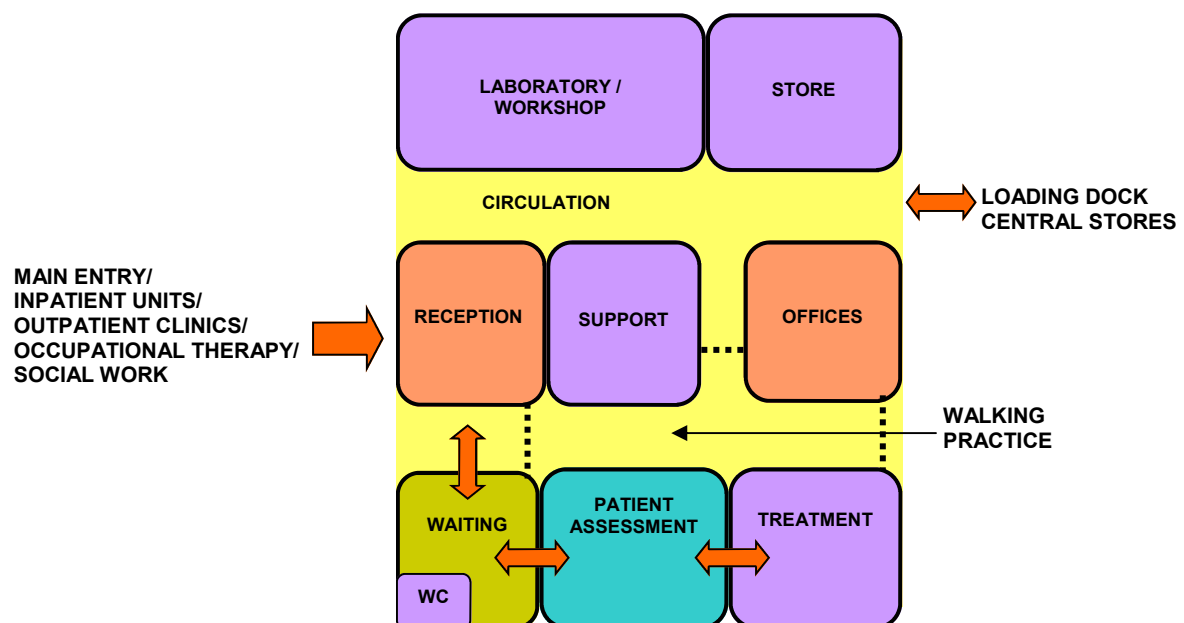
BAY - BEVERAGE	yes				1 x 3	1 x 3	Co-located with Staff Room
CLEANER'S ROOM	yes				1 x 4	1 x 4	
DISPOSAL ROOM	yes				1 x 8	1 x 8	
PROPERTY BAY - STAFF	yes				1 x 6	1 x 6	
RECEPTION	yes				1 x 10	1 x 10	
SHOWER - PATIENT	yes				1 x 4	1 x 4	
STAFF ROOM	yes				1 x 15	1 x 15	
TOILET - DISABLED	yes				1 x 5	1 x 5	
WAITING	yes				1 x 10	1 x 10	

References and Further Reading

- 530.43.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities. 1997.
- NSW Health - SESAHS Redevelopment Unit, POW Hospital: Project Definition Plan - Spinal Medicine and Rehabilitation Unit, 2000.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - ORTHOTICS UNIT



Part B - Health Facility Briefing and Planning

540 PAEDIATRIC/ ADOLESCENT UNIT

INDEX

Description

- 540 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Space Standards and Components
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 540 .2.00 The Paediatric/ Adolescent Unit is an Inpatient Accommodation Unit with special provisions for paediatric and adolescent general medical and surgical patients.
- The Unit is specifically designed to reflect the varying physical and psychological needs of children and adolescents aged from one month to fourteen years.

PLANNING

Functional Areas

- 540 .3.00 The Paediatric/ Adolescent Unit will consist of the following Functional Areas:
- Patient areas including Bedrooms, Isolation Rooms, Play Areas, Multipurpose Activities area, Nursery and feeding areas, Ensuities and Bathrooms
 - Support areas including Staff Station, Utilities, Formula, Store, Pantry, Cleaner's and Disposal Rooms; support rooms may be shared with adjacent units if appropriate
 - Staff Areas including Offices, Meeting Rooms, Staff Change and Toilets.
- 540 .4.00 STORAGE
- Storage rooms or cabinets for toys and educational and recreational equipment shall be provided within the unit.
- 540 .5.00 Storage space shall be provided to permit exchange of cribs and adult beds. Provisions shall also be made for storage of equipment and supplies such as cots or recliners and extra linen for parents who stay with the patient overnight.

Functional Relationships

- 540 .6.00 The Paediatric/ Adolescent Unit should be located with ready access to Emergency Unit, Operating Unit, Critical Care areas and Medical Imaging areas. It should be located to avoid the need for through traffic.

DESIGN

Space Standards and Components

- 540 .7.00 PATIENT BEDROOMS

Maximum room capacity shall be four patients.

COMPONENTS OF THE UNIT

Introduction

- 540 .8.00 The Paediatric/ Adolescent Unit may consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 540 .9.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 540 .10.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 540 .11.00 NURSERY

DESCRIPTION AND FUNCTION

The Nursery will provide facilities for the care of babies. To minimize the possibility of cross infection, each Nursery Room (or defined Nursery Bay) serving paediatric patients shall contain no more than eight bassinets; each bassinet shall have a minimum clear floor area of 3.75 m².

Note: The above limitation on number of patients in a Nursery Room does not apply to the Paediatric Intensive Care Unit.

- 540 .12.00 LOCATION AND RELATIONSHIPS

The Nursery shall be located with direct observation from the Staff Station and with ready access to feeding areas and Clean Utility.

- 540 .13.00 CONSIDERATIONS

Each Paediatric Nursery shall have an area for instruction and parent contact with the infant including breast and/or bottle feeding. This may be a section of the nursery with provisions for privacy and quiet.

Additional room requirements will include the following:

- Staff handbasin with lever taps
- Emergency call system

Part B - Health Facility Briefing and Planning

- Glazed viewing window for observing infants from public areas and workrooms
- Direct access to a Clean Utility.

540 .14.00 MULTIPURPOSE ROOM

DESCRIPTION AND FUNCTION

Multi-purpose or individual room/s shall be provided for dining, education, and developmentally appropriate play and recreation, with access and equipment for patients with physical restrictions. If the functional brief requires, an individual room shall be provided to allow for confidential parent/ family comfort, consultation, and teaching.

The size of the Multi-purpose Room will be dependent on the number of persons to be accommodated and the range of equipment and toys provided.

540 .15.00 LOCATION AND RELATIONSHIPS

The Multi-purpose Room should be located within or adjacent to areas serving paediatric and adolescent patients.

540 .16.00 CONSIDERATIONS

Insulation, isolation, and structural provisions shall minimise the transmission of impact noise through the floor, walls, or ceiling of the Multi-purpose Room/s.

Fittings and furniture will include provisions for children and adolescents including toys, computers, CD, television and video.

Part B - Health Facility Briefing and Planning

APPENDICES

Paed/Adol. Unit Generic Schedule of Accommodation

540 .17.00 Schedule of Accommodation for a Paediatric/ Adolescent Unit at Levels 4 to 6:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED ROOM	yes			4 x 15	4 x 15	4 x 15	
1 BED ROOM - ISOLATION	yes			1 x 15 optional	1 x 15 optional	1 x 15 optional	Refer to Infection Control for details
2 BED ROOM	yes			3 x 25 optional	3 x 25 optional	3 x 25 optional	
4 BED ROOM	yes			1 x 42 optional	1 x 42 optional	1 x 42 optional	
ANTEROOM	yes			1 x 8 optional	1 x 8 optional	1 x 8 optional	Refer to Infection Control
BAY - HANDWASHING	yes			4 x 1	4 x 1	4 x 1	In addition to handbasins in Bedrooms
BAY - LINEN	yes			1 x 3	1 x 3	1 x 3	Includes allowance for Blanket Warmer
BAY - RESUS TROLLEY	yes			1 x 2	1 x 2	1 x 2	
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	
ENSUITE - STANDARD	yes			9 x 5	9 x 5	9 x 5	
FEEDING ROOM				1 x 9	1 x 9	1 x 9	
FORMULA ROOM	yes			1 x 9	1 x 9	1 x 9	
MULTI-PURPOSE ROOM				1 x 24	1 x 24	1 x 24	With provisions for children/ adolescents including toys, computers etc
NURSERY				1 x 15	1 x 15	1 x 15	Will require access to Utility Rooms and Storage
PANTRY	yes			1 x 8	1 x 8	1 x 8	
PLAY ROOM				1 x 20	1 x 20	1 x 20	
SHOWER - PATIENT	yes			1 x 4 optional	1 x 4 optional	1 x 4 optional	For 4 Bed Room/s
STAFF STATION	yes			1 x 14	1 x 14	1 x 14	
STORE - BEDS / COTS				1 x 12	1 x 12	1 x 12	
STORE - GENERAL	yes			1 x 9	1 x 9	1 x 9	
TOILET - PATIENT	yes			1 x 4 optional	1 x 4 optional	1 x 4 optional	For 4 Bed Room/s
TREATMENT ROOM	yes			1 x 15	1 x 15	1 x 15	

Part B - Health Facility Briefing and Planning

CIRCULATION %				32	32	32	

540.18.00 ADOLESCENT UNIT OF 15 BEDS

Note: For a Level 6 service, a group of beds are designated Adolescent:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED ROOM	yes					7 x 15	
2 BED ROOM	yes					4 x 25 optional	
BAY - HANDWASHING	yes					4 x 1	In addition to handbasins in Bedrooms
BAY - LINEN	yes					1 x 2	
BAY - RESUS TROLLEY	yes					1 x 2	
ENSUITE - STANDARD	yes					11 x 5	
LOUNGE - PATIENT / DAY ROOM	yes					1 x 15	To accommodate computers, games, CD players, videos etc
PANTRY	yes					1 x 8	
STAFF STATION	yes					1 x 14	
STORE - GENERAL	yes					1 x 9	

540.19.00 STAFF AND SUPPORT AREAS

Note: Offices and Support Areas are dependent on the Operational Policy and management structure:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CONSULT ROOM	yes				1 x 12 optional	1 x 12 optional	
MEETING ROOM	yes				1 x 15 optional	1 x 15 optional	
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9	1 x 9	1 x 9	1 x 9	Unit Manager
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Registrar

540.20.00 SHARED AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BATHROOM	yes			1 x 10	1 x 10	1 x 10	
CLEAN UTILITY	yes					1 x 12	
DIRTY UTILITY	yes					1 x 10	

Part B - Health Facility Briefing and Planning

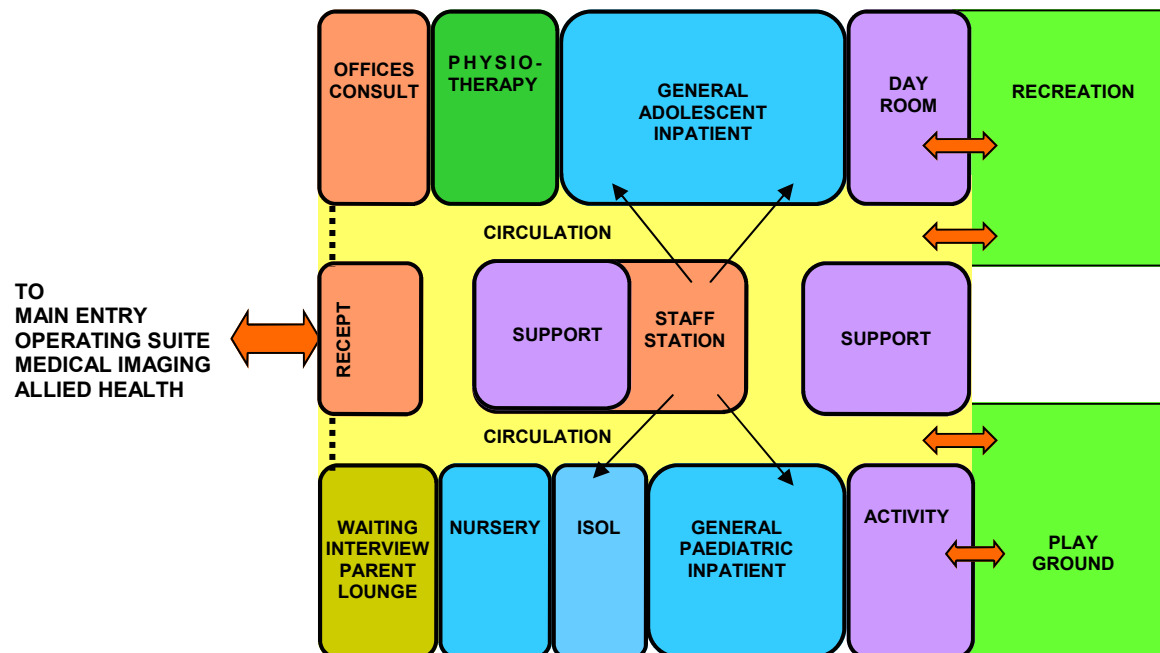
PHYSIOTHERAPY TREATMENT					1 x 20	1 x 20	
PROPERTY BAY - STAFF	yes		1 x 6	1 x 6	1 x 6	1 x 6	
TOILET - STAFF	yes		1 x 2	1 x 2	1 x 2	1 x 2	

References and Further Reading

- 540 .21.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- NSW Health, Design Standard 22 Health Building Guidelines - 12 Bed Paediatric/ Adolescent Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - PAEDIATRIC & ADOLESCENT UNIT



Part B - Health Facility Briefing and Planning

545 PALLIATIVE CARE UNIT

INDEX

Description

- 545 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Generic Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 545 .2.00 Palliative Care as defined by Palliative Care Australia should be understood to encompass a philosophy of care, a program, and a collection of services. Hospice is often used to refer to the concept of care for people living with an incurable illness, whether at home or in an Inpatient Unit. The words 'hospice' and 'palliative care' are often used interchangeably.
- 545 .3.00 A Palliative Care Unit shall be provided in facilities that are designed to deliver care in accordance with the principles of palliative care. Separate entrances to these facilities will be provided wherever possible. Environment is important, with an emphasis on ambience, accessibility, and availability predominantly of single rooms.

PLANNING

Functional Areas

- 545 .4.00 The Palliative Care Unit may include the following Functional Areas:
- Entry, Reception and Waiting areas
 - Patient accommodation areas including Lounge Rooms
 - Patient Activities areas including Day Areas and outdoor facilities
 - Support areas including Utility Rooms, Cleaner's Room, Disposal, Pantry, Store Rooms
 - Staff areas including Offices, Meeting Rooms, Staff Change and Toilets.
- 545 .5.00 ENTRANCE AREA
- The Entrance Area is the first point of contact for members of the community and should display clear direction informing people where to proceed. Design considerations for the Entrance should include:
- If the Palliative Care Unit is situated within or adjacent to another facility or hospital there needs to be 24 hour secure discreet access to the unit
 - Vehicle access to the Palliative Care Unit is required at all times
 - Entry facilities should be suitable for people with disabilities, such as limited mobility and poor vision
 - The entry can incorporate an airlock space and may have sensor or

Part B - Health Facility Briefing and Planning

automatically opening doors to facilitate access.

545 .6.00 ENTRANCE CANOPY

If the Palliative Care Unit is stand-alone, an Entrance Canopy is required to provide dry access to the building.

Design considerations include:

- Ensuring the covered area is large enough to allow vehicles such as taxis, buses, cars, and emergency vehicles to manoeuvre beneath it, and is structured to facilitate free concurrent traffic flow for multiple vehicles
- The use of clear roofing material to maximise natural light inside the building

545 .7.00 FAMILY FACILITIES

A Multi-Purpose room is required for use as a Family Room or as Interview / Counselling room. It may be equipped to accommodate family members overnight, in which case an Ensuite may also be provided.

Design considerations include:

- Furniture should include sofa beds, tables and chairs
- Tea and coffee making facilities will be required, bench with sink, cupboards, drawers and Boiling Water unit
- The room should be lockable
- Telephone, power and data capabilities and television
- Sound isolation is required
- An external view is desirable.

545 .8.00 PALLIATIVE CARE DAY CARE FACILITY

A Palliative Care Day Care Facility may be required to provide a 'half-way house' between home care and inpatient services as an outpatient service. The space may be shared by inpatients and outpatients. Facilities that may be included are:

- Consultation
- Pain Management
- Medical treatments and minor procedures
- Physical care including bathing
- Dietary advice, pharmacy, occupation therapy assessment and intervention
- Counselling, social work, spiritual care, chaplaincy, volunteer support
- Physiotherapy gymnasium equipment and gentle exercise programs to improve mobility
- Diversional therapy providing crafts, television, video and other leisure activities
- Hairdressing and wig care, facials and manicure
- Complementary therapies, these may include massage, aromatherapy, relaxation techniques, meditation, music, etc
- Education sessions, computer and internet access
- A program of practical social recreational or health promotional activities that provides a therapeutic milieu where patients receive the necessary support, training and equipment to adapt to changes
- Respite on a regular basis and support that is practical and encompasses the emotional, spiritual and social aspects of care for carers.

545 .9.00 LIBRARY / RESOURCE AREA

A Library / Resource Area is required for staff and clients. Note: Larger facilities may have a specified room for this purpose, but a small unit can incorporate this facility into other areas, for example, the Multi-purpose Meeting Room or as part of a Waiting Area.

545 .10.00 OUTDOOR AREAS

Outdoor Areas, such as gardens, courtyards and terraces should be provided to give a pleasant domestic setting for the building. The outdoor areas such as courtyards, gardens or terraces should be adjacent to all of the Bed-Based Areas.

Design considerations should include the following:

- Adequate provision for sitting or walking
- Pathways that are clear, simple, non-slip and designed to lead somewhere
- Pathways must be wide enough and with a surface that allows for easy access by wheelchairs and beds
- Pathways should not end at a wall or fence
- A BBQ Area, with bottled or piped gas, may be considered for the outdoor facility
- A water sprinkling system is advisable for all Outdoor Areas that have gardens and pot plants.

545 .11.00 PATIENT / LIVING AREAS

Patient / Living areas of the Palliative Care Unit will incorporate bedrooms, ensuites, bathrooms, toilets, lounge areas, dining and recreational areas.

545 .12.00 Bedrooms may include two bed rooms but the majority of rooms should be single rooms.

545 .13.00 RECEPTION / WAITING AREA

The Reception Area is the main arrival and exit point of the Unit and will also function as a Waiting Area. Design considerations for the Reception / Waiting Area should include the following:

- The area needs to impart a welcoming feel and be spacious enough to allow for ample comfortable seating
- The Reception desk or counter should be designed to allow maximum communication with visitors, particularly those in wheelchairs
- Access to a public phone is required
- Access to Public Toilets is required

545 .14.00 SERVICE ENTRY / LOADING BAY/ CANOPY

The service entry is required to allow deliveries to the facility without having to pass through the main entrance of the building. It may also need to provide ambulance service access and egress in emergency circumstances.

Design considerations include:

- An area large enough to allow vehicles including ambulances to turn and manoeuvre
- A large enough space with sufficient blank wall length to allow for temporary storage of items such as linen or food trolleys, items of furniture or items of equipment for repair
- Access for picking up soiled linen from inside the building only through the service entry. Large institutions may have separate zones for the various utilities and deliveries
- Adequate infection control
- A loading bay located away from the client entry point to facilitate access for delivery staff and for staff who regularly load therapy equipment and mobility aids into vehicles.

Functional Relationships

- 545 .15.00 The Palliative Care Unit should be located in a position that is convenient to all potential users, including patients, family members, support people or team people. The site should allow easy movement around it for all users. This includes ensuring that there is level ground in client areas. A ground level site is preferable with easy access to outside areas.

COMPONENTS OF THE UNIT

Introduction

- 545 .16.00 The Palliative Care Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 545 .17.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 545 .18.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Service demand.

- 545 .19.00 MULTI-PURPOSE ACTIVITIES AREA

DESCRIPTION AND FUNCTION

A Multi-purpose Activities Area or room is required for inpatient and outpatient activities during the day; it may also function as a craft room.

The Multipurpose Activity Room should be sized according to the number of people to be accommodated and the range of activities.

- 545 .20.00 LOCATION AND RELATIONSHIPS

The Multi-purpose Activities Area should be located with ready access to inpatient areas and day patient areas. If used for outpatient day activities, it should be located close to dining facilities.

- 545 .21.00 CONSIDERATIONS

Design considerations for a Multi-Purpose Activities Area include:

- Space for tables and physical activities
- A quiet area for people who need a break in activities
- Chairs should be suitable for tables and for relaxation
- Fittings should include a whiteboard, a pinboard and projection screen or wall suitable for projection
- Direct access to outdoor areas is desirable
- Tea and coffee making facilities within close proximity
- Toilets located in close proximity
- Provision for television, video and computer facilities.

For additional room considerations refer to Standard Component - Meeting Room - Medium/ Large.

Non-Standard Components

545 .22.00 QUIET SITTING ROOM

DESCRIPTION AND FUNCTION

A Quiet Sitting room is required for quiet relaxation. This area may be used as a palliative care family room where families can relax during the day; it may also be used to provide overnight accommodation for relatives.

545 .23.00 LOCATION AND RELATIONSHIPS

The Quiet Sitting Room should be located with ready access to inpatient accommodation areas, day patient areas, patient and public amenities.

545 .24.00 CONSIDERATIONS

Design considerations for a Quiet/ Sitting Room include:

- Comfortable seating for up to six persons with domestic style furniture
- Nurse call, emergency call and indicator lights are required
- A direct access to external spaces is desirable
- Full height windows are recommended.

For additional room considerations refer to Standard Components - Meeting Room - Small.

Part B - Health Facility Briefing and Planning

APPENDICES

Palliative Care Generic Schedule of Accommodation

545 .25.00 Schedule of Accommodation for a Bed Palliative Care Unit in a hospital at Levels 3 and 4

Note: Level 3 includes patient areas only as a part of an integrated Inpatient Unit sharing all support services:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2			Remarks
			6 Beds	10 beds			
1 BED ROOM - SPECIAL	yes		6 x 18	10 x 18			Rooms may also include refreshment facilities and families
BAY - HANDWASHING	yes		2 x 1	3 x 1			In addition to handbasins in Bedrooms
BAY - MOBILE EQUIPMENT	yes			1 x 4			
BAY - LINEN	yes			1 x 2			
CLEAN UTILITY	yes			1 x 12			
DIRTY UTILITY	yes			1 x 10			
ENSUITE - SPECIAL	yes		6 x 7	10 x 7			
INTERVIEW ROOM	yes			1 x 12			May also be used for family overnight stays
LOUNGE - PATIENT	yes		1 x 15	1 x 15			
MEETING ROOM - SMALL	yes		1 x 12	1 x 12			Quiet Sitting Room; Access to an Outdoor area is desirable
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9			Unit Manager
OFFICE - 3 PERSON SHARED	yes			1 x 16 optional			Dependent on staffing establishment
PANTRY	yes		1 x 8	1 x 8			
STAFF STATION	yes			1 x 14			May be shared with an adjoining HPU
STORE - EQUIPMENT	see remarks			1 x 10			Refer to Standard Component-Store-Equipment; size according to quantity
TOILET - DISABLED	yes			1 x 5			
CIRCULATION %			35	35			

545 .26.00 SHARED AREAS

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2			Remarks
BAY - FLOWERS	yes			1 x 2			

Part B - Health Facility Briefing and Planning

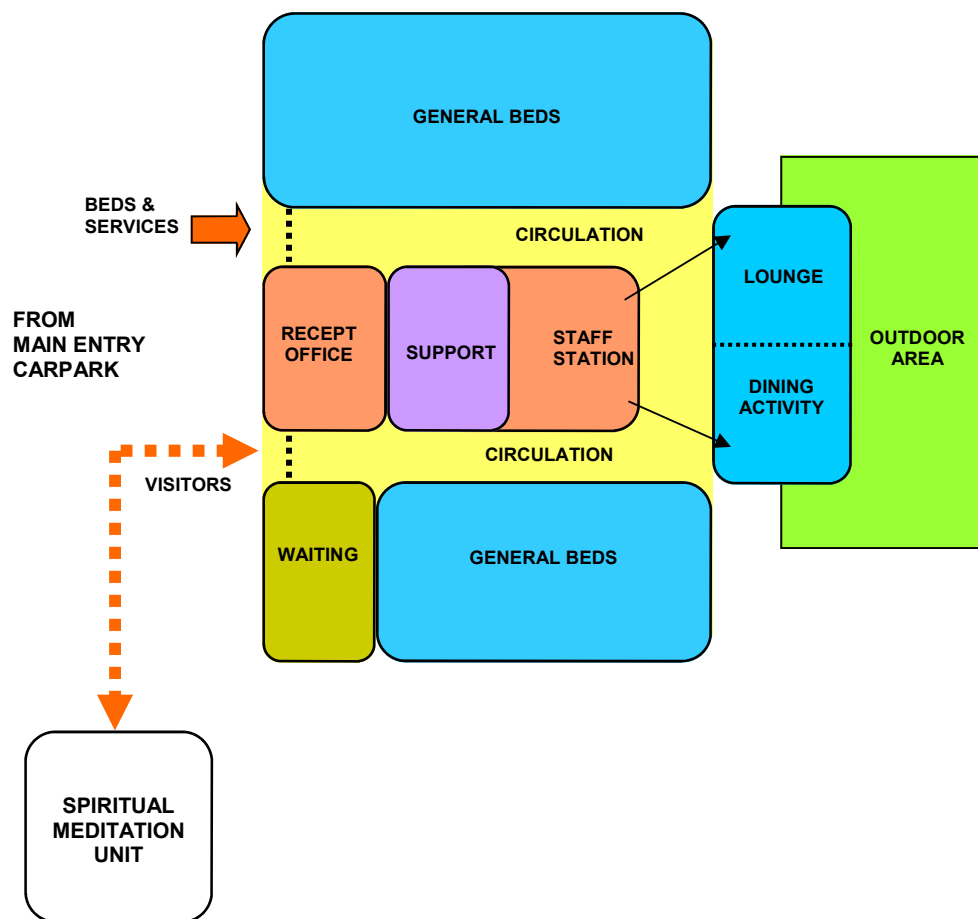
BATHROOM	yes		1 x 10	1 x 10			
CLEANER'S ROOM	yes			1 x 4			
DISPOSAL ROOM	yes			1 x 8			
MEETING ROOM - MEDIUM	yes			1 x 20			
MULTIPURPOSE ACTIVITIES ROOM				1 x 30			For inpatients and day patients
RECEPTION	yes			1 x 10			Co-located with Waiting
TOILET - STAFF	yes			1 x 2			

References and Further Reading

- 545 .27.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- Department of Human Services, Victoria; Aged, Community & Mental Health Division, Hospice Unit Generic Brief, 1999.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - PALLIATIVE CARE UNIT



Part B - Health Facility Briefing and Planning

550 PATHOLOGY UNIT

INDEX

Description

550 .1.00	INTRODUCTION General
	PLANNING Functional Areas Functional Relationships
	DESIGN Environmental Considerations Fixtures and Fittings Safety and Security
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

General

550 .2.00	The Pathology Unit provides facilities and equipment for the examination of body tissues and fluids, involving receipt of patient specimens, testing and issue of reports.
550 .3.00	Dependent upon the Role Delineation and the Operational Policy of the facility, it may be necessary to provide a dedicated on-site Pathology Unit.

PLANNING

Functional Areas

550 .4.00	If the Pathology service is based in the hospital, the following facilities shall be provided for the Pathology Unit: <ul style="list-style-type: none">- A separate, purpose built Pathology Laboratory Room to provide a pathology service; must be capable of secure isolation and cannot be shared- A laboratory workbench with space for equipment such as microscopes, appropriate chemical analysers, incubator/s and centrifuge/s- Access to vacuum, gas and electrical services at the workbench- Sinks with hot and cold water; may be used for the disposal of non-toxic fluids- Refrigerated blood storage- Basin or bench sink for staff hand-washing- Storage facilities for reagents, standards, supplies, and stained specimen microscope slides including refrigeration, as needed.
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Note: The size of the laboratory and workroom/s shall be appropriate to the function and provide a safe working environment.

Part B - Health Facility Briefing and Planning

Functional Areas

- 550 .5.00 For a hospital based Pathology Service, the following facilities shall also be provided:
- A blood collection area that shall have a workbench, space for patient seating and hand washing facilities
 - A urine and faeces collection room which shall be equipped with a toilet and handbasin
 - Chemical safety provisions including emergency shower, eye flushing devices and appropriate storage for flammable liquids
 - Facilities and equipment for terminal sterilisation (autoclave or electric oven) of contaminated specimens before transport; (terminal sterilisation is not required for specimens which are incinerated on site).
- 550 .6.00 Provision shall also be made for collecting and processing specimens. This can be mobile equipment for bedside or Consulting Room collection, or a dedicated Specimen Collection Room.

Functional Relationships

- 550 .7.00 The Pathology Unit, if in-house, is best located adjacent to the areas that utilise the service the most such as the Operating and Obstetric Units.

DESIGN

Environmental Considerations

- 550 .8.00 If radioactive materials are employed, facilities shall be available for long-term storage and disposal of these materials. No special provisions will normally be required for body waste products from most patients receiving low level isotope diagnostic material.
- If the hospital based Pathology Service utilises radio-active materials, the facility may need to be considered for possible registration under the relevant State Radiation Safety Act. The appropriate Australian Standards for laboratories shall apply.

Fixtures & Fittings

- 550 .9.00 The Operational Policy shall describe the type and location of all special equipment that is to be wired, plumbed, or plugged in, and the utilities required to operate each.

Safety and Security

- 550 .10.00 Chemical safety provisions including emergency shower, eye-flushing devices, and appropriate storage for flammable liquids shall be made.

COMPONENTS OF THE UNIT

Introduction

- 550 .11.00 The Emergency Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 550 .12.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

550 .13.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

550 .14.00 BLOOD STORE

DESCRIPTION AND FUNCTION

The Blood Store provides for the secure, temperature controlled storage of blood and other blood products for access by authorised staff only.

The Blood Store should be a minimum of six m2.

550 .15.00 LOCATION AND RELATIONSHIPS

The Blood Store should be located with ready access to Pathology Unit, Emergency Unit, Operating Unit and Critical Care areas. Consideration shall be given to blood storage location in relation to external after-hours access and security.

550 .16.00 CONSIDERATIONS

The blood storage refrigerators shall be secured, accessed by authorised staff only, and equipped with temperature monitoring and alarm signals. Alarms and controls should be located to ensure easy staff control.

The blood refrigerators / freezers will require an essential power supply.

Part B - Health Facility Briefing and Planning

APPENDICES

Pathology Generic Schedule of Accommodation

550.17.00 Schedule of Accommodation for a Pathology Unit in a Level 4 Hospital of 120 Beds:

ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
BLOOD STORE				1 x 6			
CLEAN-UP / STERILISATION				1 x 12			
LABORATORY - PATHOLOGY				1 x 25			
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional			Manager
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9 optional			Pathologist, according to staffing establishment
RECEPTION	yes			1 x 10			
SPECIMEN COLLECTION				3 x 8			
SPECIMEN RECEPTION / SORTING				1 x 12			
STORE - FILES	yes			1 x 10			Located adjacent to Reception
STORE - GENERAL	yes			1 x 9			
CIRCULATION %				25			

550.18.00 SHARED AREAS

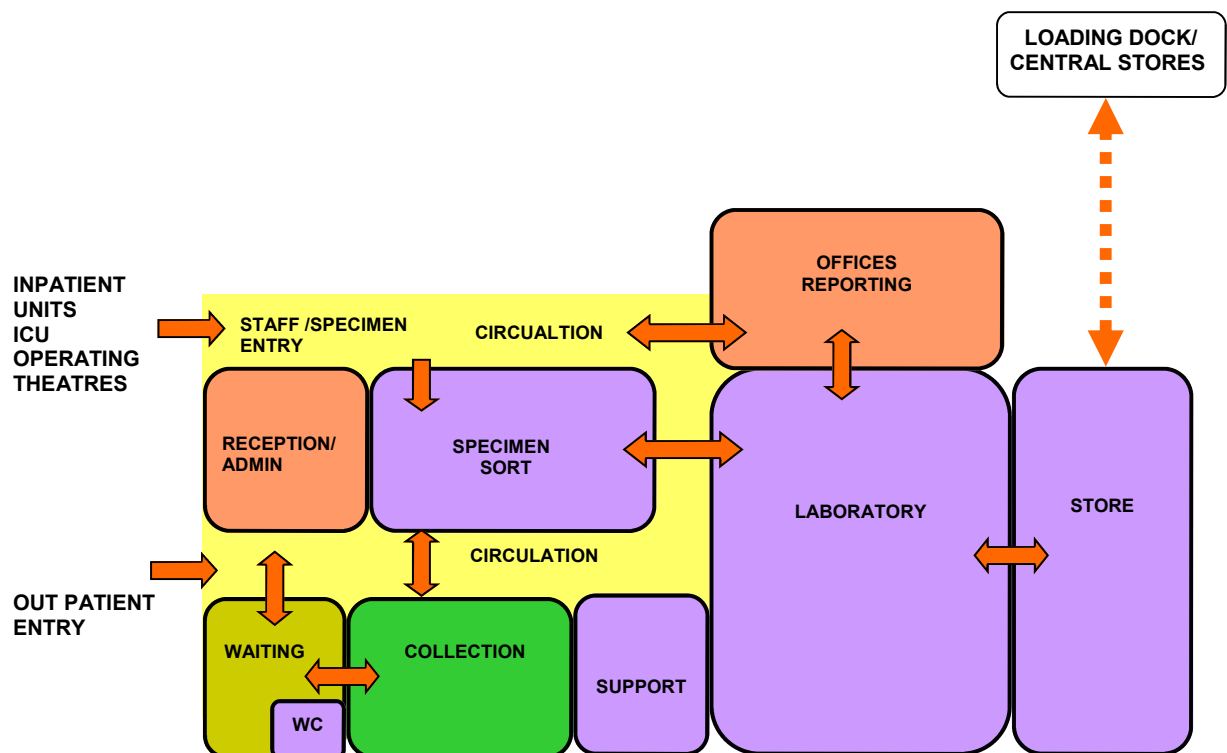
ROOM / SPACE	Standard Component			Level 4 Qty x m2			
PROPERTY BAY - STAFF	yes			1 x 6			
SHOWER - EMERGENCY				1 x 2			Dependent on Operational Policy
TOILET - PATIENT	yes			1 x 4			
TOILET - STAFF	yes			1 x 2			
WAITING	yes			1 x 15			

References and Further Reading

- 550.19.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities. 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.
 - NSW Health, Design Series 21, Health Building Guidelines - Pathology Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - PATHOLOGY UNIT



560 PHARMACY UNIT

INDEX

General

- 560 .1.00 INTRODUCTION
General
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Infection Control
Safety and Security
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

General

- 560 .2.00 The size and type of service to be provided in the Pharmacy Unit will depend upon the type of drug distribution system used, number of patients to be served, and extent of shared or purchased services. This shall be described in the Operational Policy.
- 560 .3.00 If unit dose procedure is used, provide additional space and equipment for supplies, packaging, labelling, and storage, as well as for the carts.
- 560 .4.00 The Pharmacy Unit facilities and provisions must comply with the Pharmacy Board of Victoria - Guidelines.

PLANNING

Functional Areas

- 560 .5.00 The Pharmacy Unit may consist of the following functional areas:
- Reception and Waiting areas
 - Patient counselling and consult areas
 - Dispensing Areas which may include separate areas for inpatients and ambulatory patients
 - Preparation and manufacturing areas
 - Storage areas including active stores for preparation and dispensing areas, bulk stores, secured stores for accountable drugs and refrigerated stores
 - Despatch area for deliveries to inpatient units
 - Drug information areas
 - After hours drug store for access only by authorised personnel
 - Staff areas including Offices, Workstations, Meeting Rooms, Staff Room, Change and Toilets

Functional Areas

- 560 .6.00 Depending on the Role Delineation and Operational Policy, the Pharmacy may also include:
- Sterile Manufacturing, which may include sterile and cytotoxic manufacturing suites, along with support facilities including Anterooms, Change Rooms and Storage
 - Facilities for clinical trials, which may include dispensing areas, secured storage and records area and workstations.
- 560 .7.00 DISPENSING STATIONS
- A Dispensing Station is an area on an Inpatient Unit used by pharmacists to dispense prescriptions for patients in that Unit. The Dispensing Station remains under the direction of the Pharmacy Unit.
- 560 .8.00 A Dispensing Station/s should be located in or adjacent to the Inpatient Unit drug storage area, preferably in a locked room.
- 560 .9.00 A Dispensing Station in an Inpatient Unit should be equipped with:
- A password-protected computer that is networked to the Pharmacy Unit
 - Dispensing equipment appropriate to the intended function including printers and labels
 - Tablet counting equipment
 - Direct access to reference texts appropriate to the activities of the Inpatient Unit and a complete set of mandatory reference texts
 - A telephone.
- 560 .10.00 A Dispensing station should:
- Be adequately lit
 - Have ready access to hand-washing facilities
 - Provide an impervious bench of sufficient size to accommodate dispensing equipment and provide 0.6 m² of clear working space
 - Be dedicated to use by the Pharmacy Unit
- 560 .11.00 A Dispensing Station may include a lockable drug storage facility.
- 560 .12.00 MANUFACTURING AREA
- The following minimum elements shall be included if manufacturing is performed on-site:
- Bulk compounding area
 - Provision of packaging and labelling area
 - Quality control area.
- 560 .13.00 SATELLITE PHARMACY
- A Pharmacy Unit Satellite is a room or unit in a hospital that is located remote from the Pharmacy Unit.
- 560 .14.00 A Satellite Pharmacy Unit must be constructed to be not less than 20 m², including shelving and working areas, unless a lesser area is approved by the Pharmacy Board in a particular case.
- 560 .15.00 A Satellite Pharmacy requires:
- A sink of stainless steel or other material approved by the Board with an impervious surround, and supplied with hot and cold running water
 - An impervious dispensing bench of not less than 40 cm width and of

Part B - Health Facility Briefing and Planning

sufficient length so as to provide not less than three m2 of free working space, in addition to the space occupied by computers and other equipment.

- 560 .16.00 A Satellite Pharmacy also has the following minimum requirements:
- An area for counselling of clients about dispensed or other medicines so that privacy can be assured
 - Adequate lighting and ventilation
 - Air temperature and humidity control suitable to the storage of drugs and medicines required to be kept there at all times.
- 560 .17.00 A Satellite Pharmacy must be:
- Constructed to prevent forced access through doors, windows, walls and ceilings
 - Fitted with a security intrusion detector alarm that is control room monitored to a central agency on a 24 hour basis
 - Constructed to prevent unauthorised access by persons other than staff of the Pharmacy Unit.

560 .18.00 STERILE PREPARATION AREA

If intravenous solutions are prepared in the Pharmacy, provide a sterile work area with laminar flow bench and hood. Arrangement and construction shall comply with the relevant Australian Standards and statutory requirements. Consideration shall be given to the physical requirements of specialist activities such as cytotoxic preparations, if they are to be carried out.

560 .19.00 STORAGE

The following minimum elements, in the form of cabinets, shelves, and/or separate rooms or closets, shall be included as required:

- Bulk storage
- Active storage
- Refrigerated storage
- Volatile fluids and alcohol storage with construction as required by the relevant regulations for substances involved
- Secure storage for narcotics and controlled drugs
- Storage for general supplies and equipment not in use.

Functional Relationships

- 560 .20.00 The Pharmacy Unit shall be located for convenient access, staff control, and security. Facilities (including satellite, if applicable) and equipment shall be as necessary to accommodate the requirements of the Operational Policy. Relevant State and Federal statutory requirements are to be complied with.
- Note: If manufacturing, refer to the 'Code of Good Manufacturing Practice for Therapeutic Goods'.

DESIGN

Infection Control

- 560 .21.00 Hand-washing facilities shall be provided within each separate room where open medication is handled.

Safety and Security

- 560 .22.00 Pharmacy Units and Pharmacies are required to be constructed so as to be as secure as practicable from unauthorised access through doors, windows, walls and ceilings, and to be fitted with a security intrusion detector alarm

which is control room monitored to a central agency on a 24 hour basis.

COMPONENTS OF THE UNIT

Introduction

- 560 .23.00 The Pharmacy Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 560 .24.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 560 .25.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 560 .26.00 DISPENSING

DESCRIPTION AND FUNCTION

Dispensing provides a secured area for delivery of dispensed prescriptions to the patient or to staff for inpatient unit collection.

The Dispensing area shall be:

- A minimum of 20 m2 for a Pharmacy or Friendly Society Pharmacies, unless a smaller area is approved by the Board
- A minimum of 140 m2 in a Pharmacy Department, unless a smaller area is approved by the Board.

- 560 .27.00 LOCATION AND RELATIONSHIPS

The Dispensing Area should be located with ready access to Waiting areas and patient counselling areas.

- 560 .28.00 CONSIDERATIONS

Dispensing areas shall include the following:

- A dispensing bench of an impervious material, not less than 40cm in width and with a minimum of three m2 of working space
- A sink of stainless steel or other Board approved material with an impervious splashback and hot and cold running water
- Adequate lighting and ventilation
- Adequate heating facilities for dispensing and compounding drugs and medicines

The following minimum elements shall also be included as required:

- Controlled pick-up and receiving point/counter
- Area for review and recording orders
- Extemporaneous compounding area

When dispensing medication to outpatients forms part of the Operational Policy, provision should be made for consultation and patient education within the Pharmacy Unit.

Part B - Health Facility Briefing and Planning

APPENDICES

Pharmacy Generic Schedule of Accommodation

560 .29.00 Schedule of Accommodation for a hospital based Pharmacy Unit at Levels 3, 4, 5 and 6:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
AFTER HOURS DRUG STORE				1 x 8	1 x 8	1 x 8	
CLEANER'S ROOM	yes		1 x 4	1 x 4	1 x 4	1 x 4	
DISPATCH / COLLECTION					1 x 11	1 x 11	For Inpatient Units
DISPENSING - CLINICAL TRIALS					1 x 11 optional	1 x 11 optional	
DISPENSING - INPATIENT / OUTPATIENT			1 x 30	1 x 30	1 x 40	1 x 40	
DISPENSING -MANUFACTURE			1 x 20 optional	1 x 20	1 x 60	1 x 60	
DRUG INFORMATION			1 x 9	1 x 9	1 x 18	1 x 18	Reference / Resource area
GENERAL PREPARATION					1 x 30	1 x 30	
GENERAL PREPARATION WET AREA					1 x 9	1 x 9	
GOODS RECEIPT			1 x 5	1 x 5	1 x 14	1 x 14	
INTERVIEW ROOM	yes		1 x 9 optional	1 x 9 optional	1 x 9 optional	1 x 9 optional	Locate near entry
QUALITY CONTROL/ QUARANTINE					1 x 10	1 x 10	
RECEPTION	yes				1 x 10	1 x 10	Combine with Secretary's Workstation
STORE - ACTIVE / DISPENSING			1 x 9	1 x 9	1 x 24	1 x 24	
STORE - BULK			1 x 30	1 x 30	1 x 150	1 x 150	Includes area for pallet storage
STORE - FILES	yes		1 x 10	1 x 10	1 x 10	1 x 10	
STORE - IV FLUIDS					1 x 20	1 x 20	
STORE - REFRIGERATED			1 x 6	1 x 6	1 x 12	1 x 12	
STORE - SECURED			1 x 4	1 x 4	1 x 8	1 x 8	
CIRCULATION 25%			25	25	25	25	

560 .30.00 STERILE MAUNUFACTURING AREA

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks

Part B - Health Facility Briefing and Planning

AIRLOCK TO CLEAN ROOMS					2 x 8 optional	2 x 8 optional	
ANTEROOM	yes				1 x 8 optional	1 x 8 optional	Include additional area for storage of clean / sterile items if required
ASEPTIC ROOM					1 x 20 optional	1 x 20 optional	Sterile Manufacturing
CHANGE ROOM - STAFF	yes				1 x 8 optional	1 x 8 optional	Size according to staffing establishment
CYTOTOXIC ROOM					1 x 15 optional	1 x 15 optional	Cytotoxic Manufacturing
OFFICE - WORKSTATION	yes				4 x 6 optional	4 x 6 optional	Adjacent to Sterile Suite
STORE - STERILE STOCK	see remarks				1 x 7 optional	1 x 7 optional	Refer to Standard Component - Store-Sterile, Size as required by Operational Policy

560 .31.00 STAFF AREAS

Note: Offices are dependent on the Operational Policy/ management structure:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9 optional	1 x 9 optional	1 x 9 optional	Manager
OFFICE - SINGLE PERSON 9 M2	yes				2 x 9 optional	2 x 9 optional	Deputy; Assistant; Clinical Trials; According to Operational Policy & staffing establishment
OFFICE - WORKSTATION	yes				4 x 6 optional	4 x 6 optional	Pharmacists; According to staffing establishment

560 .32.00 SHARED AREAS

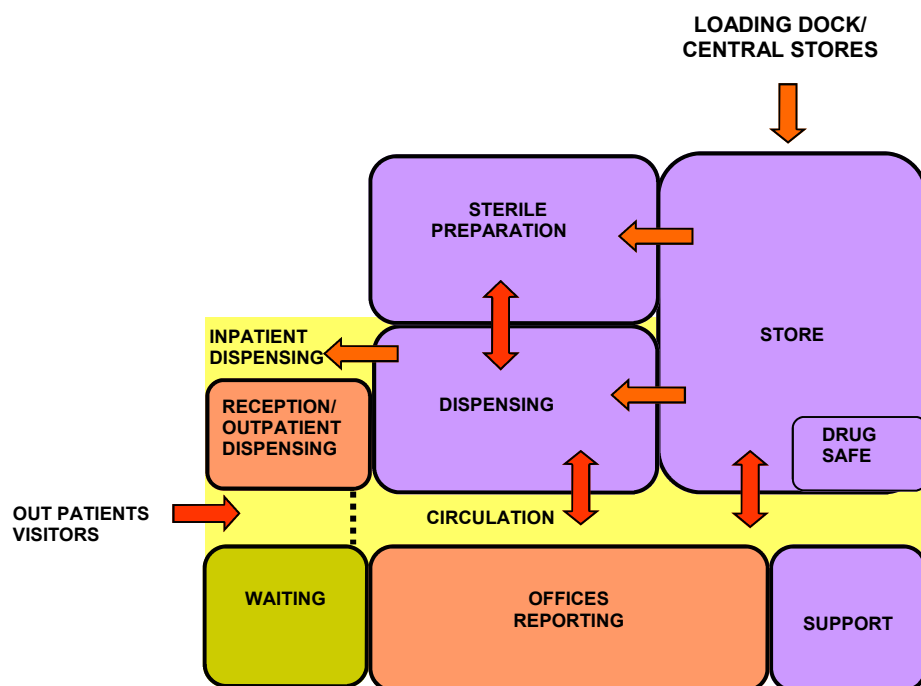
ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - WORKSTATION	yes				2 x 6	2 x 6	Dispensing Area
PROPERTY BAY - STAFF	yes		1 x 6	1 x 6	2 x 6	2 x 6	
STAFF ROOM	yes		1 x 15	1 x 15	2 x 15	2 x 15	
TOILET - STAFF	yes		1 x 2	1 x 2	2 x 2	2 x 2	
WAITING	yes		1 x 8	1 x 8	1 x 10	1 x 10	

References and Further Reading

- 560 .33.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.
 - NSW Health, Design Series 23, Health Building Guidelines - Pharmacy Unit, 1992.
 - Pharmacy Board - Victoria, Pharmacy Board Guidelines: Ward Dispensing Stations & Pharmacy Satellites in Hospitals, 2001.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - PHARMACY UNIT



Part B - Health Facility Briefing and Planning

590 PUBLIC AMENITIES UNIT

INDEX

Description

590 .1.00	INTRODUCTION Description
	PLANNING Functional Areas Functional Relationships
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

590 .2.00	<p>Larger hospitals may provide optional public amenities for the visitors' convenience and comfort. Some of the amenities may optionally be used by patients who are allowed to walk through the hospital. These amenities may include:</p> <ul style="list-style-type: none">- Florist- Kiosk / Coffee Shop- Gift Shop / Newsagent- Retail Pharmacy- Banks or agencies- Hairdresser- Others as considered viable <p>The above public amenities are not mandatory, however, when provided, they should comply with all relevant statutory and authority codes.</p> <p>Note: Most of the above public amenities occupy small areas compared with the size of an average hospital. Under the BCA, these small additional areas can be designed as if they were under class 9a.</p> <p>These guidelines require that the above public amenities, if provided, must be designed as part of a class 9a classification, unless prohibited by the BCA due to the area. All other requirements of these Guidelines also apply.</p>
590 .3.00	<p>The provision of a cool palatable water supply such as a cold water drinking unit is a mandatory requirement and should be situated in a convenient public location. Multiple units will be necessary to service large facilities. A minimum of one per floor shall be provided.</p> <p>Note: Each required cold water drinking unit on each floor may be replaced with a drinks vending machine, a Kiosk or a Coffee Shop.</p>

Part B - Health Facility Briefing and Planning

PLANNING

Functional Areas

- 590 .4.00 The Public Amenities Unit will consist of the following mandatory Functional Areas:
- Public Toilets
 - Disabled Toilets
 - Area and facilities for drinking water.

Functional Relationships

- 590 .5.00 The Public Amenities Unit should be located close to the Main Entrance with ready access to waiting areas and lifts.

COMPONENTS OF THE UNIT

Introduction

- 590 .6.00 The Public Amenities Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 590 .7.00 Provide the Standard Components as identified in this section and in the Schedule of Accommodation.

590 .8.00 TOILETS - PUBLIC

As a mandatory minimum requirement, every Hospital or Day Procedure Centre shall have at least one Disabled Unisex Toilet with a toilet pan and basin for the exclusive use of visitors.

Non-Standard Components

- 590 .9.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Service demand.

590 .10.00 VENDING MACHINE BAY

DESCRIPTION AND FUNCTION

Vending machines are a popular way of providing 24 hour per day consumer services to the public, patients and staff. The Vending Machine Bay will be a recessed area for the location of vending machines according to service demand and the Operational Policy.

Vending machines are not mandatory, however if provided, they will replace the requirement for a cold water drinking unit.

590 .11.00 LOCATION AND RELATIONSHIPS

It is advisable to locate vending machines in fully recessed alcoves off public corridors to eliminate the possibility of such machines blocking major corridor systems in breach of these Guidelines.

590 .12.00 CONSIDERATIONS

Part B - Health Facility Briefing and Planning

590.12.00

Some vending machines supplying drinks may require a floor waste or water connection. In addition to a standard GPO, some vending machines may also require a telephone line.

APPENDICES

Public Amenities Generic Schedule of Accommodation

590.13.00 A Generic Schedule of Accommodation for Public Amenities Unit for a Level 4 Hospital of 120 Beds:

ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
TOILET - DISABLED	yes			1 x 5			
TOILET - PUBLIC	yes			3 x 3			Male
TOILET - PUBLIC	yes			4 x 3			Female
BAY - VENDING MACHINE				1 x 3 optional			
CIRCULATION %				10			

590.14.00 RETAIL AREAS

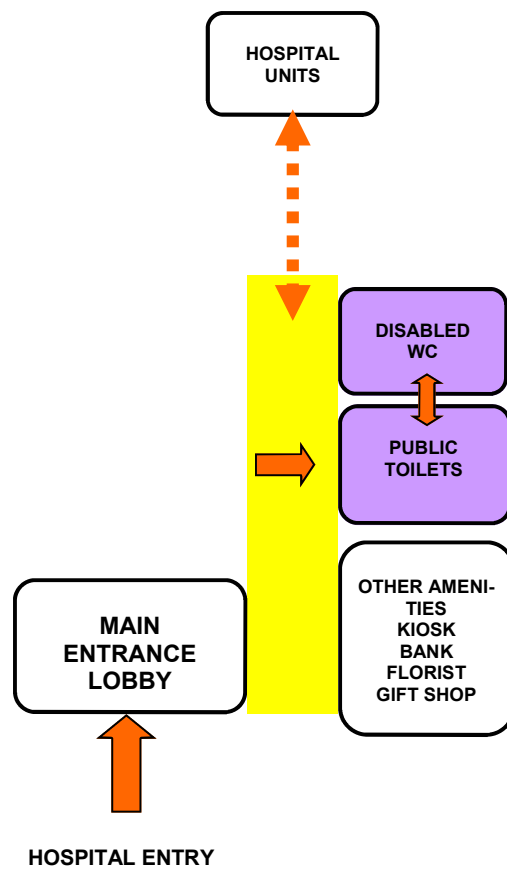
ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
COFFEE SHOP PREPARATION				1 x 12 optional			
COFFEE SHOP SEATING				1 x 50 optional			
COFFEE SHOP SERVERY				1 x 15 optional			
MIXED RETAIL SHOP				1 x 15 optional			

References and Further Reading

- 590.15.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - PUBLIC AMENITIES UNIT



Part B - Health Facility Briefing and Planning

600 RADIOTHERAPY UNIT

INDEX

Description

600 .1.00	INTRODUCTION Description
	PLANNING Functional Areas Functional Relationships
	DESIGN Safety and Security Building Service Components
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

600 .2.00	The Radiotherapy Unit may contain one or both electron beam therapy and radiation therapy. Although not recommended, a Simulation Room may be omitted in small linear accelerator facilities where other positioning geometry is provided.
	Room sizes and specifications for a Radiotherapy Unit should accommodate the equipment manufacturer's recommendations, as space requirements may vary from one machine to another and one manufacturer to another.

PLANNING

Functional Areas

600 .3.00	The Radiotherapy Unit may include the following Functional Areas: <ul style="list-style-type: none">- Reception, Waiting, Administrative and records areas- Patient Treatment areas including Radiotherapy Bunkers, Treatment Planning, Simulation, Holding area, Patient Toilet- Film processing and storage areas- Support Areas including Consult, Utilities, Cleaner's Room, Store, Disposal rooms- Staff Areas including Staff Station, Offices, Staff Change and Toilets.
600 .4.00	SUPPORT AREAS
	The following optional support areas may be required: <ul style="list-style-type: none">- Quality control area with illuminated X-ray viewing boxes- Computer control area normally located adjacent to the Radiotherapy Room entry- Dosimetry equipment area- Hypothermia Room (may be combined with an Examination Room)- Oncologist's Office (may be combined with Consultation Room)

Part B - Health Facility Briefing and Planning

- Physicist's Office (may be combined with Treatment Planning)
- Treatment Planning and Record Room.

600 .5.00 Provision shall be made for the following additional support areas for Linear Accelerator:

- Mould Room with exhaust hood and handbasin
- Block Room with storage (may be combined with the Mould Room).

600 .6.00 The Cobalt Room shall be provided with a Hot Laboratory.

600 .6.50 FILM STORAGE

Provision shall be made for a secure film storage area, and storage for unprocessed film.

Functional Relationships

600 .7.00 The Radiotherapy Unit should be located with ready access for ambulant patients and beds/trolleys. The Unit may be co-located with Medical Imaging Units. If intra-operative therapy is proposed, the Radiotherapy Unit should be located close to the Operating Unit or with a direct link.

A ground level location is preferred due to the weight of the equipment and shielding requirements, and for ease of installation and replacement.

DESIGN

Safety and Security

600 .9.00 RADIATION PROTECTION

Cobalt and linear accelerator rooms require radiation protection that may include concrete walls, floors and ceiling to a specified thickness. The radiation protection needs of the unit shall be assessed by a certified physicist or appropriate state agency. This assessment is to specify the type, location, and amount of protection to be installed in accordance with final approved department layout and equipment selection. The radiation protection requirements shall be incorporated into the final plans and specifications.

Building Service Requirements

600 .10.00 CONSTRUCTION STANDARDS

The flooring for a Radiotherapy Unit shall be adequate to meet the load requirements for equipment, patient, and personnel. Provision for cable ducts or conduits should be made in the floors and ceilings as required. Ceiling mounted equipment should have properly designed rigid support structures located above the finished ceiling. The minimum recommended ceiling height is 3 metres. A lay-in type of ceiling should be considered for ease of installation, service, and remodelling.

COMPONENTS OF THE UNIT

Introduction

- 600 .11.00 The Radiotherapy Unit will contain a combination of Standard Components and Non-Standard Components, according to the Level of Service.

Standard Components must comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 600 .12.00 Provide the Standard Components as identified in the Generic Schedules of Accommodation.

Non-Standard Components

- 600 .13.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 600 .14.00 DARKROOM

DESCRIPTION AND FUNCTION

A Darkroom shall be provided for film processing. Where daylight processing is used, the Darkroom may be minimal for emergency use.

The darkroom shall be a minimum of six m2.

- 600 .15.00 LOCATION AND RELATIONSHIPS

The Darkroom should be located with ready access to the daylight processing area, Treatment Room/s and the quality control area.

- 600 .16.00 CONSIDERATIONS

If automatic film processors are used, a receptacle of adequate size with hot and cold water for cleaning the processor racks shall be provided either in the Darkroom or nearby.

Room requirements will include:

- Sink and bench
- Safe light
- Film processing equipment
- Floor waste
- Light proof door seals and grilles

- 600 .17.00 FILM PROCESSING

DESCRIPTION AND FUNCTION

A film processing area is required to accommodate daylight processing equipment. The size of the film processing area may vary according to the number and type of processors to be installed.

- 600 .18.00 LOCATION AND RELATIONSHIPS

The Film Processing area should be located with ready access to Imaging Rooms, Darkroom and reporting areas.

Non-Standard Components

600 .19.00 CONSIDERATIONS

The Film Processing area will include the following:

- Daylight processing equipment installed to manufacturer's recommendations
- Deep sink for cleaning of processor racks
- X-ray viewing boxes, wall mounted for quality control checking of films

600 .20.00 RADIOTHERAPY BUNKER ROOM/S

DESCRIPTION AND FUNCTION

Radiotherapy Bunker Rooms include Cobalt Rooms, Linear Accelerator and Simulator Rooms, provide an area and equipment for patient radiation treatment.

The Bunker Rooms shall be sized in accordance with equipment and access requirements and shall accommodate a patient trolley.

600 .21.00 LOCATION AND RELATIONSHIPS

The Bunker Rooms should be located with ready access to Patient Waiting, Holding, Treatment Planning and support areas including film processing areas and utility rooms.

600 .22.00 CONSIDERATIONS

Layouts shall be designed to prevent radioactive particles from escaping. Openings into the room, including doors, ductwork, vents and electrical raceways and conduits shall be baffled to prevent direct exposure to other areas of the facility.

Services requirements including electrical, hydraulics, and air-conditioning will be according to the equipment manufacturer's specifications.

Part B - Health Facility Briefing and Planning

APPENDICES

Radiotherapy Generic Schedule of Accommodation

600.23.00 Schedule of Accommodation for Radiotherapy Unit for levels 5 & 6:

TREATMENT AREAS

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - HANDWASHING	yes				1 x 1	1 x 1	
CONTROL ROOM					2 x 8	3 x 8	
MOULDS / MASK ROOM					1 x 20 optional	1 x 20 optional	
RADIO THERAPY BUNKER ROOM					2 x 60	3 x 60	Room area dependent on equipment supplier, model and alignment within room
TREATMENT PLANNING (SIMULATOR)					1 x 42	1 x 42	
CIRCULATION %					30	30	

600.24.00 STAFF AREAS

Note: Offices are dependent on the Operational Policy/ staffing structure:

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Manager
OFFICE - SINGLE PERSON 9 M2	yes				1 x 9 optional	1 x 9 optional	Registrar
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Radiographer

600.25.00 SHARED AREAS

ROOM / SPACE	Standard Component				Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes				1 x 3	1 x 3	
CLEANER'S ROOM	yes				1 x 4	1 x 4	
CLEAN UTILITY	yes				1 x 12	1 x 12	
CONSULT ROOM	yes				2 x 12	4 x 12	
DARKROOM					1 x 6	1 x 6	
DIRTY UTILITY	yes				1 x 10	1 x 10	
FILM PROCESSING					1 x 15	1 x 15	
PATIENT BAY	yes				2 x 9	3 x 9	Holding Bays

Part B - Health Facility Briefing and Planning

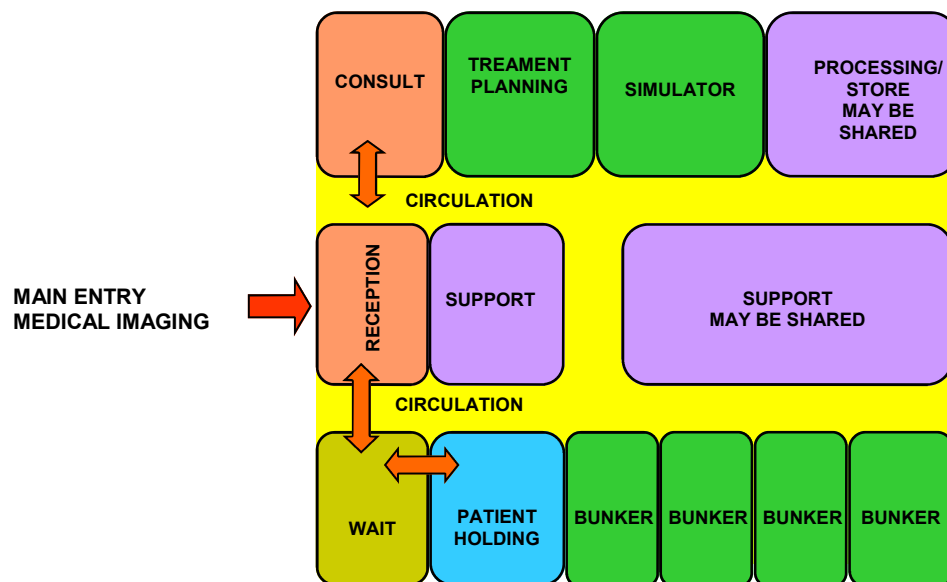
PROPERTY BAY - STAFF	yes				1 x 6	1 x 6	
RECEPTION	yes				1 x 10	1 x 10	
STAFF STATION	yes				1 x 14	1 x 14	
STORE - EQUIPMENT	yes				1 x 20	1 x 20	
STORE - FILES	yes				1 x 10	1 x 10	
STORE - GENERAL	yes				1 x 9	1 x 9	
TOILET - PATIENT	yes				1 x 4	3 x 4	With Change facilities
TOILET - STAFF	yes				1 x 2	1 x 2	
WAITING	yes				1 x 10	1 x 20	
X-RAY VIEWING AND REPORTING	yes				1 x 12	1 x 12	

References and Further Reading

- 600 .26.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - RADIOTHERAPY UNIT



Part B - Health Facility Briefing and Planning

610 REHABILITATION UNIT

INDEX

Description

- 610 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
General
Space Standards and Components
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 610 .2.00 The Rehabilitation Unit provides a multi disciplinary rehabilitation service care in which the clinical intent or treatment goal is to improve the functional status of a patient with an impairment, disability or handicap.
- 610 .3.00 Sub-acute inpatient services are time limited and goal oriented. The Sub-acute inpatient unit places great emphasis on encouraging patients out of bed, compared to inpatient units. Patients are encouraged to dress each day and not remain in pyjamas or gowns. The activities of patients during the day may be predominantly located in the Rehabilitation Therapy area.

PLANNING

Functional Areas

- 610 .4.00 The Rehabilitation Unit will include the following Functional Areas:
- Entry, Reception and waiting areas
 - Patient accommodation areas including Lounge and Dining areas
 - Patient Therapy areas which may be shared
 - Support areas including Utilities, Cleaner's Room, Disposal, Pantry and Store Rooms
 - Staff areas including Offices, Meeting Rooms, Staff Change and Toilets.
- 610 .5.00 ENTRY AREAS
- The entry canopy is required to provide dry access to the building. Design considerations include:
- Ensuring the covered area is large enough to allow vehicles such as taxis, buses, cars, and emergency vehicles to manoeuvre beneath it, and is structured to facilitate free concurrent traffic flow for multiple vehicles
 - The use of clear roofing material to maximise natural light inside the building.

Functional Areas

- 610 .6.00 The External Entrance Area, best sited at ground floor level, is the first point of contact for members of the community and should display clear directions informing people where to proceed. Design considerations include:
- Vehicle access is required at all times
 - Entry facilities should be suitable for people with disabilities, such as limited mobility and poor vision
 - The entry can incorporate an airlock space and may have sensor or automatically opening doors to facilitate access.

610 .7.00 PATIENT LOUNGE AREAS

A Lounge Area is required for therapeutic and social purposes. These include reading, writing and watching television or videos. The Lounge, Kitchenette and Dining Areas may be combined in a large Multi-purpose Day Room or in separate but adjacent areas.

610 .8.00 SERVICE AREAS

The service entry is required so that deliveries to the facility do not have to pass through the main entrance of the building. It may also provide ambulance service access and egress in emergency circumstances.

Design considerations include:

- An area large enough to allow vehicles including ambulances to turn and manoeuvre
- A large space with blank wall space for temporary storage of items such as linen or food trolleys, furniture or equipment for repair
- Access to soiled linen should only be available through the service entry or in large institutions separate zones may be available for the various utilities and deliveries
- Adequate infection control
- A loading bay that gives access for delivery staff and staff loading equipment and mobility aids into vehicles, located away from the client entry point.

610 .9.00 WHEELCHAIR PARKING

An area should be provided near the entrance for parking wheelchairs and electric scooters. The wheelchair parking area requires power outlets for recharging of electric wheelchairs and scooters when they are not in use. Cupboards may be provided over wheelchairs for additional storage.

Functional Relationships

- 610 .10.00 The Rehabilitation Inpatient Unit should be located at ground level with access to an outdoor area. To share facilities and services, the Rehabilitation Inpatient Unit should be adjacent to a Rehabilitation Day/ Allied Health therapy Area. The Unit should have easy access to Diagnostic, Speech Pathology and Social Work and Allied Health units.

DESIGN

General

- 610.11.00 The design philosophy of the Rehabilitation Unit should convey a friendly and inviting environment and should encourage community members to utilise the available facilities for rehabilitation purposes. A non-institutional, safe and supportive environment needs to be promoted. Building design must be flexible and adaptable to enable the unit to cater for varying client and service needs.
- 610.12.00 Buildings should be designed to cope with a wide range of possible conditions. The aim is to provide an environment that will allow the maximum mobility possible for each person. The Rehabilitation Unit will include access for the disabled as required in the BCA.

Space Standards and Components

- 610.13.00 Some examples of the average circulation space sizes required for ambulant people using the following mobility aids are:
- One person using a walking stick - 750 mm width
 - One person using elbow crutches - 900 mm width
 - One person using two walking sticks - 800 mm width
 - One person using crutches - 950 mm width
 - One person using walking frame - 900 mm width

COMPONENTS OF THE UNIT

Introduction

- 610.14.00 The Rehabilitation Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 610.15.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 610.16.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 610.17.00 DINING ROOM

DESCRIPTION AND FUNCTION

A Dining Room is required for patients to have meals, socialise and undertake recreational activities.

The Dining Room size will be dependent on the number of persons to be accommodated.

- 610.18.00 LOCATION AND RELATIONSHIPS

The Dining Room may be located adjacent to the Lounge area and should have ready access to inpatient and day patient areas, and patient toilets.

610.19.00 CONSIDERATIONS

Fittings and furniture for this area should include:

- Individual tables with seating for up to four people with space for wheelchairs
- Tables that have the capacity to be joined to seat up to 10 people
- Domestic style furnishings that may include sideboards and audio equipment
- Wall and door protection for chairs and wheelchairs.

Part B - Health Facility Briefing and Planning

APPENDICES

Rehabilitation Generic Schedule of Accommodation

610 .20.00 Schedule of Accommodation for an Inpatient Rehabilitation Unit at Levels 3/4 of 20 Beds and Levels 5/6 of 26 Beds:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
			20 Beds	20 Beds	26 Beds	26 Beds	
1 BED ROOM	yes		7 x 15	7 x 15	9 x 15	9 x 15	
1 BED - SPECIAL	yes		1 x 18 optional	1 x 18 optional	1 x 18 optional	1 x 18 optional	Transitional Bedroom
2 BED ROOM	yes		2 x 25 optional	2 x 25 optional	2 x 25 optional	2 x 25 optional	
4 BED ROOM	yes		2 x 42 optional	2 x 42 optional	3 x 42 optional	3 x 42 optional	
BAY - HANDWASHING	yes		2 x 1	2 x 1	3 x 1	3 x 1	In addition to handbasins in Bedrooms
BAY - LINEN	yes		1 x 2	1 x 2	1 x 2	1 x 2	
BAY - MOBILE EQUIPMENT	yes		3 x 4	3 x 4	3 x 4	3 x 4	Wheelchairs and trolleys
CLEANER'S ROOM	yes		1 x 4	1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes		1 x 12	1 x 12	1 x 12	1 x 12	
DINING ROOM			1 x 36	1 x 36	1 x 46	1 x 46	
DIRTY UTILITY	yes		1 x 10	1 x 10	1 x 10	1 x 10	
DISPOSAL ROOM	yes		1 x 8	1 x 8	1 x 8	1 x 8	
ENSUITE - SPECIAL	yes		2 x 7 optional	2 x 7 optional	2 x 7 optional	2 x 7 optional	
ENSUITE - STANDARD	yes		8 x 5	8 x 5	10 x 5	10 x 5	
LOUNGE - PATIENT	yes		1 x 15	1 x 15	2 x 15	2 x 15	
PANTRY	yes		1 x 8	1 x 8	1 x 8	1 x 8	
SHOWER - PATIENT	yes		2 x 4 optional	2 x 4 optional	2 x 4 optional	2 x 4 optional	For 4 Bed Rooms
STAFF STATION	yes		1 x 14	1 x 14	1 x 14	1 x 14	
STORE - EQUIPMENT	yes		1 x 20	1 x 20	1 x 20	1 x 20	
STORE - GENERAL	yes		1 x 9	1 x 9	1 x 9	1 x 9	
TOILET - DISABLED	yes		1 x 5	1 x 5	1 x 5	1 x 5	Patient & public use
TOILET - PATIENT	yes		2 x 4 optional	2 x 4 optional	2 x 4 optional	2 x 4 optional	For 4 Bed Rooms

Part B - Health Facility Briefing and Planning

CIRCULATION %			32	32	32	32	
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610 .21.00 STAFF AND SUPPORT AREAS

Note: Offices and Support Areas are dependent on the Operational Policy and management structure:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
ALLIED HEALTH AREAS	see remarks						Refer to Allied Health HPU
HYDROTHERAPY AREAS	see remarks						Refer to Allied Health HPU
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9 optional	1 x 9 optional	1 x 9 optional	1 x 9 optional	Manager
OFFICE - 2 PERSON SHARED	yes		1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional	Allied Health

610 .22.00 SHARED AREAS

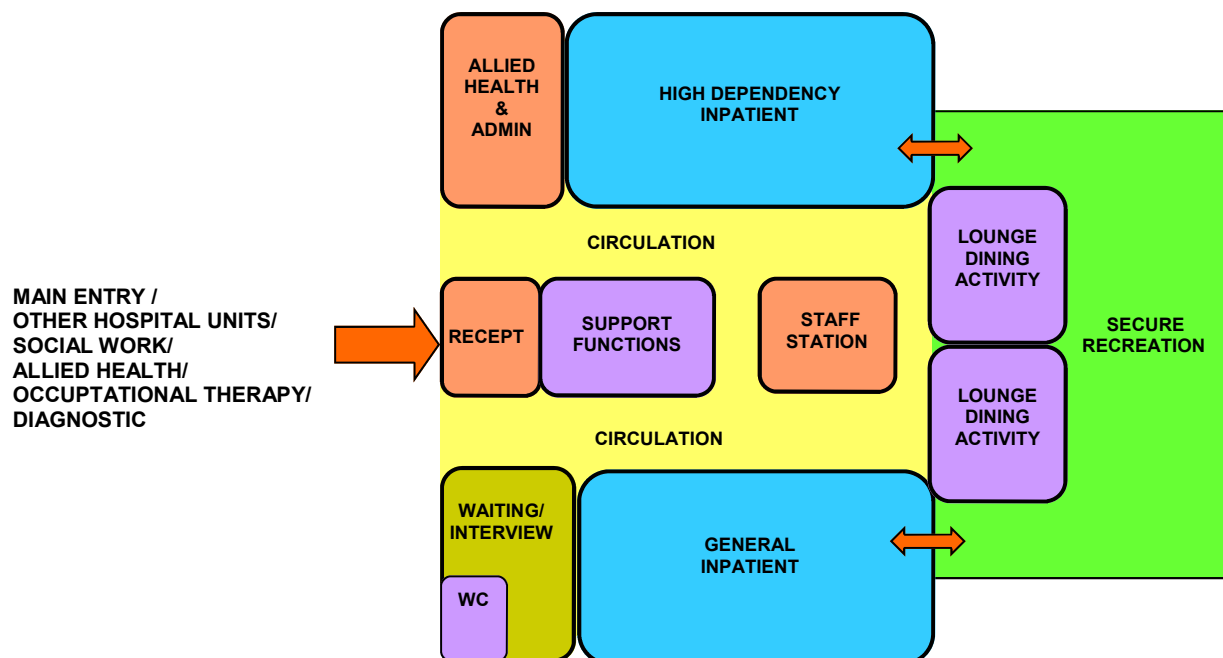
ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BATHROOM	yes		1 x 10	1 x 10	1 x 10	1 x 10	
INTERVIEW ROOM	yes		1 x 9	1 x 9	1 x 9	1 x 9	
MEETING ROOM	yes		1 x 15	1 x 15	1 x 15	1 x 15	
RECEPTION	yes		1 x 10	1 x 10	1 x 10	1 x 10	
STAFF ROOM	yes		1 x 15	1 x 15	1 x 15	1 x 15	
STORE - FILES	yes		1 x 10	1 x 10	1 x 10	1 x 10	
TOILET - PUBLIC	yes		1 x 3	1 x 3	1 x 3	1 x 3	Add 1 m2 if baby change facilities are to be included
TREATMENT ROOM	yes		1 x 15	1 x 15	1 x 15	1 x 15	
WAITNG	yes		1 x 5	1 x 5	1 x 5	1 x 5	

References and Further Reading

- 610 .23.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Department of Human Services, Victoria; Aged, Community & Mental Health Division, Community Rehabilitation Centres Generic Brief, 1999.
 - NSW Health, Design Standard 12- Health Building Guidelines, 20 Bed Assessment & Rehabilitation Inpatient Unit, 1992.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - REHABILITATION UNIT



Part B - Health Facility Briefing and Planning

620 RENAL DIALYSIS UNIT

INDEX

Description

620 .1.00	INTRODUCTION General
	PLANNING Functional Areas Functional Relationships
	DESIGN Infection Control Building Service Requirements
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

General

620 .2.00	The number of Dialysis Stations provided in a Renal Dialysis Unit shall be based upon the expected workload and may include several work shifts per day.
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PLANNING

Functional Areas

620 .3.00	The Renal Dialysis Unit may include the following Functional Areas: <ul style="list-style-type: none">- Reception, Waiting areas and Administrative areas including Clinical Records holding/ storage- Patient Treatment areas including Bedrooms, Isolation Rooms, open plan Bed Bays, Treatment Rooms- Support areas including Reprocessing Room (if applicable), Workshop/ Laboratory, plant areas, Utility Rooms, Store Rooms, Pantry, Cleaner's Room and Disposal- Staff areas including Staff Station, Offices, Meeting Rooms, Staff Change and Toilets.
620 .4.00	DIALYSIS TREATMENT AREA The Treatment Area may be an open area and shall be separate from Administrative and Waiting Areas. The open unit shall be designed to provide privacy for each patient. Storage for patients' belongings shall be provided.

Functional Relationships

620 .5.00	The location of a Renal Dialysis Unit shall offer convenient access for outpatients. Accessibility to the unit from parking and public transportation shall be a consideration.
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Part B - Health Facility Briefing and Planning

DESIGN

Infection Control

620 .6.00 HANDWASHING FACILITIES

Hand-washing facilities shall be convenient to the Staff Station and patient treatment areas. There shall be at least one hand-washing facility serving no more than four patient treatment bays. These shall be uniformly distributed to provide equal access from each bay.

Building Service Requirements

620 .7.00 WATER TREATMENT

The water treatment equipment shall be located in an enclosed room.

COMPONENTS OF THE UNIT

Introduction

620 .8.00 The Renal Dialysis Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

620 .9.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

620 .10.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

620 .11.00 REPROCESSING ROOM

DESCRIPTION AND FUNCTION

A Reprocessing Room is required if dialysers are reused to clean and store dialysers. The room shall be sized according to service demand.

620 .12.00 LOCATION AND RELATIONSHIPS

The Reprocessing Room should be located with ready access to patient treatment areas and water treatment plant areas.

620 .13.00 CONSIDERATIONS

Room requirements will include the following:

- A one-way flow of materials from soiled to clean is required
- Decontamination/cleaning areas including sinks, benches and processors
- Refrigerator for temporary storage of dialysers
- Computer and Label printers
- Packaging area
- Dialyser storage cabinets
- Handwashing basin.

Non-Standard Components

620 .14.00 WORKSHOP

DESCRIPTION AND FUNCTION

The Workshop may be provided for servicing and repairing dialysis machines and equipment.

The Workshop shall be a minimum of eight m2.

620 .15.00 LOCATION AND RELATIONSHIPS

The Workshop shall be located with ready access to patient treatment areas and plant areas.

620 .16.00 CONSIDERATIONS

Room requirements will include:

- Handwashing basin
- Deep service sink
- Workbench
- Storage cabinets or shelving
- Dialysis port, data and electrical outlets for testing of equipment.

Part B - Health Facility Briefing and Planning

APPENDICES

Renal Dialysis Generic Schedule of Accommodation

620.17.00 Schedule of Accommodation for a Renal Dialysis Unit at Levels 3/4 with 6 bed/chair spaces and at Levels 5/6 with 15 bed/chair spaces:

Note: Level 1/2 relates to a patient consultation service only; Level 6 is similar to Level 5 with the addition of teaching and research roles

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
			6 Chair	6 Chair	15 Chair	15 Chair	
1 BED ROOM - ISOLATION	yes				2 x 15 optional	2 x 15 optional	
BAY - BEVERAGE	yes		1 x 3	1 x 3	1 x 3	1 x 3	
BAY - HANDWASHING	yes		2 x 1	2 x 1	4 x 1	4 x 1	
BAY - LINEN	yes		1 x 2	1 x 2	1 x 2	1 x 2	
BAY - MOBILE EQUIPMENT	yes		1 x 4	1 x 4	2 x 4	2 x 4	
BAY - RESUS TROLLEY	yes		1 x 2	1 x 2	1 x 2	1 x 2	
CLEANER'S ROOM	yes		1 x 4	1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes		1 x 12	1 x 12	1 x 12	1 x 12	
DIRTY UTILITY	yes		1 x 10	1 x 10	1 x 10	1 x 10	
ENSUITE - STANDARD	yes		1 x 5 optional	1 x 5 optional	2 x 5	2 x 5	
PATIENT BAY	yes		6 x 9	6 x 9	15 x 9	15 x 9	With provisions for dialysis
REPROCESSING ROOM			1 x 15	1 x 15	1 x 15	1 x 15	
STAFF STATION	yes		1 x 14	1 x 14	1 x 14	1 x 14	
STORE - EQUIPMENT	yes		1 x 20	1 x 20	1 x 20	1 x 20	Also for dialysis fluids on heavy duty shelving
STORE - GENERAL	yes		1 x 9	1 x 9	1 x 9	1 x 9	
TOILET - PATIENT	yes		1 x 4	1 x 4	2 x 4	2 x 4	
TREATMENT ROOM	yes				1 x 15 optional	1 x 15 optional	
WATER TREATMENT PLANT			1 x 6	1 x 6	1 x 6	1 x 6	
WORKSHOP/ LABORATORY			1 x 8	1 x 8	1 x 15	1 x 15	
CIRCULATION %			32	32	32	32	

620.18.00 STAFF AND SUPPORT AREAS

Part B - Health Facility Briefing and Planning

Note: Offices and Support Areas are dependent on Operational Policy and management structure:

ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 9 M2	yes		1 x 9	1 x 9	1 x 9	1 x 9	Unit Manager
OFFICE - 2 PERSON SHARED	yes				1 x 12 optional	1 x 12 optional	Medical personnel, according to staffing establishment
TOILET - STAFF	yes		1 x 2	1 x 2	1 x 2	1 x 2	

620 .19.00 SHARED AREAS

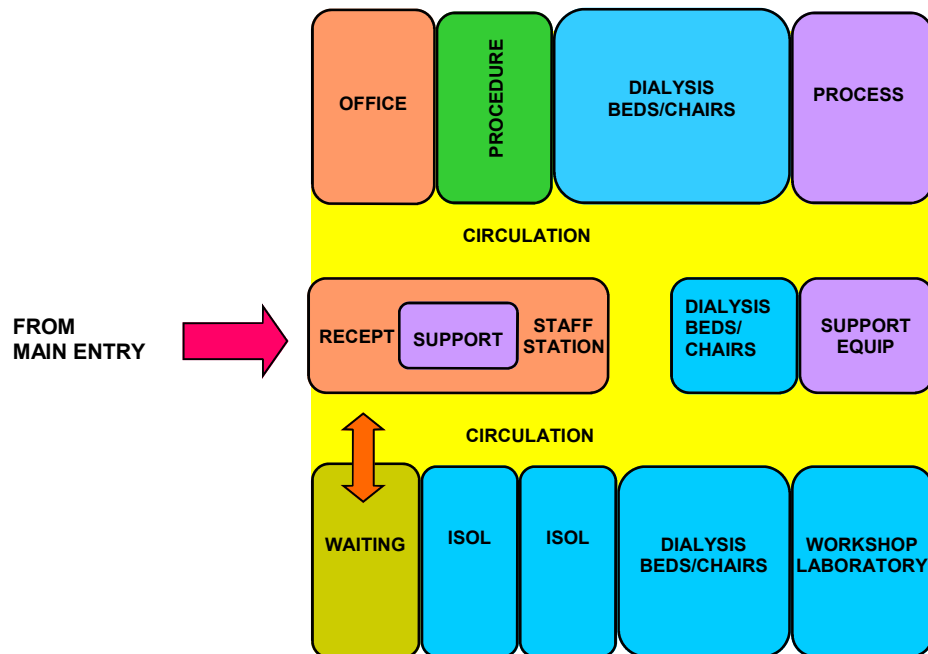
ROOM / SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes				1 x 3	1 x 3	Co-located with Staff Room
DISPOSAL ROOM	yes				1 x 8	1 x 8	
PROPERTY BAY - STAFF	yes		1 x 6	1 x 6	1 x 6	1 x 6	
RECEPTION	yes		1 x 10	1 x 10	1 x 10	1 x 10	
STAFF ROOM	yes		1 x 15	1 x 15	1 x 15	1 x 15	
TOILET - PUBLIC	yes		1 x 3	1 x 3	1 x 3	1 x 3	
WAITING	yes		1 x 10	1 x 10	1 x 10	1 x 10	

References and Further Reading

- 620 .20.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - RENAL DIALYSIS UNIT



Part B - Health Facility Briefing and Planning

630 SECURE EXTENDED CARE UNIT

INDEX

Description

630 .1.00	INTRODUCTION Description
	PLANNING Planning Models Functional Areas Functional Relationships
	DESIGN General Fixtures and Fittings Safety and Security
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

630 .2.00	Secure Extended Care Units generally provide a region wide service and are built on the same site/campus as one of the adult Acute Inpatient Units in the region.
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PLANNING

Planning Models

630 .3.00	In general, the planning of the Secure Extended Care Unit should provide for: <ul style="list-style-type: none">- The building to have a front and a back- Opportunities for privacy, recreation and self expression- Opportunities for movement/ambulation both indoors and outdoors with unobtrusive environmental boundaries and with appropriate safety provisions- Flexibility of space usage through consideration of a range of patient needs for personal and shared space- Clearly defined patient residential areas- An effective balance between opportunities for patient privacy and staff observation of patient behaviours- Clear delineation between patient and non-patient areas- Access to external sheltered space- Availability of visual information about the outdoor environment and weather conditions in all sleeping and living areas- Reduction of natural light with appropriate verandas/overhangs and pergolas to reduce glare- Appropriate landscape to ensure that views of surrounding areas from the building enhance feelings of well being in patient and staff.
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Functional Areas

630 .4.00 The Secure Extended Care Unit will consist of the following functional areas or zones:

- Entry and Reception Area
- Inpatient Accommodation area
- High Dependency Area
- Staff Offices / Administration area
- Staff Amenities

630 .5.00 ENTRY AND RECEPTION AREAS

The Reception will require clerical space for administrative tasks, receiving of patients, visitors, telephone calls and enquiries. Waiting Areas and a Visitors' Toilet - disabled should be located in this area.

630 .6.00 HIGH DEPENDENCY AREA

A High Dependency Area is required for patients at immediate risk of harming themselves, others or property. The High Dependency Areas shall comprise single Secure Bedrooms, Ensuite, a minimum of two Seclusion Rooms, a Quiet Sitting Area with access to a secured external area, and access to a Utility Room.

630 .7.00 The Secured Bedrooms will require:

- Sufficient space for up to eight persons while engaging in restraint procedures
- Security doors with deadbolts to secure top, middle and bottom
- Viewing panel with safety glass to doors with internal blind
- Doors to the Secure Room/s should open outwards.

630 .8.00 Fittings in the Secure Ensuite/s will afford protection from self injury and property damage. A small locked cupboard for soap and supplies may be included. The Ensuite door should be lockable and open outwards.

630 .9.00 The Quiet Lounge should have direct visual access from the Staff Station. Features will include:

- Toughened glass windows, double glazed with integral blinds
- Access to a secured external area.

630 .10.00 A secured courtyard is required to provide secure outdoor recreational space for patients in the High Dependency Area. The area should include:

- Solid fixed seating
- Durable, non toxic plants
- Secure fence/wall.

630 .11.00 OUTDOOR AREAS

The principal concept of planning external spaces should be to seek to integrate the new facility with its surrounds, and with the other buildings. Planning of external spaces must take into account the requirement for provision of a secure courtyard associated with the high dependency area, and an outside secure garden area for each of the living units. The outside secure garden areas should be large enough for up to ten patients to walk freely; at least one area should be large enough to accommodate larger numbers of patients and allow space for outdoor games such as volleyball or kicking football while still retaining space for other patients to be outside who may not be directly involved in the activity. These areas should include aesthetically pleasing furnishings and provide significant covered areas where patients can shelter from the elements and direct sunlight. .

Part B - Health Facility Briefing and Planning

The design of external areas, as for the building, should be domestic in nature, rather than formal or monumental, and should seek to play down the necessary security provision through appropriate planting strategies.

Functional Relationships

- 630 .12.00 To provide for maximum flexibility, it is essential that the Secure Extended Care Unit be located on one level. Due to the importance of access to external recreational spaces in the programs which will operate within the unit, it is necessary that the unit be located at ground level.
- 630 .13.00 The Secure Extended Care Unit should be adjacent to or in close proximity to the Adult Acute Unit. The entrance should be separated from other services, have different street frontage and be clearly identifiable.

DESIGN

General

- 630 .14.00 Some patients may at times exhibit disturbed or dangerous behaviour. Appropriate planning and use of materials such as safety glass and low maintenance/resilient surfaces, can achieve an environment where all patients can co-exist with minimal disruption to each other. The building should be able to accommodate patients of all levels of disturbance without taking on the characteristics of being enclosed.
- 630 .15.00 The ability to lock and unlock sections as required would need to be a design consideration.

Fixtures & Fittings

- 630 .16.00 Holland blinds and Venetian blinds should be avoided in patient areas. Curtain tracks and other fittings that provide potential for patients to hang themselves should be avoided.
- 630 .17.00 Light fittings, smoke/thermal detectors and air-conditioning vents to higher dependent areas, particularly Seclusion Rooms, should be vandal-proof.
- 630 .18.00 All doors should be a solid core type with knob type handles. Lever type handles should not be used due to a high incidence of damage to the levers when forced by patients whilst the door is locked.
- 630 .19.00 All glazing should be laminated or toughened glass of various thicknesses dependant on likelihood of damage.

Safety and Security

- 630 .20.00 The design/fabric should avoid the potential for the patient to do harm to themselves or others. Similarly, avoid the use of fixtures/finishes that could be used either as a weapon or to inflict personal damage. For example, paintings, mirrors and signage should be rigidly fixed to walls with tamper-proof fixings. Mirrors should be fully glued to a backing to prevent loose fragments becoming available if the mirror is broken.
- 630 .21.00 There should be a capacity to close off sections of the Secure Extended Care Unit to enable flexibility and provide a graduated level of care throughout. Each unit/activities area should be made secure and independent of each

Part B - Health Facility Briefing and Planning

other. The utility/treatment areas are to be locked when not in use.

All locks on doors should be keyed alike, to enable all staff to have access with a single key.

630 .22.00 The staff alert/alarm system should be easily accessible by staff and allow quick response from staff. An indicator board is to be mounted in the Staff Station. It should be clear and large enough to read easily.

630 .23.00 The Secure Extended Care Unit should have only one main entrance point. Other exits/entry doors are for designated 'service' purposes, such as linen/meal delivery, and for use in emergencies.

The garden fences shall be aesthetically pleasing. They should be high enough to prevent them from being climbed over, but still allow an optimum view beyond the garden. A lockable emergency/ service gate shall be incorporated in each garden's fence to allow for access in the event of fire, and so on.

Windows that can only be opened to a defined limited degree should be utilised to prevent unauthorised exit of patients from the unit.

COMPONENTS OF THE UNIT

Introduction

630 .24.00 The Secure Extended Care Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

630 .25.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

630 .26.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

630 .27.00 ACTIVITIES LOUNGE

DESCRIPTION AND FUNCTION

The Activities Lounge Area will provide an area where patients may relax and interact after finishing structured program activities.

The size of the Activity Lounge area will vary according to the number of persons to be accommodated.

630 .28.00 LOCATION AND RELATIONSHIPS

The lounge should have access to external recreation areas.

630 .29.00 CONSIDERATIONS

Furniture and fittings will include:

Part B - Health Facility Briefing and Planning

- Comfortable seating for up to 10 persons
- Coffee tables.

630 .30.00 ART AND CRAFT ROOM

DESCRIPTION AND FUNCTION

An Art and Craft Room will be required for specific inpatient activities such as pottery, drawing and painting.
The Art & Craft Room size will vary according to the Operational Policy.

630 .31.00 LOCATION AND RELATIONSHIPS

The Art and Craft Room will be located adjacent to and accessed from the Patient Lounge Area.

630 .32.00 CONSIDERATIONS

Fittings and furniture will include:

- Lockable walk in storage area for storage of art and pottery supplies
- A locked cupboard is required within the walk in storage area for chemicals such as turpentine and glazes
- A stainless steel trough and exhaust to remove fumes
- Laminated tables and chairs
- Telephone.

630 .33.00 DINING ROOM

DESCRIPTION AND FUNCTION

The Dining Room provides an area for inpatient dining and relaxation.
Provision should be made for a common dining area for the total unit population.
The Dining Room size will vary according to the number of persons to be accommodated.

630 .34.00 LOCATION AND RELATIONSHIPS

The Dining Room should be adjacent to the Patient Lounge and Kitchen.

630 .35.00 CONSIDERATIONS

Fittings and furniture will include:

- Tables and chairs
- Sideboard (optional).

630 .36.00 KITCHEN

DESCRIPTION AND FUNCTION

A Kitchen shall be provided, where meals can be prepared and served by patients as part of their rehabilitation.

630 .37.00 LOCATION AND RELATIONSHIPS

The Kitchen should be located adjacent to the Dining Room and with ready access to patient activities area.

Non-Standard Components

630 .38.00 CONSIDERATIONS

The Kitchen should be lockable by a stable type door. Fittings will include:

- Oven and hotplates (power must be key locked for safety purposes)
- Built-in dishwasher
- Refrigerator/freezer
- Benches with sink and cupboards for storage of utensils and supplies
- Telephone/intercom point.

630 .39.00 MEDICATION ROOM

DESCRIPTION AND FUNCTION

A Medication Room is required for storage, preparation and dispensing of medications.

The Medication Room shall be a minimum of 12 m2.

630 .40.00 LOCATION AND RELATIONSHIPS

The Medication Room should be located adjacent to the Consult Room and with access to both Low and High Dependency areas for dispensing to patients.

630 .41.00 CONSIDERATIONS

The Medication Room shall be lockable. Fittings and equipment will include:

- Bench with sink
- Lockable cupboards above and below bench for storage of drugs
- Lockable tall cupboard for storage of medications
- Drug safe inside cupboard
- Handbasin with lever taps, and paper towel and soap fittings
- Underbench drug refrigerators (up to two)
- Telephone
- Trolleys including medication, resuscitation
- Stable doors for dispensing of drugs to high dependency and low dependency areas.

630 .42.00 RECREATIONAL AREA

DESCRIPTION AND FUNCTION

The Recreational Area provides an indoor area where patients can play pool or table tennis.

The size of the Recreational Area may vary according to the number of persons to be accommodated and the type of activities to be included.

630 .43.00 LOCATION AND RELATIONSHIPS

The Recreational Area should be located in visual contact with the staff station and have access to external areas.

630 .44.00 CONSIDERATIONS

Fittings and furniture may include:

- Lockable storage cupboard for games equipment
- Pool table / table tennis table
- Tables and chairs for board games.

Part B - Health Facility Briefing and Planning

APPENDICES

S.E.C.U. Generic Schedule of Accommodation

630 .45.00 Schedule of Accommodation for a 22 Bed and 35 Bed Secure Extended Care Unit at Levels 4 and 5/6 respectively:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
				22 Bed	35 Bed	35 Bed	
1 BED ROOM - MENTAL HEALTH	yes			20 x 15	30 x 15	30 x 15	
ACTIVITIES LOUNGE				1 x 30	2 x 30	2 x 30	
ART AND CRAFT ROOM				1 x 20 optional	1 x 20 optional	1 x 20 optional	
BAY - HANDWASHING	yes			5 x 1	8 x 1	8 x 1	
BAY - LINEN	yes			1 x 2	2 x 2	2 x 2	
CLEANER'S ROOM	yes			1 x 4	1 x 4	1 x 4	
CLEAN UTILITY	yes			1 x 12	1 x 12	1 x 12	
CONSULT ROOM	yes			2 x 12	2 x 12	2 x 12	
DINING ROOM				1 x 14	1 x 60	1 x 60	
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	
DISPOSAL ROOM	yes			1 x 8	1 x 8	1 x 8	
ENSUITE - MENTAL HEALTH	yes			20 x 5	30 x 5	30 x 5	Fixtures and Fittings suitable for Mental Health patients
INTERVIEW ROOM	yes			2 x 12	2 x 12	3 x 12	Large - for family groups
KITCHEN				1 x 12	2 x 12	2 x 12	
LOUNGE - PATIENT	yes			1 x 30	1 x 45	1 x 45	
MEDICATION ROOM				1 x 12	1 x 12	1 x 12	
MEETING ROOM	yes			1 x 24	1 x 36	1 x 36	For Group Room activities; Adjoining Meeting Rooms with operable wall
MEETING ROOM - SMALL	yes			2 x 12	3 x 12	3 x 12	Quiet Room
RECEPTION	yes			1 x 10	1 x 10	1 x 10	
RECREATIONAL AREA				1 x 25 optional	1 x 25 optional	1 x 25 optional	
STAFF STATION	yes			1 x 14	1 x 14	1 x 14	
STORE - GENERAL	yes			1 x 9	1 x 9	1 x 9	
TOILET - DISABLED	yes			1 x 5	1 x 5	1 x 5	Public and patient use

Part B - Health Facility Briefing and Planning

TOILET - PATIENT	yes			2 x 4	4 x 4	4 x 4	
TREATMENT ROOM	yes			1 x 15	1 x 15	1 x 15	
WAITING	yes			1 x 5	1 x 5	1 x 5	
CIRCULATION %				35	35	35	

630 .46.00 HIGH DEPENDENCY AREA

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
1 BED ROOM - MENTAL HEALTH	yes			2 x 15	5 x 15	5 x 15	
ENSUITE - MENTAL HEALTH	yes			2 x 5	5 x 5	5 x 5	
QUIET SITTING ROOM				1 x 8 optional	1 x 12 optional	1 x 12 optional	
SECLUSION ROOM	yes			2 x 14	2 x 14	2 x 14	Level 4 is an Intensive Care Unit in a Private Health Facility

630 .47.00 STAFF AREAS

Note: Offices are dependent on the Operational Policy & staffing structure:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE - SINGLE PERSON 12 M2	yes				1 x 12 optional	1 x 12 optional	Director
OFFICE - SINGLE PERSON 12 M2	yes			1 x 12 optional	1 x 12 optional	1 x 12 optional	Psychiatrist, Registrar; according to staffing establishment
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9	1 x 9	1 x 9	Manager
OFFICE - 4 PERSON SHARED	yes			1 x 20 optional	1 x 20 optional	1 x 20 optional	Allied Health, according to staffing establishment

630 .48.00 SHARED AREAS

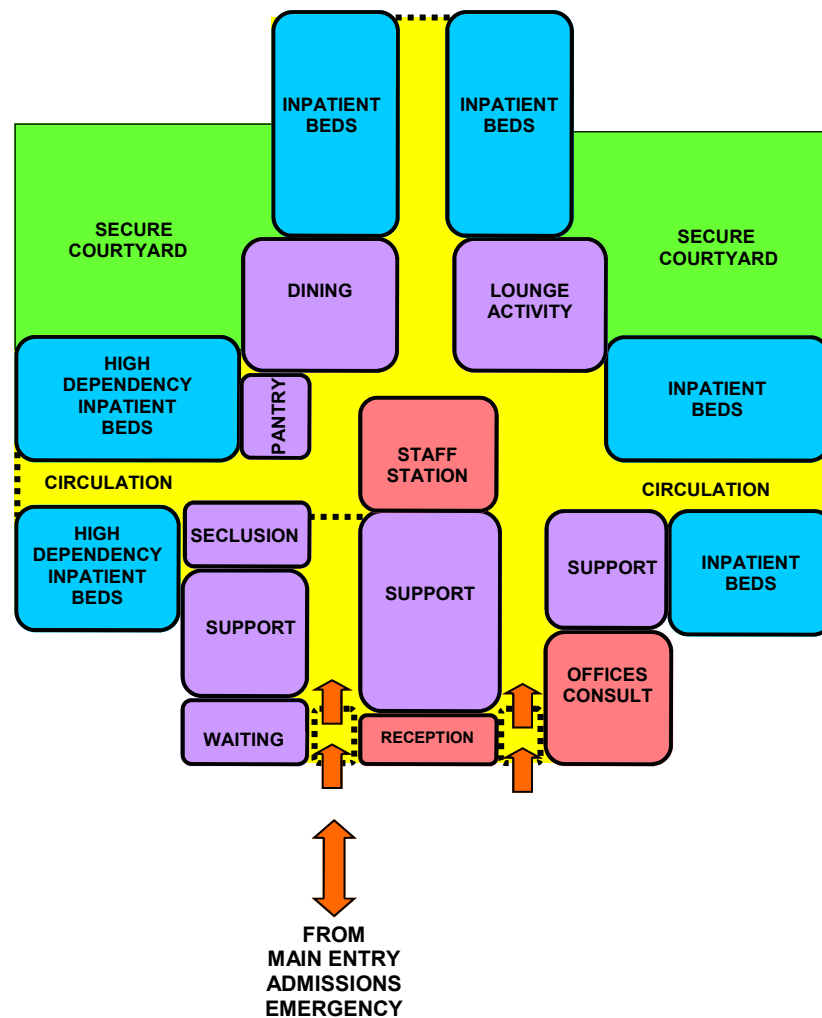
ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY - BEVERAGE	yes			1 x 3	1 x 3	1 x 3	Co-located with Staff Room
BATHROOM	yes			1 x 10	1 x 10	1 x 10	
DIRTY UTILITY	yes			1 x 10	1 x 10	1 x 10	
MEETING ROOM	yes			1 x 12	2 x 12	2 x 12	
PROPERTY BAY - STAFF	yes			1 x 6	1 x 6	1 x 6	
STAFF ROOM	yes			1 x 15	1 x 15	1 x 15	
TOILET - STAFF	yes			1 x 2	2 x 2	2 x 2	

References and Further Reading

- 630 .49.00 - Department of Human Services, Aged Community & Mental Health Division, Secure Extended Care Unit Generic Brief, 1999.
- Department of Human Services, Aged Community & Mental Health Division, Generic Brief for a Pysychogeriatric Nursing Home - 30 Bed, 1997.
 - NSW Health, Design Standard 26 Health Building Guidelines - Adult and Adolescent Mental Health Acute Inpatient Units, 2002.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - SECURE EXTENDED CARE UNIT



Part B - Health Facility Briefing and Planning

635 SPIRITUAL/ MEDITATION UNIT

INDEX

Description

- 635 .1.00 INTRODUCTION
Description
- PLANNING
Functional Relationships
- APPENDICES
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 635 .2.00 Depending on the size and nature (religious base) of the facility, it is highly desirable, but not mandatory, to provide an acoustically private Multi-use Room, or separate rooms with singular functions, for:
- Consoling distressed relatives
 - Confidential interviews
 - Multi-denominational religious services

PLANNING

Functional Relationships

- 635 .3.00 Location and outlook are important considerations in the planning of such a facility. The room must allow for easy access by disabled people.

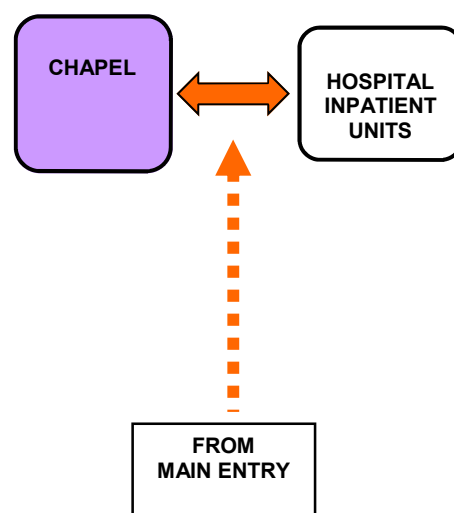
APPENDICES

References and Further Reading

- 635 .4.00 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - SPIRITUAL/MEDITATION UNIT



Part B - Health Facility Briefing and Planning

640 STAFF AMENITIES UNIT

INDEX

Description

- 640 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 640 .2.00 The Staff Amenities Unit provides facilities for the following staff functions:
- Changing
 - Secure storage of street clothing and valuables
 - Grooming/ hand-washing
 - Toileting
 - Showering
 - Relaxation (lounge)
 - Dining
- Staff is to be interpreted as meaning both employees and volunteers.
- 640 .3.00 Staff amenities described in this section shall be in addition to and separate from those required for specialist unit functional needs such as dedicated Change Rooms / Showers / Toilets and Lounges for Operating Unit, medical staff and facilities for public areas.

PLANNING

Functional Areas

- 640 .4.00 The Staff Amenities Unit will consist of the following Functional Areas:
- Staff Change Rooms
 - Staff Lounge
 - Staff Toilets and Showers
 - Staff Dining Room

Functional Relationships

- 640 .5.00 The Staff Amenities Unit should be located in a staff only accessed area of the facility. Staff Toilets should be located in close proximity to Staff Dining and Lounge areas. Staff Change should have ready access to arrival and exit points in the facility.

Part B - Health Facility Briefing and Planning

COMPONENTS OF THE UNIT

Introduction

- 640 .6.00 The Staff Amenities Unit may consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets and Room Layout Sheets.

Standard Components

- 640 .7.00 Provide the Standard Components as identified in this section and in the Schedule of Accommodation according to the Operational Policy and Functional Brief.

- 640 .8.00 CHANGE ROOM/S - STAFF

Hospitals shall provide Separate Change Rooms for male and female non-residential staff.

Refer to Standard Components in these Guidelines for the room description and details.

- 640 .9.00 TOILETS / SHOWERS - STAFF

Hospitals shall provide toilets, showers, and handbasins adjacent to the Staff Change and Staff Lounge in accordance with the following table:

ITEM		MALE	FEMALE
BASINS		1 per 15	1 per 15
SHOWERS		1 per 20	1 per 20
TOILETS		1 per 20	1 per 15
URINALS		1 per 10-25	N/A

- 640 .10.00 The number of persons either male or female is to be taken as the total number of persons commencing or finishing a period of duty at any one time. In the case of a Hospital that does not employ male staff on a regular basis, at least one toilet and handbasin shall be provided in a suitable location for use by tradesmen, maintenance staff, gardeners and the like.

Refer to Standard Components in these Guidelines for the room description and details.

- 640 .11.00 STAFF LOUNGE

The Staff Lounge should be located with views to the outside, and if feasible, access to outdoor areas. The Staff Lounge should incorporate facilities for relaxation, eating meals and preparation of hot beverages. This area may be co-located with Staff Dining Room.

Refer to Standard Components in these Guidelines for the room description and details.

Part B - Health Facility Briefing and Planning

Non-Standard Components

640.12.00 There are no Non-Standard Components in this Unit.

APPENDICES

Staff Amenities Generic Schedule of Accommodation

640.13.00 Schedule of Accommodation for a Staff Amenities Unit:

ROOM / SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CHANGE ROOM - STAFF	yes			1 x 60	required	required	Female
CHANGE ROOM - STAFF	yes			1 x 50	required	required	Male
SHOWER - STAFF	yes			2 x 2	required	required	Separate Male & Female
STAFF LOUNGE	see remarks			1 x 40	required	required	refer to Standard Component-Staff Room; May be combined with Staff Dining
TOILET - STAFF	yes			8 x 2	required	required	Separate Male & Female
CIRCULATION %				10	10	10	

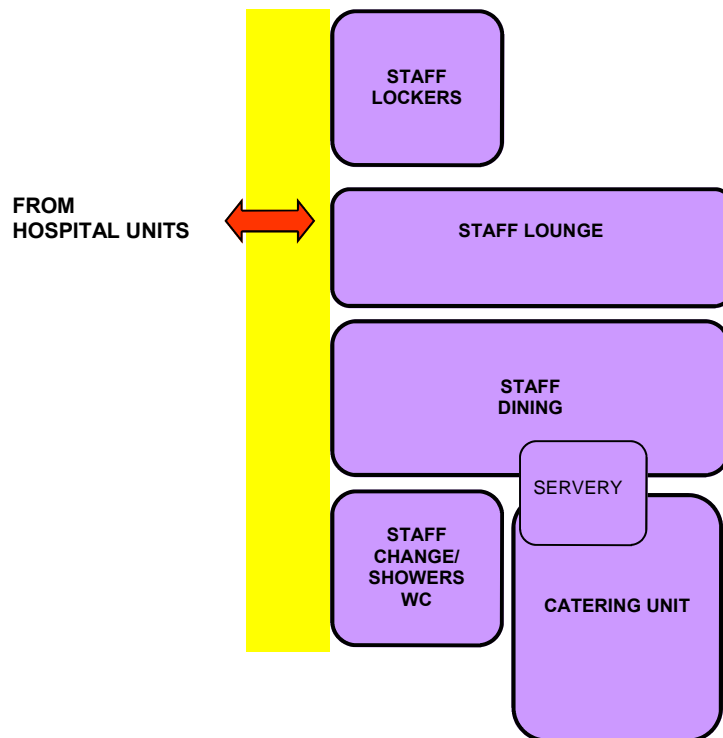
640.14.00 Numbers for Levels 5 & 6 have not been provided as these depend on each hospital's Brief and Operational Policy. A sample only, for a Level 4 Hospital of 120 Beds has been provided as a guide.

References and Further Reading

- 640.15.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Department of Human Services, Victoria, Design Guidelines for Private Hospital Buildings, 1987.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - STAFF AMENITIES UNIT



Part B - Health Facility Briefing and Planning

650 SUB-ACUTE CARE UNIT

INDEX

Description

650 .1.00	INTRODUCTION Description
	PLANNING Functional Areas Functional Relationships
	DESIGN General
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Schedule of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

Description

650 .2.00	Sub-acute Care is the specialised health care delivered to patients who need time rather than intensity and a mix of clinical and professional skills rather than management by a single or principal specialty. It is problem-focused rather than diagnosis-focused and is provided in the setting most appropriate to their individual needs.
650 .3.00	Sub-acute Care service comprises the following streams of care: - Geriatric Evaluation and Management - Rehabilitation - Ambulatory Care Services (Community Rehabilitation and Specialist Clinics).
650 .4.00	GERIATRIC EVALUATION AND MANAGEMENT (GEM) Geriatric Evaluation and Management is care in which the clinical intent or treatment goal is to maximise health status and/or optimise the living arrangements for a patient with multi-dimensional medical conditions associated with disabilities and psychosocial problems, who is usually (but not always) an older patient. This may also include younger adults with clinical conditions generally associated with old age. This care is usually evidenced by multi-disciplinary management and regular assessment against a management plan that is working towards negotiated goals within indicative time frames. Geriatric evaluation and management includes care provided in a GEM unit, in a designated GEM program, under the principal clinical management of a Geriatrician, and in the opinion of the treating doctor, when the principal clinical intent of care is GEM.
650 .5.00	REHABILITATION PROGRAM Rehabilitation is care in which the clinical intent or treatment goal is to improve the functional status of a patient with an impairment, disability or handicap. It is usually evidenced by a multi-disciplinary rehabilitation plan comprising negotiated goals and indicative time frames, which are evaluated by a periodic assessment using a recognised functional assessment measure.

Part B - Health Facility Briefing and Planning

It includes care provided in a designated rehabilitation unit; under the principal clinical management of a rehabilitation physician, or in the opinion of the treating doctor, when the principal clinical intent of care is rehabilitation.

Refer to Rehabilitation Unit for a detailed description of unit requirements and accommodation.

650 .6.00 SUB-ACUTE AMBULATORY CARE SERVICES

Sub-acute ambulatory care based services are delivered in a person's home or at a community rehabilitation centre.

Sub-acute care in the community is typified as a person-focused, interdisciplinary model of care, which is oriented towards flexible service delivery in a range of care settings (for example Community Rehabilitation Centres). Its aim is to improve and maintain a person's functional capacity and maximise their independence.

Sub-acute ambulatory care based services provide the following:

- A flow of care, where therapy in a community setting follows up an inpatient episode of care
- Time-limited, goal-centred episodes of care aimed at improving health outcomes
- The ability to reduce admissions and readmissions to inpatient services by providing people with home-based or centre-based therapeutic interventions that prevent the deterioration of an existing condition and/or improve functionality
- Therapy to people to assist them in achieving the maximum level of reintegration into their community after an inpatient episode.

650 .7.00 COMMUNITY REHABILITATION CENTRES

Community Rehabilitation Centres (CRCs) provide a multidisciplinary rehabilitation service to enable clients who are disabled, frail, chronically ill or recovering from traumatic injury to achieve and retain optimal functional independence.

The range of sub-acute specialist clinics includes:

- Continence clinics
- Cognitive Dementia and Memory
- Service (CDAMS) clinics; Falls and Mobility clinics
- Pain management clinics.

PLANNING

Functional Areas

650 .8.00 SETTINGS OF CARE

Sub-acute Care will include:

- Admitted patient/bed base care, delivered through:
 - Identified sub-acute beds within acute health services
 - Centres Promoting Health Independence
- Sub-acute community-based services, delivered through:
 - Community Rehabilitation Centres
 - Specialist Clinics
 - Centres Promoting Health Independence
 - The person's home.

650 .9.00 ADMINISTRATIVE & ENTRY AREAS

These areas comprise the:

Part B - Health Facility Briefing and Planning

- Entry / Lobby, Reception / Waiting Area and Toilets
- Clinical / health records, computers, printers, photocopier and store
- Multi-use Interview Room
- Executive and administrative offices
- Multi-use Meeting Room and beverage preparation.

650 .10.00 CLINICAL / HEALTH RECORDS

The clinical records storage space should be located adjacent to the administrative areas, accessible to reception and clinical staff, particularly night nursing staff.

650 .11.00 FAMILY FACILITIES

A multi-function space for use as a family sitting area or interview/ counselling may be required. Fittings and furniture may include the following:

- Lounge chairs, or table and chairs
- Access to tea/coffee making facilities is desirable
- Sufficient power for appliances and television.

650 .12.00 LIBRARY / RESOURCE FACILITIES

An area is required for Library / resource material. Larger facilities may have a specified room for this purpose; smaller services may incorporate this facility into other areas such as the Meeting Room or Waiting Area.

650 .13.00 PANTRY

A Pantry may be required for the storage, preparation and cooking of food. The function of the Pantry will vary depending on whether there is a central Kitchen on site. The Pantry may need to function as an ADL training Kitchen.

650 .14.00 PATIENT LOUNGE

A Lounge is required where patients may relax and socialise. Lounge, Dining and Kitchen areas may be combined into one open space or in separate but adjacent areas. Patient Toilets should be located in close proximity.

650 .15.00 RECEPTION AREA

The Reception Area is the main arrival and exit point of the building. This space may also function as a Waiting Area. Clerical office space for receiving of patients, visitors, telephone calls and enquiries will be situated in this area. The Reception Area is located at the entry of the Sub-acute Care Inpatient Unit and should be in close proximity to administrative office personnel.

Functional Relationships

650 .16.00 Sub-acute Care Unit will require easy access for patients and visitors with limited mobility.

The Sub-acute Inpatient Unit should be in close proximity to the Allied Health / Treatment area.

DESIGN

General

- 650 .17.00 The design should provide an environment that will allow the maximum mobility for each person, particularly the increasing number of patients who are frail and require assistance from one or more staff.

The design should also accommodate patients with sensory impairments. The use of cues, orientation, colour, material surface changes and details such as varying the corridor widths or change in direction assist in providing a built environment in which the patient feels comfortable and secure.

COMPONENTS OF THE UNIT

Introduction

- 650 .18.00 The Sub-acute Care Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 650 .19.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 650 .20.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 650 .21.00 DINING ROOM

A Dining Room is required for patients to have meals and socialise.

The Dining Room size will be dependent on the number of persons to be accommodated.

- 650 .22.00 LOCATION AND RELATIONSHIPS

The Dining Room may be located adjacent to the Lounge and Kitchen areas and should have ready access to patient toilets.

- 650 .23.00 CONSIDERATIONS

Fittings and furniture for this area should include:

- Individual tables with seating for up to four people with space for wheelchairs
- Domestic style furnishings
- Wall and door protection for chairs and wheelchairs.

- 650 .24.00 MULTI-PURPOSE ACTIVITY AREA

DESCRIPTION AND FUNCTION

A Multi-purpose Activity Area is required for inpatients and outpatients to participate in therapeutic and social activities during the day.

Part B - Health Facility Briefing and Planning

Non-Standard Components

650 .25.00 LOCATION AND RELATIONSHIPS

The Multi-purpose Activity Area should be located with ready access to inpatient and outpatient areas. Direct access to an external area is desirable.

650 .26.00 CONSIDERATIONS

Fittings and furniture will include:

- Lockable cupboards for storage of materials or equipment
- Chairs suitable for table activities and relaxation
- A whiteboard and pinboard
- A wall that may be used for projection
- Computer cabling if computer activities are to be included
- Television outlet and television.

For additional room considerations refer to Standard Component - Meeting Room - Medium/ Large.

APPENDICES

Sub-acute Care Generic Schedule of Accommodation

650 .27.00 Schedule of Accommodation for Sub-acute Care Facilities of 10, 20 30 and 40 Beds:

ENTRY & ADMINISTRATIVE AREA

ROOM / SPACE	Standard Component	10 Bed Qty x m2	20 Bed Qty x m2	30 Bed Qty x m2	40 Bed Qty x m2		Remarks
BAY - MOBILE EQUIPMENT	yes	2 x 4	3 x 4	4 x 4	4 x 4		Wheelchairs and trolleys
ENTRY LOBBY		1 x 6	1 x 6	1 x 8	1 x 8		
INTERVIEW ROOM	yes	1 x 12	1 x 12	1 x 12	2 x 12		Large for family groups
RECEPTION	yes	1 x 15	1 x 20	2 x 25	2 x 25		Area dependent on numbers of staff to be accommodated
STORE - FILES	yes	1 x 10	1 x 10	1 x 12	1 x 14		Clinical Records; area dependent on quantity of records to be held
STORE - PHOTOCOPY / STATIONERY	yes	1 x 8	1 x 8	1 x 8	1 x 8		
TOILET - DISABLED	yes	1 x 5	1 x 5	1 x 5	2 x 5		Public
WAITING	yes	1 x 15	1 x 20	1 x 24	1 x 24		

650 .28.00 INPATIENT AREAS

ROOM / SPACE	Standard Component	10 Bed Qty x m2	20 Bed Qty x m2	30 Bed Qty x m2	40 Bed Qty x m2		Remarks
1 BED ROOM	yes	7 x 15	15 x 15	23 x 15	30 x 15		
1 BED ROOM - SPECIAL	yes	1 x 18 optional	1 x 18 optional	1 x 18 optional	1 x 18 optional		
2 BED ROOM	yes	1 x 25	2 x 25	3 x 25	4 x 25		

Part B - Health Facility Briefing and Planning

ADL KITCHEN	yes	1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional		
ADL BATHROOM	yes	1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional		
BAY - FLOWERS	yes	1 x 2 optional	1 x 2 optional	2 x 2 optional	2 x 2 optional		
BAY - HANDWASHING	yes	2 x 1	3 x 1	3 x 1	4 x 1		In addition to handbasins in Bedrooms
BAY - LINEN	yes	1 x 2	1 x 2	2 x 2	2 x 2		
BAY - RESUS TROLLEY	yes	1 x 2	1 x 2	1 x 2	1 x 2		
CLEANER'S ROOM	yes	1 x 4	1 x 4	1 x 4	1 x 4		
CLEAN UTILITY	yes	1 x 12	1 x 12	1 x 12	2 x 12		
DINING		1 x 20	1 x 30	2 x 20	2 x 30		
DIRTY UTILITY	yes	1 x 10	1 x 10	2 x 10	2 x 10		
DISPOSAL ROOM	yes	1 x 8	1 x 8	1 x 8	2 x 8		
ENSUITE - STANDARD	yes	8 x 5	17 x 5	26 x 5	34 x 5		
ENSUITE - SPECIAL	yes	1 x 7	1 x 7	1 x 7	1 x 7		
LOUNGE - PATIENT	yes	1 x 15	2 x 15	3 x 15	4 x 15		
MEETING ROOM - LARGE	yes	1 x 30 optional	1 x 30 optional	1 x 30 optional	1 x 30 optional		Multi-use, for Activities
MEETING ROOM - SMALL	yes	1 x 12	2 x 12	3 x 12	4 x 12		Quiet Sitting Room
PANTRY	yes	1 x 8	1 x 8	2 x 8	2 x 8		Including oven, grill, cooktop and rangehood
STAFF STATION	yes	1 x 14	1 x 14	2 x 14	2 x 14		
STORE - GENERAL	yes	1 x 9	1 x 9	1 x 9	1 x 9		
STORE - EQUIPMENT	see remarks	1 x 10	1 x 10	1 x 20	1 x 20		Refer to Standard Component - Store - Equipment; size according to amount of
TOILET - PATIENT	yes	1 x 4	2 x 4	3 x 4	4 x 4		Locate near Dining / Activities areas
TREATMENT ROOM	yes	1 x 15	1 x 15	1 x 15	1 x 15		
CIRCULATION %		32	32	32	32		

650 .29.00 STAFF AND SUPPORT AREAS

Note: Offices and Support Areas are dependent on the Operational Policy and management structure:

ROOM / SPACE	Standard Component	10 Bed Qty x m2	20 Bed Qty x m2	30 Bed Qty x m2	40 Bed Qty x m2	Remarks
OFFICE - SINGLE PERSON 12 M2	yes	1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional	Director

Part B - Health Facility Briefing and Planning

OFFICE - SINGLE PERSON 9 M2	yes	1 x 9	1 x 9	1 x 9	1 x 9		Unit Manager
OFFICE - 2 PERSON SHARED	yes	1 x 12 optional	1 x 12 optional	1 x 12 optional	2 x 12 optional		Administrative functions, according to staffing establishment
TOILET - STAFF	yes	1 x 2	1 x 2	2 x 2	2 x 2		

650 .30.00 COMMUNITY REHABILITATION CENTRE & SUPPORT AREAS

Note: Provision of clinic rooms for Specialist Clinics is dependent on the Operational Policy and service provision of the facility.

ROOM / SPACE	Standard Component	8 EFT Qty x m2	12 EFT Qty x m2	16 EFT Qty x m2	20 EFT Qty x m2		Remarks
AUDIOLOGY STORE				1 x 4 optional	1 x 4 optional		
CRAFT ROOM		1 x 20 optional	1 x 20 optional	1 x 20 optional	1 x 20 optional		
GERODONTAL		1 x 20 optional	1 x 20 optional	1 x 20 optional	1 x 20 optional		
OCCUPATIONAL THERAPY		1 x 40 optional	1 x 80 optional	1 x 80 optional	1 x 120 optional		
OFFICE - SINGLE PERSON 12 M2	yes	1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional		Audiology
ORTHOTICS WORK ROOM		1 x 6 optional	1 x 6 optional	1 x 6 optional	1 x 6 optional		
PATIENT BAY	yes	1 x 9	1 x 9	1 x 9	2 x 9		Physiotherapy Cubicles
PHYSIOTHERAPY GYMNASIUM	see remarks	1 x 70	1 x 100	1 x 100	1 x 140		Refer to Standard Component - Gymnasium; Size according to Operational Policy
PODIATRY		1 x 15 optional	1 x 15 optional	1 x 15 optional	1 x 15 optional		
PODIATRY STORE				1 x 4 optional	1 x 4 optional		
SPEECH PATHOLOGY		1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional		
SPLINT ROOM		1 x 12 optional	1 x 12 optional	1 x 12 optional	1 x 12 optional		
STORE - EQUIPMENT	see remarks	1 x 10 optional	1 x 15 optional	1 x 15 optional	1 x 20 optional		Occupational Therapy equipment; Refer to Standard Component Store - Equipment
STORE - EQUIPMENT	see remarks	1 x 8 optional	1 x 10 optional	1 x 10 optional	1 x 17 optional		Physiotherapy equipment; Refer to Standard Component Store - Equipment
URODYNAMICS		1 x 16 optional	1 x 16 optional	1 x 16 optional	1 x 16 optional		

650 .31.00 SHARED AREAS

ROOM / SPACE	Standard Component	10 Bed Qty x m2	20 Bed Qty x m2	30 Bed Qty x m2	40 Bed Qty x m2		Remarks
BATHROOM	yes	1 x 10	1 x 10	1 x 10	2 x 10		
BAY - BEVERAGE	yes	1 x 3	1 x 3	1 x 3	1 x 3		Co-locate with Staff Room
EXTERNAL TREATMENT AREA		1 x 150	1 x 150	1 x 150	1 x 150		
LIBRARY / RESOURCE AREA				1 x 10	1 x 10		

Part B - Health Facility Briefing and Planning

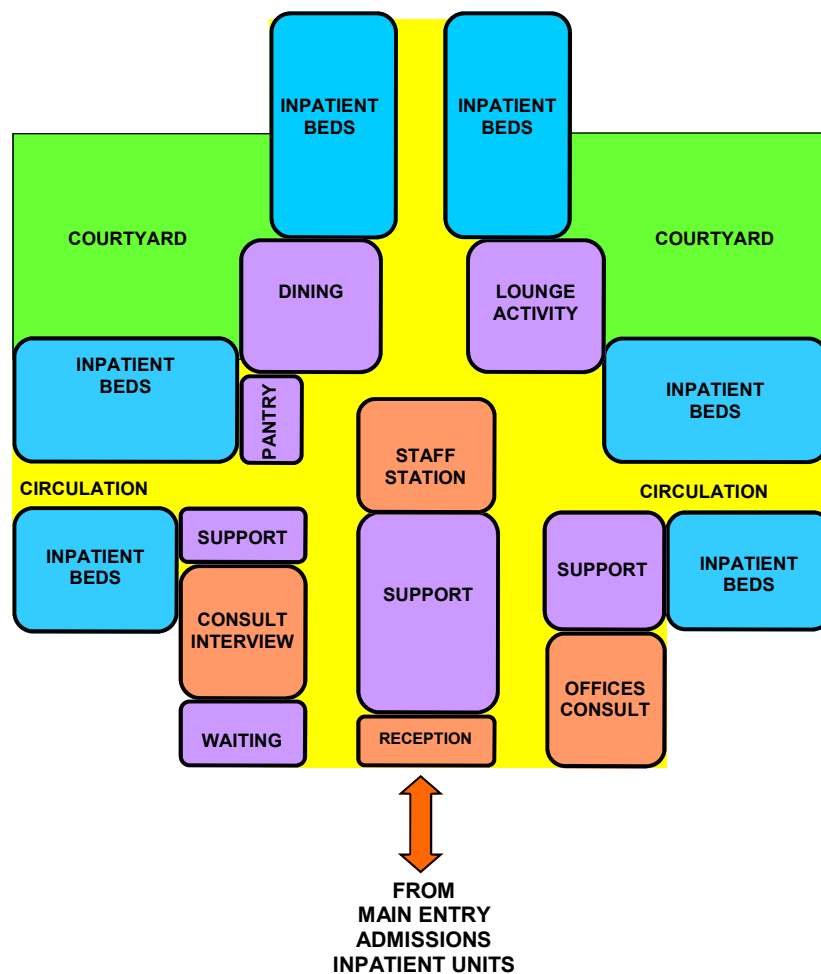
MEETING ROOM - LARGE	yes	1 x 30	1 x 30	1 x 30	1 x 30		
PROPERTY BAY - STAFF	yes	1 x 6	1 x 6	2 x 6	2 x 6		
STAFF ROOM	yes	1 x 15	1 x 15	1 x 15	1 x 15		

References and Further Reading

- 650 .32.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- Department of Human Services, Aged, Community & Mental Health Division, Sub-acute Care Facilities and Specialist Clinics Generic Brief, 2000.
 - Department of Human Services, Aged, Community & Mental Health Division, Hospice Unit Generic Brief, 1999.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - SUB ACUTE CARE UNIT



Part B - Health Facility Briefing and Planning

660 SUPPLY UNIT

INDEX

Description

- 660 .1.00 INTRODUCTION
Description
- PLANNING
Functional Areas
Functional Relationships
- DESIGN
Safety and Security
- COMPONENTS OF THE UNIT
Introduction
Standard Components
Non-Standard Components
- APPENDICES
Generic Schedule of Accommodation
References and Further Reading
Functional Relationships Diagram

INTRODUCTION

Description

- 660 .2.00 The Supply Unit shall provide for the following functions:
- Purchase and receipt of equipment and bulk medical supplies
 - Storage of bulk dry goods, consumables, intravenous fluids, drugs and flammable liquids
 - Storage of surplus hospital equipment and equipment awaiting repairs
 - Deliveries to hospital units for regular restocking of unit based supplies.

PLANNING

Functional Areas

- 660 .3.00 The Supply Unit may consist of the following Functional Areas:
- Loading Dock
 - Receivals area
 - Despatch areas for stock awaiting collection
 - Storage areas which may include bulk stores, palletted supplies, flammable stores, furniture and equipment and gas bottles
 - Staff areas including Offices, Workstations and access to Staff Change and Toilets.

660 .4.00 STORAGE AREAS - OUTPATIENTS

Additional storage areas for Outpatients shall be provided in an amount not less than 5 percent of the total area of the Outpatient Facilities. This may be combined with and in addition to the general stores or be located in a central area within the Outpatient Unit. A portion of this storage may be provided off-site.

Functional Relationships

- 660 .5.00 The Supply Unit may be located in a separate building on-site, but the preferred location is within the main building. A portion of the storage may be

Part B - Health Facility Briefing and Planning

located off-site. Protection against inclement weather during transfer of supplies shall be provided. Fire protection and security are important considerations.

DESIGN

Safety and Security

- 660 .6.00 All entrances and exists shall be secured. An intercom or call bell should be located at the dock entrance area to announce deliveries when doors are closed.

COMPONENTS OF THE UNIT

Introduction

- 660 .7.00 The Supply Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 660 .8.00 Provide the Standard Components as identified in the Generic Schedule of accommodation.

Non-Standard Components

- 660 .9.00 Provide the Non Standard Components as described in this section and in the Schedule of Accommodation, according to Operational Policy and Functional Brief.

- 660 .10.00 RECEIVALS AREA

DESCRIPTION AND FUNCTION

A dedicated Receivals Area shall be provided for the receipt, checking, sorting and temporary holding of incoming stock. The Receivals Area will require off street unloading facilities.

- 660 .11.00 LOCATION AND REALTIONSHPIS

The Receivals Area shall be located adjacent to the Loading Dock and with ready access to the Bulk Store.

- 660 .12.00 CONSIDERATIONS

Security for incoming stock will require consideration. Visual control of the area from the Store Manager's office is recommended.

The Receivals Area may include a workstation with computer.

Part B - Health Facility Briefing and Planning

APPENDICES

Supply Generic Schedule of Accommodation

660.13.00 The Schedule of Accommodation for a Supply Unit suitable for a Level 4 Hospital of 120 Beds:

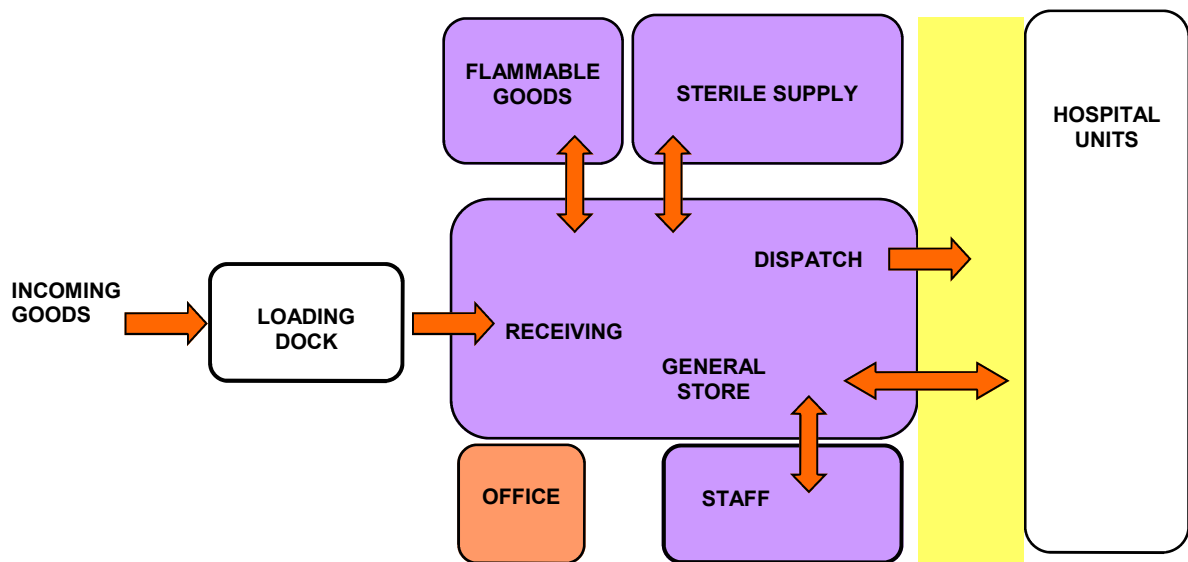
ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
DESPATCH AREA				1 x 12			
LOADING DOCK				1 x 20			May be shared with Catering and Linen
OFFICE - SINGLE PERSON 9 M2	yes			1 x 9			Manager
OFFICE - WORKSTATION	yes			1 x 6 optional			Supply personnel
RECEIVALS AREA				1 x 12			
STORE - BULK				1 x 180			
STORE - FLAMMABLE LIQUIDS				1 x 6			
STORE - IV FLUIDS				1 x 20			
STORE - MEDICAL GAS BOTTLE				1 x 20 optional			May be located external to the hospital in secured area
STORE - SECURED				1 x 6 optional			For drugs - may be located in Pharmacy Unit
CIRCULATION %				10			

References and Further Reading

- 660.14.00 - American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
- Health Department Western Australia, Private Hospital Guidelines, 1988.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - SUPPLY UNIT



Part B - Health Facility Briefing and Planning

670 WASTE MANAGEMENT UNIT

INDEX

Description

670 .1.00	INTRODUCTION Description
	PLANNING Functional Areas Functional Relationships
	DESIGN General Finishes Infection Control Building Service Requirements
	COMPONENTS OF THE UNIT Introduction Standard Components Non-Standard Components
	APPENDICES Generic Schedules of Accommodation References and Further Reading Functional Relationships Diagram

INTRODUCTION

General

670 .2.00	A hospital must have a Waste Management Unit for storing waste and used linen. The Waste Management Unit shall have the following features: <ul style="list-style-type: none">- Located close to all functional areas- Accessible from within the unit and externally- Fitted with a deadlock- Located away from food and clean storage areas- Not accessible to the public.
-----------	--

PLANNING

Functional Areas

670 .3.00	The Waste Management Unit will include the following Functional Areas: <ul style="list-style-type: none">- Enclosed dust free workstation with a workbench, telephone and computer outlet to undertake recording and reporting functions; it should have visual control of the waste handling facility- General waste skip or compactor area with direct contractor access for removal; general waste may be compacted on site- Provision for front load bins- Clinical waste bin storage- Paper and recyclable materials bin storage- Clean bin storage area; a variety of bins need to be stored pending distribution to the hospital units- Storage space for consumables such as plastic bin liners and cleaning materials; could be located adjacent to the Work Management Station.
670 .4.00	The following Functional Areas are optional requirements: <ul style="list-style-type: none">- An area for bin receiving with room for pull tug and cart trolley access and bin sorting may be required.

Part B - Health Facility Briefing and Planning

- A waste weighing and recording station, which includes a floor level digital weighbridge and bar code recorder, will be required if waste handling policy includes weighing and tracking.
- An upright freezer may be required to store tissue pending dispatch for incineration.

670 .5.00 BULK WASTE MOVEMENT

The waste handling area will be frequently serviced by site and contractor's vehicles removing waste in carts and front loading bulk bins. It is important that adequate traffic access is provided for delivery and removal of all wastes. The access roads need to be adequate and turning areas uncongested. Noise levels may be significant during waste collection periods.

- 670 .6.00 Bulk waste bin movement around the site and during the disposal process may require that the bins are accessed from a raised dock. A variable level platform may be considered as an option.

670 .7.00 CLINICAL WASTE

Contaminated waste bins should be located in strategic collection points for each clinical section. These collection points need to be easily accessible to the staff responsible for disposing of wastes, as well as to those servicing the facility in removing and replacing the bins.

- 670 .8.00 Contaminated waste bins should not be accessible to the public and should preferably be out of sight in a secure area.

- 670 .9.00 Separate colour-coded bins will be required for the disposal of sharps, human tissue, cytotoxic and radioactive materials. Receptacles, whether disposable or recyclable, are to comply with AS 4031 and AS 4261, and should be located in treatment areas. Wall mounting of the containers is recommended.

- 670 .10.00 Human tissue, cytotoxic and radioactive materials are only likely to occur in specific clinical units. Provision of receptacles and storage space for these materials will be required in the specific unit on an as-needed basis.

Functional Relationships

- 670 .11.00 Servicing of waste and linen storage areas should be undertaken via thoroughfares that avoid regular public, patients and staff facilities. Particular attention should be made to avoiding food handling and high profile public areas. A service lift devoted to materials movement within the hospital is highly recommended.

DESIGN

General

- 670 .12.00 The Waste Management Unit should be designed to secure the material, reduce organic decomposition, contain odours and allow hygienic cleaning of storage areas and carts. Larger institutions may benefit from the installation of a mechanised bin washing facility.
- 670 .13.00 Liquid waste emanating from disinfection procedures may need to be stabilised before disposal in sewerage systems.

Part B - Health Facility Briefing and Planning

General

- 670 .14.00 Access doors to bin storage areas need to be a minimum of 900 mm wide and require a closing and locking facility. Wall and floor surfaces need to be sealed to allow cleaning of spills. A graded floor with drainage should be provided. A handbasin should be located near the access door.

Finishes

- 670 .15.00 Walls and floors in areas used for bin storage should be sealed to allow easy cleaning.

Infection Control

- 670 .16.00 Hand-washing facilities should be located adjacent to the waste collection area where clinical waste is handled.

Building Service Requirements

- 670 .17.00 Building service requirements for the Waste Management Unit will include the following:
- The temperature with the waste handling area should be maintained at a temperature that helps control odours; ideally a negative pressure environment should be provided to contain the spread of odours.
 - The areas used to store waste materials need to be secure from vermin and rodent infestation.
 - Hot and cold water outlets with a hose spray are the minimum requirements to be provided for cleaning waste holding areas and bins as required
 - A high pressure wash down unit should be provided for the adequate cleaning of the area.
 - Drainage from this area may include disinfectants, therefore liquid wastes may require special treatment prior to discharge.
 - Walls and floors should be sealed to withstand the frequent wash downs and the floors graded to allow run off.

COMPONENTS OF THE UNIT

Introduction

- 670 .18.00 The Waste Management Unit will consist of a combination of Standard Components and Non-Standard Components.

Standard Components must comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets.

Standard Components

- 670 .19.00 Provide the Standard Components as identified in the Schedule of Accommodation.

Non-Standard Components

- 670 .20.00 Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

- 670 .21.00 BIN WASHING AREA

DESCRIPTION AND FUNCTION

The Bin Washing Area will provide an area and facilities for washing of bins as required. Bins may be cleaned off-site by external waste removal contractors.

Part B - Health Facility Briefing and Planning

Non-Standard Components

670 .22.00 LOCATION AND RELATIONSHIPS

The Bin Washing Area should be located in the Waste Handling Unit with ready access to general and clinical waste holding areas.

670 .23.00 CONSIDERATIONS

Hot and cold water outlets with a hose spray are the minimum requirements to be provided for cleaning bins as required. Reticulated steam, pressure cleaning systems and air blow drying facilities may also be considered.

APPENDICES

Waste Management Generic Schedule of Accommodation

670 .24.00 Schedule of Accommodation for a Waste Management Unit suitable for a Level 4 Hospital of 120 Beds:

ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
BIN WASHING AREA				1 x 6 optional			May be omitted if washing done by external contractors off-site
CLEAN BIN HOLDING				1 x 8			
CLINICAL WASTE COLLECTION				1 x 20			
GENERAL WASTE COLLECTION				1 x 25			
PAPER & RECYCLABLE WASTE COLLECTION				1 x 10 optional			May be located in the General Waste area
CIRCULATION %				20			

670 .25.00 SHARED AREAS

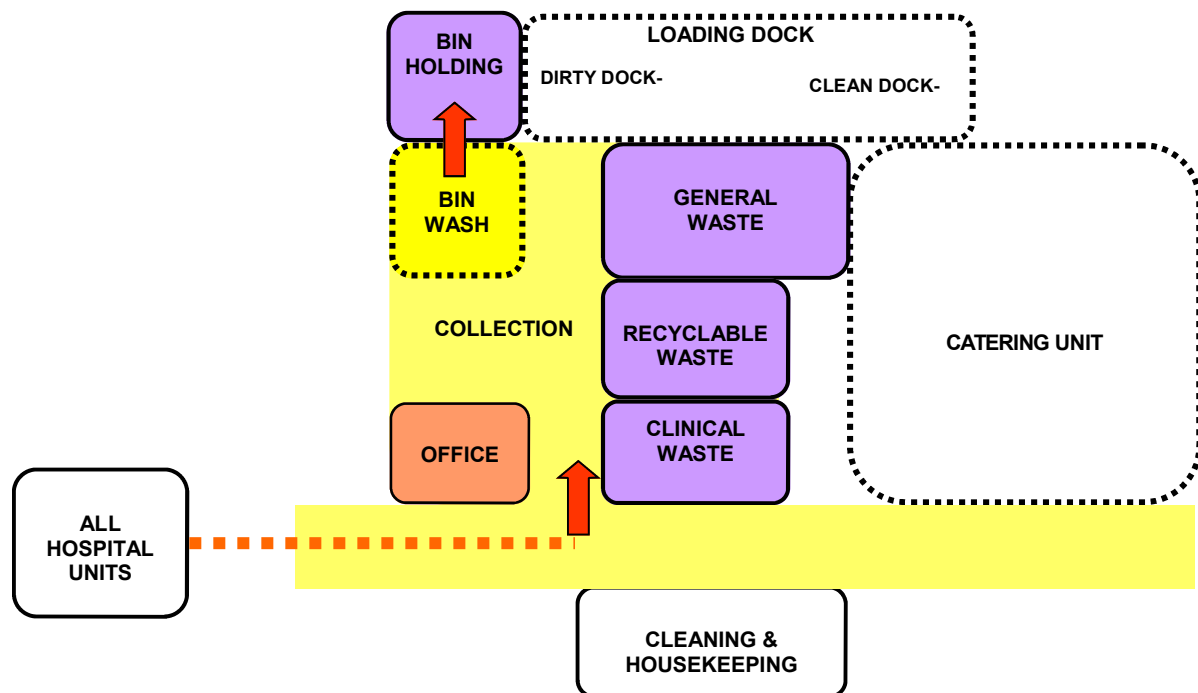
ROOM / SPACE	Standard Component			Level 4 Qty x m2			Remarks
OFFICE - WORKSTATION	yes			1 x 6			Waste Service personnel

References and Further Reading

- 670 .26.00
- American Institute of Architects, Guidelines for Design & Construction of Hospital & Healthcare Facilities, 1997.
 - Health Department Western Australia, Private Hospital Guidelines, 1998.
 - Queensland Government, Private Health Facilities Building Code, 2000.

Part B - Health Facility Briefing and Planning

FUNCTIONAL RELATIONSHIPS DIAGRAM - WASTE MANAGEMENT UNIT



Part B - Health Facility Briefing and Planning

680 FURNITURE & EQUIPMENT

General

- 680 .1.00 Furniture and equipment, both fixed and mobile, shall be provided in sufficient quantity and quality to satisfy the requirements of the Hospital's Operational Policy and to meet minimum Occupational Health & Safety requirements. All furniture and equipment is to be maintained in a clean, safe and serviceable condition.
- 680 .2.00 Fixtures and Fittings refer to items that are generally factory made or otherwise off-site manufactured then installed in the building. Some fixtures and fittings may be present at the time of the completion of the construction or renovation. Others may be installed at a later date. For the purpose of these Guidelines, all fixtures and fittings that are 'installed', that is, fixed to the building, are part of the building and subject to the requirements of these Guidelines. As such, they should comply with requirements of all parts, and in particular:
- Ergonomics & Human Engineering
 - Security and Safety Precautions
 - Infection Control

Spatial Requirements

- 680 .3.00 The design of the facility shall take into account the spatial requirements of furniture and equipment, for example, trolley bed impact on the design of corridors, doorways and room proportions and service area for sterilisers. Refer also to Part C - Access, Mobility, OH&S for discussion on spatial requirements of design.
- 680 .4.00 To enable an accurate assessment of the modus operandi of the facility or facility component, drawings submitted for approval must show the locations and spatial requirements of all furniture, fittings and equipment that will have a space planning impact on the design. The furniture and equipment is to be drawn to the manufacturers' dimensions, taking into account all overhangs and projections.
- 680 .5.00 Where final selection has not been made on an item of furniture or equipment, the dimensions of the largest option is to be used. Special service connections such as mechanical, electrical and plumbing) should be considered when placing the equipment. Space requirements for accessing and servicing equipment also needs to be included.

Electro-medical Equipment

- 680 .6.00 All electro-medical equipment shall conform to the requirements of AS 3200 'Approval and test specification - Electro-medical equipment - General requirements', and any other appropriate Australian Standard. Particular attention shall also be given to the electrical safety of plugs and sockets for the electrical supply to freestanding equipment.

Bed Screens

- 680 .7.00 **GENERAL REQUIREMENTS**
To provide privacy between patients or between patients and other persons, beds in multiple-bed wards, and elsewhere as necessary, shall be screened by approved curtains. These curtains shall be hung on sliding tracks suspended from the ceiling at door head height to a maximum of 300 mm above floor level. Termination points shall be clear of electrical switches and outlets, including nurse call system fixtures.

680 .8.00 FIRE SAFETY

Bed screens shall be made of approved fire retardant materials. The material shall retain fire retardant properties after the normal hospital laundry processes.

PRIVACY

Bed screens should be reasonably opaque to obscure the bed cubicles, even when light shines through the material.

ACCESS TO LIGHT

Bed screens shall be designed in such a way that closing the screen on one cubicle does not deprive other cubicles from access to light and view.

Note: This typically means that bed screens, when closed, should not totally obscure the window.

ACCESS TO SERVICES

Bed screens shall be designed in such a way that access by one patient to bed head services such as medical gases and GPOs will not necessitate crossing the screen line.

Note: This requirement also applies to bed head services which shall be positioned in such a way that access by one patient to services such as medical gases and GPOs will not necessitate crossing the screen line.

Soft Furnishings

680 .9.00 Certain plastics and materials, in quantities, are known to produce large amounts of toxic gases. The use of these plastics and materials in mattresses, upholstery and other items, shall be avoided as far as practical.

680 .10.00 Cubicle screens, bed screens and curtains/window treatments shall be non-combustible or rendered flame retardant and shall comply with the Building Code of Australia, Section C1.10.

Note: Designers should consider the use of Trevira CS fabric for such screens. The fabric should be capable of withstanding Hospital standard laundry treatment without losing its fundamental properties.

Electronic Equipment

680 .11.00 Special consideration shall be given to protecting computerised equipment such as multiphasic laboratory testing units, as well as computers, from power surges and spikes that might damage the equipment or programs. Consideration shall also be given to the addition of a constant power source in areas where loss of data input might compromise patient care.

Major Technical Equipment

680 .12.00 Major Technical Equipment is specialised equipment, medical or non-medical, that is customarily installed by the manufacturer or vendor. Since major technical equipment may require special structural designs, electromechanical requirements, or other considerations, close co-ordination is required between building design, services, construction and operations.

690 TRAFFIC AND CAR PARKING

General

- 690 .1.00 Car parking shall be provided, either on-site or immediately adjacent to the site.
- 690 .2.00 The following guidelines are intended for use in the absence of a relevant Local Council car parking code. The parking requirements stated in this document should be regarded as an absolute minimum. A parking study is desirable to determine the site-specific rates of parking provision.

Car Parking Requirements

- 690 .3.00 The following car parking requirements are based on the results of surveys in a number of hospitals. The formulae for calculating the required number of parking spaces are based on a premise that different types of car park users at hospitals have peak demands at different times. These requirements do not include car parking for emergency facilities.
- 690 .4.00 The car parking requirements shall be taken as a maximum result from the two formulae (one for morning and one for afternoon conditions).
- 690 .5.00 City conditions:
- $$P_m = 0.8 C_{pt} S_m + 0.6 S_{sm} + 0.1 B_p + 0.2 B_m + 0.2 B_d + 1.3 D_{so}$$
- $$P_a = 0.8 C_{pt} S_a + 0.6 S_{sa} + 0.2 B_p + 0.3 B_m + 0.15 B_d + 1.0 D_{so}$$
- 690 .6.00 Suburban and country conditions:
- $$P_m = 0.9 S_m + 0.7 S_{sm} + 0.2 B_p + 0.3 B_m + 0.4 B_d + 1.5 D_{so}$$
- $$P_a = 0.9 S_a + 0.7 S_{sa} + 0.3 B_p + 0.4 B_m + 0.25 B_d + 1.5 D_{so}$$
- 690 .7.00 Explanation of Codes:
- | | |
|-----------------------|---|
| P_m | - required number of parking spaces during the morning peak |
| P_a | - required number of parking spaces during the afternoon peak |
| S_m | - number of staff during the morning peak (typically between 10.00 am and 11.00 am), including visiting doctors |
| S_a | - number of staff during the afternoon peak (such as during the nursing shift changeover, both morning and afternoon nursing shifts counted), including visiting doctors and medical research staff |
| S_{sm} and S_{sa} | - number of medical and nursing students present during the morning and afternoon peaks respectively; |
| C_{pt} | - coefficient of public transport provision - 0.9 if a public transport node such as a bus/rail interchange is located within 250 m from the facility boundary, otherwise 1.0 |
| B_p | - number of beds, all patients except maternity patients and children patients |
| B_m | - number of maternity and children beds |
| B_d | - number of beds or recliners for day patients |
| D_{so} | - number of effective full time doctors and specialists treating Outpatients including Community and Allied Health, Physiotherapy and Imaging. |
- 690 .8.00 In restrained conditions, it is possible to provide lower standard overflow parking (such as on a surface such as gravel) for the short period of nurses

Part B - Health Facility Briefing and Planning

shift changeover. The number of these spaces may be calculated as 0.8 (Sa-Sm) for city conditions and 0.9 (Sa-Sm) for suburban and country conditions.

- 690 .9.00 In addition to the above requirements, a time restricted set down / pick up area is to be provided near the facility entry. The recommended number of spaces is:

$$\text{Psp} = 0.01 (\text{Bp} + \text{Bm}) * + 0.5 \text{ Bd}$$

* (Bp+Bm) rounded up to the nearest hundred of beds

It is desirable that the drop off/pick-up area be protected from bad weather conditions.

Emergency Access and Parking

- 690 .10.00 A drop off/pick-up area shall be provided near the entry to the Emergency Unit. Emergency parking should be separated from the staff, patient and visitor car parking areas and be as close as practicable to the Emergency Unit. The number of parking spaces shall be determined based on the likely throughput.

Bicycle and Motorcycle Parking

- 690 .11.00 Bicycle parking spaces shall be provided at a rate of one space per five car parking spaces for the first 100 car parking spaces or part thereof, plus two additional bicycle parking spaces for each additional 100 car parking spaces or part thereof.

Motorcycle parking spaces shall be provided at a rate of one space per 15 car parking spaces for the first 100 car parking spaces or part thereof plus one additional motorcycle parking space for each additional 100 parking spaces or part thereof.

Design Issues

- 690 .12.00 Due to a difference in the parking demand patterns between hospital staff, patients and visitors and in order to benefit from their overlapping demand, a single parking area is preferred to a number of parking areas. Design of car parking areas shall conform with the requirements of the Australian Standard 2890.1.
- 690 .13.00 Clear and conspicuous signposting shall be erected on approaches to the facility so as to direct incoming traffic to appropriate parking areas. Directional signs and linemarkings within the site shall serve to minimise the number of internal movements and to ensure pedestrian and vehicle safety. A plan of traffic management shall be prepared by a qualified traffic engineer.

Servicing, Loading and Unloading

- 690 .14.00 At least three loading bays shall be provided for the first 50 beds or part thereof plus 1 loading bay for each additional 100 beds or part thereof. The design of loading areas shall satisfy the requirements of Australian Standard 2890.2. Fifty per cent of loading bays shall be suitable for a Heavy Rigid Vehicle as defined in the Australian Standard and the remaining bays shall be suitable for a Small Rigid Vehicle. Access to servicing and delivery areas shall be separated from access to parking areas and from emergency and ambulance access.

Ambulance Access and Parking

- 690 .15.00 It is recommended that access for ambulance vehicles should be separated

Part B - Health Facility Briefing and Planning

from access to staff and visitor parking areas.

- 690.16.00 Manoeuvring areas and parking spaces for ambulance vehicles shall be designed to allow ambulance vehicles to enter and exit in a forward direction and/or allow the largest ambulance vehicle using the facility to turn around. Turning templates for an ambulance vehicle are contained in Annexure X.

Short term ambulance spaces shall be long enough for an ambulance vehicle with an additional five metre long clear area at the rear for unloading stretchers.

Manoeuvring areas and parking spaces for ambulance vehicles shall be designed to permit entry and exit in a forward direction and/or turning around of a largest ambulance vehicle using the facility. Currently, the largest common ambulance vehicle is Mercedes Benz 4WD 312D "Sprinter". The length of short term ambulance spaces shall allow for an ambulance vehicle with an additional 5 metre long clear area at the rear to permit stretcher unloading.

Public Transport

- 690.17.00 A Hospital Facility shall be located where it will allow patients, staff and visitors reasonable access to public transportation, where it is available. When public transport is not available, representations should be made to the appropriate transport authority early in the planning stages for the provision of public transport to and from the site.

Note: It is not necessary to guarantee the success of such representations.

Part B - Health Facility Briefing and Planning

700 SERVICES BRIEFING

Electrical Services

- 700 .1.00 GENERAL**
A hospital or day procedure unit must be equipped with electrical components, fittings, appliances, equipment and apparatus to a standard that will provide a safe environment for patients, staff and visitors at all times.
- 700 .2.00** The details of the minimum briefing requirements for the electrical services can be found in the relevant sections of Part B of these Guidelines.
- For the engineering and construction requirements refer to Part E 'Building Engineering and Environmental Design'.
- 700 .3.00 POWER REQUIREMENT**
Electrical power outlets shall be provided to suit the intended use of the room, area or the equipment (both mobile and fixed). The number of outlets should be sufficient to prevent the need for double adaptors or extension boards.
- 700 .4.00** The minimum number of power outlets for typical areas are set out in the following schedule. The mandatory minimum numbers are clearly noted. Other numbers are not mandatory but recommended.

ROOM/ AREA	STANDARD POWER	ESSENTIAL POWER	MANDATORY YES/NO
ACUTE BEDHEAD (ADDITIONAL MAY BE REQUIRED FOR L5/6)	4	2	Yes
ANAESTHETIC INDUCTION ROOM	6	2	Yes
BIRTHING/ DELIVERY ROOM	4	4	Yes
CLEAN UTILITY	4		Yes
CONSULT ROOM	6		No
CORRIDOR - PATIENT CARE AREA	2	2	No
DIRTY UTILITY	2		Yes
HDU BEDHEAD		6	Yes
ICU/ CCU BEDHEAD		8	yes
NEONATAL ICU	14	6	yes
OFFICE - 9 M2	4		No
OFFICE - 12 M2	6		No
OPERATING ROOM	6	6	Yes
PANTRY	2		Yes
PATIENT BAY - HOLDING/ RECOVERY	2	1	yes

Part B - Health Facility Briefing and Planning

SPECIAL CARE NURSERY	4	4	yes
STAFF STATION	6	2	Yes
SUB-ACUTE BEDHEAD	3	1	Yes
TREATMENT ROOM	6	2	Yes

700 .5.00 CLEANER'S POWER OUTLETS

A dedicated Cleaner's power outlet is to be provided in patient areas according to AS 3003.

700 .6.00 EMERGENCY POWER

A backup generator is to be provided in a Hospital or Health Care Facility to ensure that uninterrupted power is supplied to:

- Intensive Care Unit
- Operating Unit
- Coronary Care Unit
- Induction Room/s
- Intensive Care - Neonatal
- Obstetric Unit
- Emergency Unit

Medical Gases

700 .7.00 Medical Gas outlets shall be provided according to the following schedule:

ROOM / SPACE	Oxygen	Med Air	Suction	Scavenge	Nitrous Oxide	Other	Remarks
ALLIED HEALTH: PHYSIO TREATMENT CUBICLE	1 Optional	1 Optional	1 Optional				May be shared
CARDIAC CATHETER:							
CATHETER LAB	2	1 Optional	2	1 Optional	1 Optional		
HOLDING / RECOVERY	1	1 Optional	1				
CORONARY CARE: BED SPACE	2	1 Optional	2				
DAY PROCEDURES:							
BED SPACE	1	1 Optional	1				
PRE-OP HOLDING	1	1 Optional	1				Shared
POST-OP BAY	1	1 Optional	1				Shared
EMERGENCY:							
RESUS BED SPACE	3	2	3				
TREATMENT/ OBSERVATION	1	1 Optional	1				May increase to 2 Oxygen, 2 Suction in Level 5/6 facilities
PLASTER TREATMENT	1	1 Optional	1	1 Optional	1 Optional		

Part B - Health Facility Briefing and Planning

INTENSIVE CARE: BED SPACE	3	2	3				
INPATIENT ACCOMMODATION:							
BED SPACE	1	1 Optional	1				
HIGH DEPENDENCY BED	2	1 Optional	2				
TREATMENT	1	1 Optional	1				
MEDICAL IMAGING ROOMS	1	1 optional	1				
OBSTETRICS UNIT:							
BIRTHING ROOM	2	2 Optional	2	1	1		1 each Oxygen, Medical Air (Optional) and Suction for baby
NURSERY- GENERAL	1	1 Optional	1				Shared
NURSERY- NICU	3	3	3				
NURSERY- SP. CARE BAY	2	2 Optional	2				
MATERNITY BED	1	1 Optional	1				
OPERATING UNIT:							
OPERATING ROOM	4	2	4	2	2	Tool Air 1	Tourniquet air optional
HOLDING BED BAY	1	1 Optional	1				
ANAESTHETIC INDUCTION ROOM	2	1 Optional	1	1 Optional	1 Optional		
RECOVERY BED BAY	1	1 Optional	1				
ANAESTHETIC WORK ROOM	1	1	1		1		for testing
PAEDIATRIC/ ADOLESCENT:							
BED SPACE	1	1 Optional	1				
TREATMENT	1	1 Optional	1	1 Optional	1 Optional		

Nurse Call System

- 700.8.00 The Nurse Call system features and specifications are to comply with AS 3811: Hard-wired patient alarm systems.
- 700.9.00 Patient Call Points are to be placed in all patient areas including Patient Bedrooms, Treatment Rooms, Lounge Rooms, Patient Toilets, Ensuites and Bathrooms.
- 700.10.00 Nurse Assist Call Points are an optional feature and if required should be located in all rooms which have a patient call point.
- 700.11.00 Emergency Call Points are required in all Patient Bedrooms, Lounge Rooms, Treatment Rooms, Patient Toilets, Ensuites and Bathrooms.

Nurse Call System

- 700 .12.00 Nurse Call Tones are to be heard in all Patient Bedrooms, corridors, Staff Room/s, Utility Rooms and Treatment Rooms.
- 700 .13.00 Duress points may be included with the nurse call system. If required they should be located at Reception desks, Staff Stations, and Counselling / Interview rooms in a discreet location.
- 700 .14.00 Corridor Indicator lights are required in the corridor outside each room that has a patient call point. For Patient Bedrooms with an Ensuite, indicator lights are not required outside the Ensuite within the Patient Bedroom - the call may be adequately indicated by light colour and tone at the corridor light.
- 700 .15.00 Patient Call multi-function handsets for patient bed spaces are recommended. They should provide a patient call button, TV channel selector, volume control, reading light control and reassurance light.
No handset - only a wall point or pull cord is required in Ensuites, Toilets, Showers, Bathrooms, Lounge Rooms, Consult Rooms and Recovery Beds.
- 700 .16.00 Annunciators may be a simple 'follow me' light system only, a display box or a television screen based system. If display or television screen type are required they should be placed in Staff Stations and corridors.
- 700 .17.00 A paging interface is a desirable feature to link the nurse call system directly to the emergency call system and should be considered.
- 700 .18.00 Swing wards that offer the ability to capture beds or rooms from one ward to another and redirect calls accordingly is a desirable feature that should be considered during system specification.
- 700 .19.00 Nurse presence points provide the ability to identify rooms with a nurse present and is a desirable management feature that should be considered. If required they should be placed in all rooms with a patient call point.
- 700 .20.00 Speech facilities that offer the ability to speak directly to the patient bed originating the call is an option available for consideration in many nurse call systems. If provided, the call must still be cancelled only at the point of origin, according to AS 3811.

Part B - Health Facility Briefing and Planning

COMPLIANCE CHECKLIST

Name of HPU: _____ (Print and complete one per HPU)

Agreed Role Delineation Level: _____

No	Item	Yes	No
1.0	Planning:		
1.1	Have all Mandatory Functional Areas of the Unit been provided?	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Have Functional Relationships been considered?	<input type="checkbox"/>	<input type="checkbox"/>
2.0	Design:		
2.1	Have the required Finishes been provided (if specified)?	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Have the required minimum Fixtures and Fittings been provided?	<input type="checkbox"/>	<input type="checkbox"/>
2.3	Have Infection Control Issues been addressed?	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Have Access, Mobility & OH&S Issues been addressed?	<input type="checkbox"/>	<input type="checkbox"/>
2.5	Space Standards and Components: Have Minimum Room Dimensions been provided (if specified)? Have Minimum Room sizes been provided as specified? Have sufficient clearances been provided (if specified)?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2.6	Have Safety and Security Issues addressed: Patient Area Staff Areas Drug Storage Areas	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2.7	Does the Design Brief comply with the nominated Standards and Codes?	<input type="checkbox"/>	<input type="checkbox"/>
2.8	Has the Private Hospital or Day Procedure Centre provided a Schedule of Accommodation?	<input type="checkbox"/>	<input type="checkbox"/>
3.0	Components of the Unit		
3.1	Have all mandatory Components been included?	<input type="checkbox"/>	<input type="checkbox"/>

Checked and certified by:

Name: _____

Date: _____

Company: _____

Position: _____

Signature: _____



Part C – Access, mobility, OH & S

710 SPACE STANDARDS & DIMENSIONS

Corridors

- 710 .1.00 There are many schools of thought on minimum corridor widths and the underlying principles that should dictate them. The requirements set out in this section should be regarded as the minimum required. These requirements take into account the need to allow for the movement of trolleys, beds, wheelchairs and other mobile equipment, including the passing of such equipment.

The overriding principle in setting the minimum corridor width is the need to allow for a workable width that, in the event of an emergency evacuation procedure, does not impede egress.

Note 1: Designers should note that the Building Code of Australia (BCA) also specifies minimum corridor widths for Patient Care Areas. The requirements of these Guidelines for certain areas may be higher than the BCA as Fire Safety is not the only focus of these Guidelines.

Note 2: Most large Hospital Units include a range of patient and staff only corridors. If staff only areas are clearly designated by planning and are not required for patient access, then the guidelines for patient corridors do not apply.

Note 3: All corridor widths are clear of hand rails and/or crash rails. It is recommended that for design purposes (and considering construction tolerances) 100 mm be allocated to each hand rail.

- 710 .2.00 In areas where patient beds, trolleys and stretchers will be moved regularly, such as Inpatient Units, Operating Units, Obstetric Units and Intensive Care Units, the minimum clear corridor width shall be 2100 mm.

The recommended corridor width in areas where there is frequent bed and trolley movement is 2350 mm. This, however, is not mandatory. Even at this dimension, special consideration must be given to the width of doorways into adjacent rooms and widening corridors at the entry to the affected rooms to accommodate turning trolleys and beds.

Corridor widths in the above areas may be considered at lesser dimensions where an existing building is utilised, but special design and planning detail must be incorporated to overcome the problems of congestion and the potential risk to patients and staff in an emergency evacuation.

Note: In any event, the corridors may not be narrower than that required by the BCA for Patient Care Areas.

- 710 .3.00 In areas where irregular trolley or bed movement is expected, such as Radiology, corridor widths can be reduced to 1800 mm. Special consideration must be given to the door widths to ensure the movement of trolleys or beds from corridor to adjacent rooms is not restricted.
- 710 .4.00 In areas where there is no patient transportation requirement and where corridor runs are no longer than 12 metres, such as a corridor to a group of staff offices, corridor widths of 1200 mm are acceptable.
- 710 .5.00 Corridor widths of less than 1200 mm are unacceptable in patient care areas, except where forming part of an existing facility, and where written approval has been obtained for the lesser width.

Corridors

- 710 .6.00 The width of major inter-department arterial corridors and public corridors generally shall be as wide as is deemed necessary for the proposed traffic flow, but shall not be less than 2100 mm.

Note: In these Guidelines, the inter-departmental corridors are also referred to as 'travel'.

- 710 .7.00 The width of lobbies within corridors shall be as wide as deemed necessary for the proposed traffic flow, and shall comply with the 'Building Code of Australia'.

In addition to the above, corridor widths shall comply with the requirements of AS 1428 series - Design for Access and Mobility.

- 710 .8.00 Corridor widths shall mean clear, unobstructed widths. Items such as handrails, drinking fountains, handbasins, telephone booths, vending machines and portable/mobile equipment of any type shall not reduce the minimum width or impede traffic flow.

- 710 .9.00 Consideration shall be given to the elimination of potentially dangerous 'blind spots'.

- 710 .10.00 The minimum requirements for health facility corridor widths are summarised in the following table:

CATEGORIES	Conditions	Usage	Description	Width	Best Option	Mandatory	Remarks
CORRIDOR WIDTH	class 9a	patient	on trolley	2100 mm	2350 mm	yes	Clear width between any grab rails
CORRIDOR WIDTH	class 9a	patient	irregular use	1800 mm	2100 mm	no	Clear width between any grab rails
CORRIDOR WIDTH	services	trolley	regular use	2100 mm	2350 mm	yes	Clear width between any grab rails
CORRIDOR WIDTH	class 5&9a	patient	no trolley	1500 mm	1800 mm	yes	Clear width between any grab rails
CORRIDOR WIDTH	AS1428	staff	no patients	1000 mm	1200 mm	yes	Maximum 12 m long
WALL PROTECTION		low level	wheel chairs	150-350 mm	150-400 mm	no	Kick boards
WALL PROTECTION		mid level	for trolleys	900 mm	900 mm	no	Bed/ trolley protection
WALL PROTECTION		corners	for trolleys	150-900 mm	150-1500 mm	no	Bed/ trolley protection
HAND RAILS	AS1428	mid level	for patients	900 mm		yes	32 mm thick
EQUIPMENT BAYS			for equipment	recessed	one sided	yes	
REST BAYS		seating	3 people	every 40 m	every 30 m	no	
REST BAYS		wheel chairs	1 person	every 40 m	every 30 m	no	
DOORS IN CORRIDORS		in corridor	fire/ smoke	maximise	conceal	yes	Corridor width minus 250 mm
WALL PHONES IN CORRIDORS			height	1600 mm		no	

Ceiling Heights

- 710.11.00 The minimum ceiling height in occupied areas shall be 2400 mm, but consideration should be given to the size (aesthetic consideration) and use of the room. 2700 mm is considered a more appropriate ceiling height in work areas such as Therapy Rooms, Conference Rooms, Intensive Care (open-plan) and Kitchens. Ceiling heights in Ensuites can be reduced to 2250 mm where required, to accommodate building services and structure.
- 710.12.00 The minimum ceiling height in areas such as corridors, passages and recesses shall be 2400 mm. In portions of remodelled existing facilities, the corridor ceiling height may be reduced to 2250 mm, but only over limited areas such as where a mechanical duct passes over a corridor. A reduced ceiling height for no greater corridor length than 3000 mm is acceptable. The extent of any such variation from the above recommendations must be approved in writing.
- 710.13.00 In areas where access is restricted such as a drinking fountain recess, a minimum ceiling height of 2250 mm is acceptable.
- 710.14.00 Rooms with ceiling mounted equipment, such as X-ray Rooms and Operating Rooms may require increased ceiling heights. Heights should comply with equipment manufacturers' recommendations. The most common ceiling height in such areas is 3000 mm.
- 710.15.00 Minimum ceiling (soffit) heights of external areas such as entry canopies, ambulance entries and delivery canopies should suit the requirements of the vehicles expected to use them. Special consideration is to be given to the impact of whip aerials fitted to emergency vehicles.
- 710.16.00 Ceiling heights in Plant Rooms are to suit the equipment and allow safe access for service and maintenance. A minimum recommended height is 2400 mm.

Department Sizes

- 710.17.00 Department sizes will depend upon the perceived facility role as set out in the Operational Policy and the organisation of services within the hospital. Some functions may be combined or shared provided that the layout does not compromise safety standards and medical and nursing practices.

Note: Departmental sizes also depend on design efficiency. For guidelines on this subject refer to Efficiency Guidelines and Schedule of Circulation Percentages in this section.

Efficiency Guidelines

- 710.18.00 **GENERAL**
The concept of efficiency refers to the ratio between net Functional Areas and circulation space. Simplistic guidelines on efficiency tend to be misleading and should not be applied to vastly different functional briefs.

It is more appropriate to allocate different circulation percentages for generically different planning units. Such a guide has been provided under the Schedule of Circulation Percentages in this section.

Inadequate circulation allowance in briefing documents is not recommended. It can result in undue pressure on designers to reduce sizes and therefore functionality. It must also be noted that the circulation percentages are a guide only. They apply to the Health Planning Units (HPUs) included in these Guidelines under Generic Schedule of Finishes. For larger planning units, a

different percentage may be appropriate.

710.19.00 NET FUNCTIONAL AREAS

In briefing documents, Net Functional Areas represent the sum of individual room areas without any corridors. Refer to Part A - How to Read for a description of how to measure areas off the plans.

710.20.00 GROSS DEPARTMENTAL AREAS

Gross Departmental Areas are calculated by adding the Net Functional Areas and departmental corridors. These are corridors that are entirely within one department (or HPU). In calculating the departmental corridors the following should be taken into account:

- Service cupboards and passing risers are excluded.
- Corridor wall thicknesses are excluded as these are included in room areas.
- Columns are included.
- Fire stairs are excluded.
- Lifts and lift shafts are excluded.

710.21.00 TRAVEL

'Travel' represents arterial corridors that connect the HPUs. Travel is required to allow passage from one unit to another without going through the internal corridors of another HPU. A target of 12.5 per cent is appropriate for Travel in a hospital of one to two storeys. Travel can be considerably reduced in high-rise buildings since in many instances corridors are replaced by vertical transportation.

In calculating travel, the following should be considered:

- Wall thicknesses are excluded as these are part of the Gross Departmental Areas.
- Fire stairs are included once for each floor to floor connection.
- External wall thicknesses are excluded.
- Lift shafts are excluded.
- Service cupboards are excluded
- Service shafts and risers are excluded.

710.22.00 ENGINEERING

Engineering refers to the area of Plant Rooms and other service areas. In calculating the Engineering allowance the following areas should be included:

- Service cupboards
- Lift motor rooms
- Service shafts and risers.

Lift shafts should be excluded. The target of 12.5 per cent applied to Gross departmental Areas may be used for a typical one to two storey hospital building.

Schedule of Circulation Percentages

710.23.00 Recommended Circulation Percentages for typical Hospital Planning Units (HPUs) are as follows:

DEPARTMENT		Circulation %	
ACUTE PSYCHIATRIC UNITS		32	
ADMINISTRATION UNIT		20	
ALLIED HEALTH UNIT		25	

Part C - Access, Mobility, OH & S

BIOMEDICAL ENGINEERING		20	
CATERING UNIT		25	
CENTRAL STERILE SUPPLY INOT		20	
CLEANING / HOUSEKEEPING UNIT		10	
CLINICAL INFORMATION UNIT		15	
CORONARY CARE UNIT		35	
DAY PROCEDURE UNIT		35	
DENTAL UNIT		20	
EDUCATION & TRAINING UNIT		15	
EMERGENCY UNIT		40	
ENGINEERING & MAINTENANCE UNIT		15	
INPATIENT ACCOMMODATION UNIT		32	
INTENSIVE CARE UNITS		40	
LAUNDRY/ LINEN HANDLING UNIT		10	
MEDICAL IMAGING UNITS		35	
MORTUARY UNIT		15	
NUCLEAR MEDICINE UNIT		30	
OBSTETRIC UNIT		35	
OPERATING UNIT		40	
PAEDIATRIC / ADOLESCENT UNIT		32	
PATHOLOGY UNIT		25	
PHARMACY UNIT		25	
PUBLIC AMENITIES UNIT		10	
RADIOTHERAPY UNIT		30	
REHABILITATION UNIT		32	
RENAL DIALYSIS UNIT		32	
SPIRITUAL/ MEDITATION UNIT		10	
STAFF AMENITIES UNIT		10	
SUPPLY UNIT		10	
WASTE MANAGEMENT UNIT		20	

General

- 720 .1.00 All facilities shall be designed and built in such a way that patients, staff, visitors and maintenance personnel are not exposed to avoidable risks of injury.

Badly designed common elements such as workstations and the layout of critical rooms have a great impact on the Occupational Health and Safety (OH&S) of staff as well as the welfare of patients.

The field of Ergonomics covers some aspects of the design of objects for common use. However, research indicates that experts disagree on some aspects of ergonomic standards such as the best sitting posture or angle of view for VDUs. On most ergonomics issues, however, there is broad agreement amongst the experts.

It is not appropriate for any standard to be regarded as ideal for every person. A writing bench or handbasin that is entirely suitable for one person may be inappropriate for another person. It is also unreasonable to expect all such objects to be designed in such a way that they can be adjusted for all users.

Given these limitations, the more practical role of ergonomics standards is to provide a reasonable common base for design. It is recommended that the actual design allows for various objects to be modified, if necessary to accommodate the special needs of the relevant staff.

Nothing in these standards is intended to create a situation where the needs of all possible preferences or indeed the highest possible standards are implemented in all situations.

The ergonomics standards included in these guidelines are those commonly debated in relation to Health Facilities. For items not covered in these guidelines, it is highly recommended that the Australian Standards for Ergonomics is followed. Refer to the following:

- SAA HB59 Handbook - Ergonomics - The human factor, A practical approach to work systems design
- AS 3590.2 Screen based workstations, Part 2: Workstation furniture
- AS/NZS 4443 Office panel systems - Workstations
- AS 1680.2.2 Interior lighting. Part 2.2: Office and screen-based tasks
- WorkSafe Publication: OfficeWise - A Guide to Health & Safety in the Office

Where a facility is designed for staff or patients with special needs, some deviation from these standards may be appropriate. In such circumstances, it is recommended that designers seek advice from specialist ergonomics experts or OH&S officers.

Disabled Access

- 720 .2.00 The Australian Standard AS 1428 - Design for access and mobility parts 1, 2, 3 & 4 cover the issues of access for people with disabilities. Particular attention is given to accessways and circulation and consistent linkages suitable for use by people who use wheelchairs and facilities for people with ambulatory disabilities and for people with sensory disabilities.

Parts of the AS 1428 series are a mandatory requirement of the BCA and must be complied with. For these requirements refer to the BCA and AS 1428.

It is a requirement of these Guidelines that sections of the Hospital or Day Procedure Centre designed for frequent use by people with disabilities should

Part C - Access, Mobility, OH & S

comply with the relevant sections of the AS 1428 series. It is, however, not a mandatory requirement of these guidelines to comply with every part of the AS 1428 series in every area of the Hospital or Day Procedure Centre. Parts of the facility may be specialised for use by patients (or staff) with particular disabilities. In such areas, the needs of the most common disabilities shall be considered and allowed for.

In short, 'specialisation' is not seen by these Guidelines as non-compliance in relation to AS 1428.

It is the requirement of these Guidelines that a minimum number of rooms be sized and designed for use by people with disabilities regardless of the anticipated number of patients with disabilities. These are covered in the relevant sections of the HPUs in part B. The balance of these ergonomic guidelines cover the average use of facilities by able bodied persons.

Standards Table

720 .3.00 For simplicity, the Ergonomics standards are presented in a table form under several categories. All items should be regarded as recommendations. Items which are mandatory are clearly noted.

ITEM		Condition	Depth mm	Height mm	Thickness mm	Mandato- ry	Remarks
WORK BENCH		Utility	600	900	32	No	No computer
WRITING BENCH 1		Typing	900	720	max 50	No	CRT monitor
WRITING BENCH 2		Typing	750	720	max 50	No	Flat monitor
HIGH COUNTER (PARCEL SHELF)		Over bench	250	1150	20-32	No	600 reach to the inside edge of counter
SHELVING		Over 900 h bench	350	1520-1810	20	No	2 shelves
SHELVING		Over 720 h bench	350	1370-1710	20	No	2 shelves
SHELVING UNIT		Full Height	350-400	150-1810	20	No	7 shelves, adjustable

Staff Station

720 .4.00 **GENERAL**
A Staff Station may be used for a variety of purposes including:

- A clerical workstation
- Reception
- Staff base
- Reporting station or sub-station
- Dispensing counter
- Servery

Part of a typical Staff Station is used as a workbench or workstation. For the ergonomic standards of these functions, refer to the appropriate sections of these Ergonomics guidelines. The balance of the Staff Station standards are covered below:

HIGH COUNTER

This is used to shield objects, equipment and records from outside view. They also provide a convenient writing surface for visitors and staff alike. A high counter is also referred to as Parcel Shelf or Service Counter. A high counter used for direct interaction between staff and visitors or patients should be designed to avoid the need for excessive 'reach' across the work surface.

A high counter should be designed in such a way to permit the location of CRT type computer monitors whilst achieving an effective work surface width of 900 mm. Alternatively the high counter should allow for the location of a flat panel display whilst achieving an effective work surface width of 750 mm. Where staff need to reach to the high counter to pass or receive documents, the maximum reach to the edge of the high counter shall be 600 mm for the relevant section only

The recommended height of the top counter used against a work surface designed at 720 mm above the floor is 1130 mm above the floor. This height will allow a typical person to gain sufficient privacy for work whilst being able to look over the top to visitors, standing or sitting. The recommended height to the top counter used against a work surface designed at 900 mm to 1000 mm is between 1200 mm and 1250 mm above the floor level.

HIGH-LOW DESIGN

Where children or visitors using wheelchairs are expected at the Staff Station or Reception counters, a design incorporating a high section (for staff privacy) as well as a low section is recommended. The low section is typically at 720 mm above the floor or a height which matches the staff work surface.

SECURITY BARRIERS

In some situations it may be necessary to provide a security barrier at the counter. This may be in high quality plastics or one of a variety of security glass. These include laminated glass, toughened glass, laminated and toughened glass and glass with a special security film. In such situations, the barrier will include a vertical or horizontal slot that is sufficient to allow the passage of sound and small objects. A slot of 125 mm is recommended. If a glazed security barrier is provided at a counter used for public interaction, then an intercom system shall be provided to amplify the sound for the hearing impaired.

At Staff Stations such as Pharmacy Dispensing Counters, it may be necessary to pass larger objects from one side to the other. In such situations a two-way drawer or cupboard may be used. These should be lockable.

If the Staff Station or counter is the only barrier between a department and outside areas, it may be necessary to provide after-hours security. If a full height barrier such as security glazing has been provided as described, this may be sufficient. Alternatively, a lockable security grille or similar device should be provided. The grill or similar device should be operable by the staff from the normal standing height.

Workbench

720 .5.00

GENERAL

Workbenches may be designed for two typical work practices; sitting position or standing position. For example, some nursing staff prefer the workbench in a Staff Station to be used in the standing position whilst some staff prefer the sitting position. Both options are equally valid and acceptable. However, the ergonomic standards for the two will vary.

SITTING POSITION

A workbench used in the sitting position should be at 720 mm above the floor. The typical minimum depth is 600 mm. This should be increased to 900 mm for the use of conventional CRT computer monitors or 750 mm for the use of flat panel computer displays.

STANDING POSITION

This position suggests that the primary use of the work bench will be in the standing position. However allowance may be made for the use of this type of work bench while sitting.

If the bench is almost exclusively used in the standing position with a requirement for occasional typing, then the bench height of 1000 mm above the floor is recommended. If the bench is mostly used in the standing position with the occasional typing in the sitting position, then a bench height of 900 mm is recommended.

The first option (1000 mm) is most often requested for Staff Stations, Reporting Stations and smaller Reception counters. The second option (900 mm) is most often used in Utility Rooms, Laboratories, tea benches, kitchens and similar areas.

FOOT SUPPORT

Shorter staff may use foot rests in the sitting position to lift the feet to the optimum ergonomic position. Chairs used at work benches used in the standing position should have foot support rings and be height adjustable. Standing height work benches where high stools are used should be constructed with built-in foot rests. The footrest should be located 700 mm below the height of the counter, and recessed by about 150 mm to prevent striking by shins.

BENCH SUPPORT

Many people tend to sit on the edge of the bench from time to time. It is important to support the bench with robust materials to avoid the collapse of the bench and danger to users. The support may be gained by using sufficiently thick and sturdy materials such as 32 mm fibre board or thinner materials such as 25 mm fibre board supported by a steel frame. In any event, the maximum thickness of the bench including any support over the user's knee should be no more than 50 mm. Supports should be designed to minimise contact with the user's knees.

ADJUSTABLE KEYBOARD SHELVES

If a fixed height workstation is selected, adjustable keyboard shelves can provide some flexibility in the provision of height adjustment. The advantages can be summarised as follows:

- Lower keyboard location results in the hands and fingers being straight or leaning slightly forward; This typing posture is considered ergonomically preferred to hands and fingers leaning upward to reach the keyboard.
- Lower keyboard can better accommodate shorter staff without changing the height of the entire work surface.

Note: Ideally the keyboard shelf should be large enough to accommodate the computer mouse.

The following potential problems should be acknowledged:

- Placement of the keyboard is restricted to one area
- The adjustment mechanism below may snag clothing and compromise knee space
- The adjustable support may be too small to accommodate both the mouse and the keyboard, resulting in the mouse being placed on the desk, requiring constant reaching.

On balance, keyboard shelves are recommended for sustained typing only.

Workstation - Typical

720 .6.00 These guidelines apply to the typical 'L' shaped workstation as well as desks with or without a return.

A workstation intended for working, writing or typing while in seated position should be 720 mm high.

If a computer with a conventional CRT type monitor is used, the depth of the

main work surface containing the CRT should be 900 mm. If the CRT is positioned in the corner, the 900 mm depth is measured diagonally.

If a computer with a flat panel display is used, the depth of the main work surface containing the display should be 750 mm. This option is preferred due to the reduced need for the staff to 'reach' across the work surface.

The depth of the return to the main work surface may be between 450 mm and 750 mm with 600 mm being the optimum recommendation. This will allow for underbench storage, file or drawer units.

The optimum recommended configuration for a workstation includes one work surface of 750 mm, one work surface of 600 mm with the computer position in the corner.

If a computer is positioned in the corner, then the corner should be angled with a minimum dimension of 400 mm.

The workstation should be designed to allow for adequate knee space. The space must be large enough so that the action of turning to use underbench units does not result in hitting the knees against these units.

One end of the workstation may be shaped to form a meeting table. For this purpose rounded edges are recommended.

If visitors are expected to sit across the workstation, then a modesty panel may be considered appropriate.

Workstations should have provision for safe cable management. The simplest system will involve an open tray under the work surface.

In proprietary workstations, GPOs and data points may be internally run with outlets above the work surface. Alternatively these outlets may be on the adjoining wall at a height of 300 or 550 mm above the floor level with access to the work surface via the cable tray and a plastic cable access cap.

Computers

720 .7.00

GENERAL

People tend to use computers in a variety of ways. It is difficult to dictate a particular position to suit all people. The following guidelines represent the most typical preferences and standards.

COMPUTER MONITOR

The type of monitor will dictate the depth of the work surface. Typically, conventional CRT (Cathode Ray Tube) monitors require greater depth to permit a comfortable distance from the user's eyes. Most IT specialists believe that in the near future almost all CRTs will be replaced by economical flat panel displays using liquid crystal, gas plasma or similar technology. These will require less depth of surface. They are also easier on the eye as they almost eliminate the flicker that is present in CRT monitors. If a choice is available, flat panel displays should be preferred to CRT monitors.

MONITOR POSITION

Within the work surface depth defined in these Guidelines, the exact horizontal location of the monitor should be adjustable to suit different users. The vertical position of the monitor will depend on the height of the user. The best option is for an adjustable monitor arm. These are, however expensive and are not recommended for all conditions. For most users, a fixed monitor is acceptable. The angle of view to the centre of the monitor should be within a range defined by a horizontal line taken from the user's eye down to 15 degrees depending on the user's preference.

LAPTOPS

Nothing in this section prevents the use of laptop computers as desktop replacements. This type of computer is acceptable for occasional typing and is recommended for maximum space saving.

Shelves

720 .8.00

GENERAL

The design of shelves should consider issues of depth, reach, spacing and strength. Shelves described in this section may be in the form of joinery shelf units, strip shelving, upright book cases, metal racks or similar devices. These standards also apply to shelves within a cupboard.

DEPTH (FRONT TO BACK)

The recommended depth for shelves below a work bench is the approximate full width of the bench. The recommended average depth for wall mounted shelves is 350 mm. This will suit wall cupboards in Utility Rooms or over workstations. If a door is provided over the shelf unit, then 350 mm will be the total depth.

The recommended depth of shelves for medical records shelving units is 400 mm. This depth also allows for metal dividers.

REACH AND SPACING

A shelf may be installed as low as 150 mm above the floor or as high as 1810 mm above the floor. Any surface above 1810 mm should be regarded as inaccessible without the use of a safe step ladder.

The recommended starting point of wall mounted shelves above a work surface designed at 720 mm above the floor is 1370 mm above the floor. This brings the underside of the shelf to 1350 mm above the floor.

The recommended starting point of wall mounted shelves above a work surface designed at 900 mm - 1000 mm above the floor is 1520 mm above the floor. This brings the underside of the shelf to 1500 mm above the floor.

A typical Medical Records storage unit will be a joinery or metal unit 2100 mm high with 7 shelves starting from 150 mm above the floor and finishing with a top shelf at 1800 mm.

The recommended depth for wall shelves used for the storage of linen is 450 mm spaced 400 mm apart vertically.

Where possible and practical, all shelving should be adjustable. Typically the first and last shelf in a joinery unit will be fixed.

Note: In heavy use areas of hospitals, the conventional metal pins inserted into joinery walls often fail. In such situations, proprietary metal strips are recessed into the joinery walls to hold shelf support pins.

STRENGTH

Shelves must be designed to suit the weight of the objects most likely to be stored upon them. It should be noted that adjustable shelves are not as strong as fixed shelves. Additional strength may be gained by using thicker and stronger material or by providing an edge downturn.

DISABLED ACCESS

Shelves designed for use by disabled patients or staff should comply with the requirements of AS 1428 parts 2 or 3 as appropriate. It should be noted that it is not the mandatory requirement of these Guidelines to comply with the ergonomics standards of AS 1428 parts 2 or 3 for all areas and all users.

730 HUMAN ENGINEERING

General

- 730 .1.00 The subject of Human Engineering covers aspects of the design which permit effective, appropriate, safe and dignified use by people including those with disabilities.

The Australian Standard AS 1428 series covers certain aspects of design for Access and Mobility for people with disabilities. These are often referred to in these Guidelines and should be followed in relevant areas. Human Engineering for able bodied persons also requires careful consideration. Some of the common issues are covered in this section.

- 730 .2.00 There is increased public awareness of barriers that make reasonable utilisation of facilities difficult or impossible for the physically impaired. A hospital facility will have a high proportion of occupants, patients and visitors, who are unable to function without some form of assistance. Some staff may also be impaired. To ensure minimum patient dependence on staff, consideration should be given to design provision for optimum patient independence.

Consideration must be given to the wide range of disabilities including:

- Mobility impairment
- Visual impairment
- Hearing impairment.

Planning

- 730 .3.00 To minimise overall costs and to avoid the need for expensive modification of finished work, initial designs shall include specific consideration of the needs of the physically impaired. The majority of requirements can be easily accommodated during the planning stage at little or no additional cost; modifications required at a later time may be prohibitively expensive or impractical.

Fixtures & Fittings

- 730 .4.00 Grab rails, handrails, vertical adjustable shower supports, towel rails, soap holders, footrests and any other fixture which may be used for support, shall have sufficient anchorage and strength to resist the sustained concentrated load of a falling heavy human.

Note: This effectively means that towel rails should be designed in a similar manner and strength to grab rails

Handwashing - Staff

- 730 .5.00 Location and arrangement of fittings for hand-washing shall permit their proper use and operation. Particular care should be given to the clearances required for elbow action type handles. Non-thermal transmitting standard handles are preferred, with effective finger grips. Heights are to suit the particular function, such as paediatric, disabled and standard.
- 730 .6.00 Hand-washing facilities shall be securely anchored to withstand an applied vertical load of not less than 115 kg on the front of the fixture.

Staircases and Ramps

- 730 .7.00 Where ramps are required for patient access, minimum gradients are to

Part C - Access, Mobility, OH & S

comply with the requirements of the Building Code of Australia.

Ramps in other areas such as service roadways shall comply with good design practice and be suitable for the task. Australian Standards, wherever applicable, shall be used.

If a ramp is unavoidable, the floor covering must be carefully chosen to reduce forces required to move wheeled equipment.

750 SIGNAGE

General

- 750 .1.00 Appropriate and comprehensive signposting shall be provided for all Hospitals and Day Procedure Centres. Signposting shall clearly identify staff, patient and visitor areas, and draw attention to restricted areas.
- 750 .2.00 The preferred lettering style is 'Helvetica Medium' upper and lower case generally. Upper case only is recommended for the building Main Entry Sign. This is not mandatory.
- 750 .3.00 Internationally recognised symbols (pictograms) in lieu of room titles are acceptable.
- 750 .4.00 Sizes of letters in relation to reading distances, mounting heights etc. shall comply with the relevant standards. Refer also to NSW Health; Technical Series 2: 'Signposting for Health Care Facilities' for assistance.
- 750 .5.00 Braille and Tactile signage are recommended for all signs within reach range (refer to AS 1428). There should be a luminance contrast of 30% minimum between the lettering and the background of all signs.

Bed Numbers

- 750 .6.00 Bed numbers shall be shown outside the patient bedroom. These shall be one number per bed. This is to assist in finding patients, and licensed beds, when appropriate.

In bedrooms with more than one bed, all bed numbers or the range of numbers should be shown on the sign outside the room for example:

Beds 78 & 79 or
Beds 78 to 81.

In bedrooms with more than one bed, each bed number shall be displayed at the bed head also.

Bed numbers outside the room must be clearly visible from the corridor and not be obscured by other objects or wall returns.

The provision of a room number is optional. When provided, it should not visually compete with the bed numbers.

Each bed bay in groups of two or more shall have a number which is clearly visible, even with privacy bed screens closed.

Patient Information

- 750 .7.00 It is no longer recommended to display signs containing information about a patient, such as patient details, doctor identification and special instruction at the patient bed head or in a visible place within the patient bedroom.

This is considered inappropriate due to the requirement for the privacy and confidentiality of patient records. Designers and managers wishing to install patient information holders in the rooms are advised to fully consider the impact on patient privacy.

Room Signs

- 750 .8.00 Non-illuminated, internal and external room-function identification signs that are located on doors require the following considerations:
- The format used should allow easy replacement of the sign or sign inset when the room function changes.
 - It may be appropriate to deliberately omit signs on certain doors used only by staff.
 - Special notes may be installed to identify restricted access to certain rooms or departments.

Note 1: Vinyl-cut signs have proved to be a practical and economical option and capable of easy changing over time. However removing them can damage some surfaces.

Note 2: Some signs using removable slats can be easily stolen unless a locking cap is used.

Note 3: Door signs in general are not mandatory.

Egress Signs

- 750 .9.00 Egress signs shall be installed in accordance with relevant statutory codes.

External Directional Signs

- 750 .10.00 External directional signs shall have white reflective letters on a blue background. The signs shall preferably be of steel or aluminium construction.

External Illuminated Signs

- 750 .11.00 External illuminated signs for an Emergency Unit shall have white letters on a red background.

External illuminated signs for the Main Entry and Night Entry shall have white letters on a blue background.

Note: Emergency department is referred to as Emergency unit in these Guidelines. The sign, however should refer to "Emergency".

Fire Services Signs

- 750 .12.00 Fire services signs shall be installed in accordance with the following:
- Fire Extinguishers: AS 2444 Portable Fire Extinguishers Selection and Location
 - Fire Hose Reel Cabinets: According to the BCA
 - Hydrants: AS 2419 Part 1 'Fire Hydrant Installations, Systems Design, Installation and Commissioning'.

Internal Signs

- 750 .13.00 **DIRECTIONAL SIGNAGE**
Non illuminated directional and area identification signs should be as follows:
- Ceiling or wall mounted
 - Text on contrasting background - dark lettering on light background preferred
 - A guide for the patient or visitor until they reach a room or door sign for the intended destination
 - Not obscure other critical ceiling fixtures such as emergency lighting or fire exit signs.

Serious consideration should be given to the provision of alternate low level signs in Braille (as well as plain text) in Hospital Entrance Foyers leading to major departments, lifts and public amenities. It is recommended that such signs be installed immediately above the hand rail required by AS1428.

750 .14.00 DOOR NUMBERS

Door/Frame Numbering or tags may be required by the management for easy maintenance. This is a separate concept to room signage showing the function or the room. Door numbering is not mandatory. Unlike room signs, door numbering may be small and unobtrusive.

Miscellaneous Signs

- 750 .15.00 Miscellaneous signs, illuminated and non-illuminated are to be provided as required. These could include illuminated 'X-ray Room in Use' signs. The colours used should meet the requirements of the relevant code or regulating authority.

Road Markings

- 750 .16.00 Road markings such as parking bays, arrows, symbols and instructions should be white generally, blue for disabled and yellow for restricted zones.

Street Signs

- 750 .17.00 Street signs shall be in accordance with the requirements of the Local Council and/or the appropriate section of the state roads and traffic authority. Accreditation Standards require that the facility has street directional signs sufficient to enable it to be easily located from the major access road in the area.

The Emergency Unit, if provided, will require an illuminated sign that is clearly visible from the entrance to the Hospital site.

760 DOORS

Door Swing

- 760 .1.00 Doors shall not swing into corridors in a manner that might obstruct traffic flow or reduce the required corridor width. This applies only to doors subject to constant patient or staff usage.

Where doors need to swing out into corridor they should be set in a recess.

- 760 .2.00 DOORS IN THE PATH OF FIRE EGRESS

All doors on the path of fire egress shall be single or double swing type. These shall comply with the requirements of the BCA (Note: if such doors also form part of a fire or smoke compartment, they shall maintain those properties in the closed position).

Sliding doors may be used for exit doors opening directly to the outside if an approved failsafe system is provided to open the door in case of fire.

DOORS USED BY PATIENTS

Doors to rooms that are likely to be used by patients without staff assistance should be single or double swing type.

Swing doors should generally open from corridors and distribution spaces into rooms. The exceptions are as follows:

- Doors to small patient ensuites should generally open out.
- Doors to disabled toilets and showers should open out.
- Doors to small change cubicles should open out.
- Doors subject to the requirements of "Emergency Access" shall open out or open in both directions.

Door Width

- 760 .3.00 Clear door openings between two sections of a corridor or from one corridor to another shall be as specified by the BCA for doors in the path of fire egress. In effect, for the purpose of these Guidelines all corridors are on the path of egress.

- 760 .4.00 The minimum dimensions of clear door openings to Patient Bedrooms in new areas shall be 1400 mm wide and 2030 mm high. This is to ensure clearance for the movement of beds. Existing doors of lesser dimensions may be considered acceptable where function is not adversely affected and replacement is impractical.

- 760 .5.00 In general, clear door openings to rooms that may be accessed by stretchers, wheeled bed stretchers, wheelchairs or handicapped persons, shall be a minimum of 900 mm. For situations such as hoists and shower trolleys 1000 mm is recommended.

- 760 .6.00 While these standards are intended to facilitate access by personnel and mobile equipment, consideration must be given to the size of furniture and special equipment that is to be delivered via these access ways.

Emergency Access

- 760 .7.00 Certain rooms that are used by patients shall be equipped with doors and hardware that will permit emergency access from the outside. These rooms can be defined broadly as follows:
- Rooms that are used independently by patients, have only one door and are smaller than six m²
 - Rooms where there is less than 2.5 m of clear space behind the single door

- Patient Bedrooms, Bathrooms and Ensuites in Mental Health facilities, or Mental Health components of other health facilities
- Secure rooms in mental health facilities.

When such rooms have only one opening the door shall be capable of opening outwards or in a manner that will negate the need to push against a patient who may have collapsed within the room. In other words, if the door normally opens inwards, in case of emergency, the staff must be able to open the door outwards without any need to use a key, Allen key or special device.

These Guidelines recommend the use of retractable door stops within flat metal door frames together with coin operated door snibs. The snib can be opened with a coin while the door can be opened outward by simply pushing the door stop into the frame.

Important note: This requirement can not be satisfied by any of the following alternatives:

- Cavity sliding doors
- Sliding doors on the inside of the room.

In all areas except mental health secure rooms, surface sliding doors installed on the outside of the room may satisfy the requirements of this clause. This can be achieved if:

- The door can be easily and safely removed off the track
- Door removal is not prevented by the door locking mechanism.

Notwithstanding the above possibility, manual sliding doors are not recommended by these Guidelines for any area of Hospitals or Day Procedure Centres.

In mental health secure rooms, the following configuration is mandatory:

- One standard door, opening in
- One adjacent door minimum 450 mm wide, opening out
- Both doors with external locks and fully recessed internal handles.

Door Handles

760 .8.00

GENERAL

The following considerations shall be given to the particular hardware requirements and special fittings needed for certain areas:

DOOR HANDLES GENERALLY

In areas where staff frequently pass doors, serious consideration should be given to the shape of the door handle so that it is not caught by the pockets in overalls. Handles with a full return are recommended.

MENTAL HEALTH

Door handles in a Mental Health Unit shall prevent self-harm by not providing a supporting point. This can usually be achieved by using recessed, concealed or flush hardware. Alternatively, specially formed knobs are available which do not allow 'hanging'.

SHARED ENSUITES

Ensuites that are shared by two patients shall incorporate hardware to automatically lock one door and indicate 'room occupied' if the other door is operated. Both doors shall be unlocked once one of the doors is opened from inside.

PAEDIATRIC ROOMS

In Paediatric Rooms consideration should be given to providing two sets of door handles one at high level and one at low level.

LOCKS

Door handles may incorporate locks, snibs, push buttons and indicators. Designers and specifiers should be advised to consider flexible hardware systems where the functionality of the door may be changed without necessarily changing the hardware.

The type of locking function shall be appropriate for the use of the room. In any event, the locking device shall prevent a person being inadvertently locked in a room, and shall be openable from inside with a single action.

PUSH / PULL PLATES

In many instances a door lock or latch is not necessary. Rooms that do not require locking may work well with only push/pull plates and a self closer. Push/pull plates are recommended in rooms that are used frequently by staff holding objects in their hands. Dirty Utility Rooms are a good example.

Door Grilles and Undercuts

- 760.9.00 The Heating, Ventilation and Air-Conditioning (HVAC) design may require door grilles or undercuts. These are usually required for return air, makeup air or pressure relief.

Door grilles or undercuts may be used in areas which do not compromise the requirements of the BCA and other requirements of these Guidelines. These may include:

- Areas with a particular air-pressurisation scheme
- Isolation rooms
- Room requiring acoustic isolation
- Rooms requiring radiation shielding

The following non-mandatory recommendations also apply to grilles and undercuts:

- Door grilles are not recommended for areas used by people in wheelchairs due to potential impact and damage
- Door grilles are not recommended for bathrooms or ensuites
- Large undercuts close to bathroom showers are not recommended as they can result in water leaking outside to adjoining rooms
- As an alternative to a door undercut, designers may consider an inward sloping door slot approximately 200 mm above the floor to reduce water egress whilst providing the same functionality as a door undercut.

Hold Open Device

- 760.10.00 Door hold-open devices should also be considered for doors that should remain open, such as doors on main traffic routes and delivery doors.

The following requirements shall apply:

- Hold open devices shall be capable of activation and de-activation without any need for the staff to bend down.
- Hold open devices shall not be fitted to doors where this compromises fire doors, smoke doors or other doors that are required to achieve a specific air pressurisation or isolation scheme by these Guidelines.
- Hold open devices shall not be fitted to the side of a door which may permit a disturbed patient to lock the door from inside.

In areas frequently used by staff holding objects or pushing trolleys, the use of delayed action combined self closer/hold open device is recommended.

Self Closers

- 760.11.00 **GENERAL**
Self closers are required for fire and smoke doors nominated in the BCA and shall comply with its requirements. This section covers other door types.

Self closers shall be provided for the following doors:

- Doors required to achieve a certain airflow or air pressurisation scheme required by these Guidelines
- All air locks, with or without an air pressurisation scheme
- Entrance doors to any area nominated as a restricted area by these Guidelines including:
 - Operating Unit
 - CSSU
 - Catering Unit
 - Sterile Stock Room
- Isolation Rooms
- Birthing Rooms
- Dirty Utility Rooms

Apart from the above doors, self closers are not required or encouraged. Indeed an over-provision of self closers can lead to unnecessary capital and maintenance costs.

Self closers to the following rooms are discouraged:

- Offices
- Patient rooms
- Bathrooms and Ensuites
- Rooms used independently by people with disabilities
- Meeting Rooms and Interview Rooms.

HARDWARE

Self closers shall be designed and installed to allow for the door opening a full 90 degrees. The nib space required for the self closer arm should be considered.

Self closers used in double doors shall be accompanied by suitable sequencer hardware to allow the doors to be closed in the right sequence. Self closers that duplicate the functionality of a hold open device may also be considered.

Observation Glass

760.12.00 Glazed panels, installed in accordance with AS 1288 - Glass in Buildings - Selection and Installation, shall be provided in doors where visual observation for reasons of safety, security or patient observation is required. However, in fire doors the size must comply with AS 1905.1 Components for the Protection of Openings in Fire Resistant Walls - Part 1 - Fire Resistant Door Sets.

760.13.00 Observation glass is recommended in the following areas:

- Entry/exit doors to Operating Rooms or Procedure Rooms
- Doors from Scrub Room to Operating Room
- Doors to air-locks
- Doors to Clean and Dirty Utility
- Work rooms frequently used by staff
- Doors to rooms used to interview mental health or disturbed patients
- Doors to rooms requiring an observation window but with no physical possibility of providing a window
- Doors to Kitchens and Pantries.

Observation glass is not recommended in the following areas:

- Doors to Patient Bedrooms generally
- Doors to rooms requiring acoustic isolation
- Doors to mental health secure rooms
- Doors to rooms resulting in an invasion of patient or staff privacy

Observation glass shall have a mechanism, device or material to protect the glass in the following areas:

- Operating Rooms and Procedure Rooms where laser may be in use

- Rooms requiring X-ray or other radiation shielding
- Rooms requiring electromagnetic shielding (such as a Faraday Cage)

Observation glass may be semi-frosted in areas where a clear vision of the room is not required. This type of glass or applied film may suit rooms where the primary concern is to avoid danger to staff passing through the door. Semi-frosted glass is usually adequate to enable staff to avoid the danger. Semi-frosted glass is recommended in doors to the following rooms:

- Clean Utility
- Dirty Utility.

Automatic Doors

- 760.14.00 Beam activated automatic sliding or swing doors are considered highly desirable in high traffic areas such as Main Entrances and delivery points. They may also be used successfully in areas where 'hands-off' access is necessary, such as entries to an Operating Unit. Where installed, they are to satisfy the requirements of emergency egress and to close at a rate that provides sufficient time for disabled and frail patients and visitors to enter/exit. Automatic doors are not mandatory.

Sliding Doors

- 760.15.00 Sliding doors may be used subject to compliance with the BCA and the following mandatory requirements.

Cavity sliders may not be used in the following areas

- Planning units containing Patient Care Areas or Treatment Areas
- Planning units containing sterile equipment
- Planning units containing patient diagnostic equipment
- Catering Facilities
- Laboratory Areas
- Mental Health Facilities

Surface sliding doors may be used subject to the requirements of 'Emergency Access'.

Note 1: Generally, these Guidelines do not recommend the use of sliding doors in Health Facilities due to a number of reasons including hygiene concerns, maintenance problems and potential for locking in place.

Note 2: Sliding doors, if used should be of solid core or metal frame type to resist warping and therefore locking. Sliding doors should have tracks on top and bottom to ensure safety of operation.

Insect Control

- 760.16.00 External doors that open directly into food preparation areas and are used for service deliveries or regular access, shall be fitted with air curtains, flexible doors or an equal control system to restrict the ingress of insects. Flyscreen doors, which can be propped open, and electronic insect traps within the kitchen, are not suitable as the only means of insect control.

765 GRAB RAILS & HAND RAILS

General

765 .1.00 Grab rails shall be detailed as described in AS 1428.1 - Design for Access and Mobility.

765 .2.00 CONTINUITY

In corridors accessed by patients, a grab rail to one side is mandatory. Depending on the plan the following will apply:

- The hand rail should be on the side of the wall leading to the majority of rooms or areas related to patients
- If the continuity of the grab rail is interrupted due to a large number of doors placed in close proximity, a grab rail should be provided to the opposite wall, at least for the length of corridor affected.

765 .3.00 PREVENTION OF SELF HARM

In certain areas such as Mental Health Units, grab rails may present the possibility of self harm by providing points of ligature.

Depending on the Operational Policy, corridor handrails in Mental Health Units shall be designed in such a way that the space between the base of the handrail profile and the wall is blocked. The top of the handrail should be designed to meet the requirements of AS 1428. This arrangement does not totally eliminate the ligature point, but it makes it impossible to tie an object around the rail.

765 .4.00 OUTSIDE CORNERS

Handrails meeting outside wall corners should be either continuous around the corner or set back from the corners by approximately 100 mm. This is to minimise the chance of the rail grabbing onto clothing, especially large pockets. Any handrails continuing around 90 degree corners shall be rounded to avoid a dangerous sharp edge.

770 WINDOWS AND GLAZING

General

770 .1.00 All rooms occupied by patients or staff on a regular basis shall have glazed windows or doors to achieve external views and/or make use of direct or borrowed natural light, where practical.

770 .2.00 All Patient Bedrooms shall have external windows overlooking external areas. An external area is defined as the perimeter space around a building as well as naturally ventilated and lit atriums and courtyards.

Note 1: It is also a requirement of the BCA that all overnight Patient Bedrooms must have an external window. This however does not apply to the Operating Unit, Emergency Unit, ICU and similar areas.

Note 2: For the purpose of this clause, an internal atrium with artificial ventilation will be accepted if the area is more than 220 m2 with a minimum dimension of 14 m and suitable permanent landscaping.

770 .3.00 The requirement for windows to patient areas is summarised in the following schedule:

ROOM / SPACE	External Window	Alternatives	Alternatives	Mandatory	Remarks
OVERNIGHT BEDROOM	Yes			Yes	
BIRTHING ROOM	Yes			Yes	
CCU BEDROOM / BED BAY	Yes			Yes	A group of bed bays may share available windows
ICU BEDROOM / BED BAY	Yes	Skylight	Internal	No	A group of bed bays may share available windows
PATIENT BAY - PRE-OP HOLDING	Yes	Skylight		No	A group of bed bays may share available windows
PATIENT BY - RECOVERY	Yes	Skylight		No	A group of bed bays may share available windows
NURSERY	Yes			Yes	A group of bed bays may share available windows
PATIENT LOUNGE	Yes			Yes	
PATIENT ACTIVITY ROOM	Yes	Skylight	Internal	No	
PATIENT DINING ROOM	Yes		Shared	Yes	May be shared with Patient Lounge or Activity Room

Window Types

770 .4.00 In multi-level hospitals with ducted air-conditioning systems, or in buildings in cyclone prone areas, it is not always possible to include an openable window component. In these circumstances, fixed windows are acceptable, although access for external window cleaning should be considered.

770 .5.00 Openable windows should have provision to restrict the degree of opening. Locks should be heavy duty, affixed to both sides of hopper windows and fixed securely through the frame with tamper proof fixings.

Window Types

- 770 .6.00 Hopper windows should not be used in multi-storey buildings because they can act as smoke/heat scoops from fires in storeys below.

Note: Hopper windows are also known as 'awning' windows. These refer to windows hinged from the top.

Size

- 770 .7.00 Each required external window and/or external glazed door shall have a net glazed area of not less than 10 per cent of the floor area of the room concerned. An opening component not less than five per cent of the floor area of that same room is considered highly desirable but not mandatory. These requirements together will ensure natural light and ventilation in the event of an electrical or air handling system failure.

If it is considered undesirable to allow patients to open windows, for reasons such as avoiding potential problems with the central air-conditioning, then the opening section of the windows should be operated with a lock or allen key held by the staff.

Note 1: Any opening section of the window or door as described above shall be provided with a fly screen.

Note 2: The provision of opening windows also facilitates energy management and conservation as artificial lighting and air-conditioning systems may not be necessary at certain times of the day and year.

Cleaning

- 770 .8.00 Window cleaning shall be considered and appropriate provisions made. The following options are provided for information:
- Inward opening windows allow for the cleaning of the outside surface in a safe manner while standing inside the building.
 - With alternate outside opening windows it is possible to open one window to reach and clean the next window; however this type of window will require secure harness anchor points for the cleaner.
 - A window cleaning ledge or balcony may be provided only for window cleaning with no patient access. If no hand rail is provided, a continuous harness system shall be provided with a harness cable or rail that must reach a safe access point.
 - A window cleaning cradle that typically descends from the roof may be used. Cradles must be accessible from a safe position on the roof and comply with all safety legislation.
 - Extension arms may be used to clean windows that are one level above the ground or accessible terrace.
 - Hospital management may enter into a window cleaning contract with a contractor who uses a mobile Cherry Pickers or similar lifting device.

Note: For safety reasons cleaning windows using a ladder is not recommended.

Glazing

- 770 .9.00 Glazing shall be in accordance with Australian Standard 1288 as applicable to public buildings except that:
- All glazing in balustrades shall comply with Part 1 Section 4.3.9 of the above standard, irrespective of the area or support of the glazing
 - Fully framed glazing to windows, doors partitions and screens, designed so that any part of the glass is less than 750 mm above the finished floor level, shall have such part glazed with safety glazing materials as defined under Clause 1.3.3 and in accordance with the size requirements of table 4.1 of the above standard.

Glazing

- 770 .10.00 Doors, sidelights, borrowed lights and windows in which the glazing extends to within or below 450 mm above the floor, and are subject to possible breakage, shall be glazed with safety glass that will not create dangerous cutting edges when broken. Refer to AS 2208 - Safety Glazing Materials for Use in Buildings (Human Impact Considerations).
- 770 .11.00 Safety glass shall also be used for wall openings in activity areas such as recreation and exercise rooms and for shower screens, internal doors and full height windows, including those in Paediatric and Psychiatric areas.

Floor Finishes

780 .1.00 GENERAL

Floor finishes have an impact on various requirements of these Guidelines. Part D covers those aspects which affect Infection Control issues. This section (Part C) covers those aspects which affect Access, Mobility, Occupational Health & Safety.

780 .2.00 The selection of floor finishes is very important. It has direct impact on the safety of patients, staff and visitors. The choice also has potential legal implications if not correctly addressed such as Workers Compensation and Tort Law.

Fire safety compliance is also a special consideration. A 'duty of care' exists where professionals such as architects and interior designers are involved in the selection of products and responsibility must be addressed by purchasing officers and retailers/agents when purchasing replacement products. Floor finishes also have a direct impact on the whole of life costs of any building where cleaning and maintenance is concerned. This is especially true in a Hospital. Low capital cost may result in high whole of life costs.

780 .3.00 BALANCE OF CONSIDERATIONS

A number of issues should be considered and balanced when making the choice of floor finish. Designers are encouraged to investigate alternative materials and if necessary organise for realistic onsite tests before making major decisions. The following are general guides to making this decision.

MOVEMENT OF OBJECTS

The floor finishes chosen should make the movement of such objects as trolleys, bed trolleys and wheelchairs sufficiently easy to minimise the potential for back injury to staff.

The following should be considered when selecting floor finishes:

- Standard vinyl and similar products are the easiest materials for the movement of trolleys and wheelchairs.
- Carpet, if used should be direct stick, commercial density with short piles, preferably loop piles; a 90/10 or 80/20 wool/nylon mix is recommended.
- Flocked carpet should be considered where the 'look and feel' of carpet is desired with the ease of movement over vinyl.
- Many hospital staff consider that it is harder to move objects over cushioned vinyl. However, cushioned vinyl may still be preferred to standard vinyl for its sound absorption qualities.

NOISE GENERATION AND SOUND ABSORPTION

Carpet type finishes not only minimise noise generation, they also dampen the noise generated by other sources. Carpet is particularly effective in corridor areas outside Patient Bedrooms where a great deal of noise can be generated. This quality should be balanced against the ease of movement by trolleys, bed trolleys and wheelchairs.

Cushioned vinyl is also effective in minimising noise generation but it does not dampen other noises as effectively as carpet.

Ceramic tiles, Terrazzo and similar hard surfaces generate noise from walking staff and visitors.

EASY ON THE FOOT

Surfaces such as carpet and vinyl, both standard and cushioned are

considered easy to stand on for long periods of time. Most OH&S experts consider surfaces such as ceramic tiles and Terrazzo too hard to stand on for more than a few hours. These are therefore not recommended in hospital work areas. However, they may be used in public areas such as foyers and courtyards.

780 .4.00 Floor materials shall be easy to clean and have wear resistance appropriate for the location involved.

780 .5.00 Floor finishes that are subject to traffic whilst wet such as showers and bath rooms, kitchens and similar work areas shall be capable of maintaining a non-slip surface.

Note: The same applies to dry floors subject to the presence of fine powder such as baby powder.

Anti-static / Conductive Flooring

780 .6.00 A distinction must be made between antistatic and conductive flooring. Antistatic flooring reduces the risk of static occurring while conductive flooring absorbs the electrical charge. However, if rubber soled shoes are worn on conductive flooring the effect is negated.

780 .7.00 In the past, anti-static flooring was required in Operating Rooms because of the use of flammable anaesthetic agents. These types of anaesthetics are no longer in use, so the requirement for this type of specialised flooring no longer applies.

780 .8.00 In addition, anti-static flooring is expensive, both to install and maintain. Most public and staff areas do not pose a problem with respect to generation of an electrical charge. Where there is any possibility of such an event, for example a computer technician working inside a computer or a worker in a specialised micro-electronics laboratory, use is made of anti-static mats which more than adequately provide the necessary barrier.

780 .9.00 If there are areas and rooms in which flammable anaesthetic agents are stored or administered to patients, floors shall comply with AS 1169 - Minimizing of combustion hazards arising from the medical use of flammable anaesthetic agents

780 .10.00 Conductive flooring may be omitted in anaesthetising areas where flammable anaesthetic agents will not be used and appropriate notices are permanently and conspicuously affixed to the wall in such areas and rooms. Otherwise, appropriate conductive flooring shall be provided.

780 .11.00 In summary, anti-static or conductive flooring are not mandatory in any part of the hospital. Any special requirement may be noted specifically on the Project Brief.

Slip Resistance

780 .12.00 Slip resistance is governed by the nature of the anticipated activity. In equating safety, consideration must be given to all the relevant variables; slip potential is a function of footwear, activities, gait, contamination, environment and other factors.

780 .13.00 The choice of floor finish shall consider the slip resistance appropriate for different conditions. The following can be used as a guide:

Part C - Access, Mobility, OH & S

- Standard vinyl is suitable for dry areas where patients and staff are expected to wear shoes (Standard - Dry).
- Standard Textured Vinyl is similar to standard vinyl but provides greater dry-condition slip resistance (Standard / Slip resistant)
- Studded vinyl flooring balances slip resistance with ease of cleaning, and is suitable for wet areas such as patient showers where water, soap and body fat are present (Non-Slip).
- Safety vinyl flooring that suits wet areas without soap or body fat where trolley movement is also expected, such as CSSU Decontamination Areas and Dirty Utilities (Extra Non-Slip).
- Ceramic tiles can be used for Ensuites and Bathrooms, but not clinical areas requiring seamless finishes. Smaller ceramic tiles generally provided greater slip resistance. The best combination of slip resistance and easy cleaning is commonly referred to as 'Orange Peel'.
- Stone and terrazzo are sometimes used in entrance foyer areas; however, on rainy days these finishes may present a danger to staff and visitors and in such circumstances proprietary non-slip chemical treatments shall be used to increase slip resistance.

780 .14.00 The following slip resistance levels as defined by the Standards Australia Handbook 197 - 'An Introductory Guide to the Slip Resistance of Pedestrian Surface Materials', are mandatory:

ROOMS / AREAS	Resistance Level	Wet Pendulum Test	Ramp Test
BATHROOMS/ ENSUITES - PATIENT	R10	X	
CLEAN-UP ROOM (OPERATING UNIT)	R10	X	
CONSULT ROOMS	R9	Z	
CORRIDORS	R9	Z	
DECONTAMINATION ROOMS (CSSU)	R11	V	
DIRTY UTILITIES	R10	X	
HYDROTHERAPY AREAS	R11		B
IMAGING ROOMS	R9	Z	
MORTUARY FACILITIES (AUTOPSY)	R10	X	
OPERATING ROOMS	R9	Z	
OUTPATIENT AREAS / CLINICS	R9	Z	
PATIENT BAY	R9	Z	
PATIENT BEDROOMS	R9	Z	
PATHOLOGY LABORATORIES	R9	Z	
PHARMACY AREAS	R9	Z	
PLASTER ROOMS	R10	X	

Part C - Access, Mobility, OH & S

STERILISATION ROOMS	R10	X	
TREATMENT AREAS (INCL PHYSIOTHERAPY)	R9	Z	

780.15.00 Note: Refer to AS/NZS 4586 for details of the Wet Pendulum Test and Ramp Test classifications.

- 780.16.00 Design considerations include:
- Floor finishes and floor finish characteristics (wear resistance and cleanability)
 - The amount and type of expected traffic (vehicles, trolleys people hurrying, elderly, disabled people with or without walking aids and children)
 - Consequences of exposure to contaminants including environmental design factors (visibility issues and contamination minimisation)
 - Management policy and maintenance practised (frequency, type and effectiveness of cleaning equipment)
 - Compliance with Occupational Health & Safety requirements
 - Special provision for slip hazards (guards and rails)
 - Alternative information sources (use of contrasting colours, tactile indicators and warning signs).

Floor Joints

- 780.17.00 Thresholds and expansion joint covers shall be flush with the floor surface to facilitate the use of wheelchairs and trolleys. Expansion and seismic joints shall be constructed to resist passage of smoke.

785 ACOUSTICS

General

- 785 .1.00 The design and construction should address acoustic aspects of the work environment. The major design issues to be considered include:
- Workplaces should be designed to minimize the occupant's exposure to noise; noisy machines and activities should be remote or isolated from other work areas.
 - Noisy equipment should be acoustically enclosed where practicable
 - Noisy work areas such as workshops should have acoustically absorbent ceilings to reduce the amount of noise other staff working nearby are exposed to
 - Noise levels of equipment should be an integral part of equipment selection /purchasing procedures
 - Consideration should be given to the impact of ultrasonic noise generation. (Refer to AS 2243 - Part 5)

Specialist advice from a qualified Acoustic Engineer is recommended.

Minimum Standards

- 785 .2.00 The Engineering Services and the building components should be selected to achieve an acceptable noise level. Unless other requirements are stated in other parts of these Guidelines, the ambient sound levels should not exceed those stated in AS/NZS 2107 'Acoustics - Recommended design sound levels and reverberation times for building interiors', and AS 1055 - 'Acoustics - Description and measurement of environmental noise'.

Duct work is to be designed to maintain the sound transfer coefficient (STC) levels as identified in Technical Standard 12 - Internal Walling Systems for health Care Buildings, available from NSW Health.

- 785 .3.00 REQUIRED MINIMUM CONSTRUCTION STC RATINGS:

AREA	Minimum STC	Recomm'd STC	Recomm'd Wall Types
CENTRAL STERILE SUPPLY UNIT	50	55	Type 5
CONSULT ROOM	40	45	Type 3
CORRIDORS / LOBBIES	40	50	Type 4
DENTAL SURGERY	40	45	Type 3
EMERGENCY UNIT	40	45	Type 3
ICU / SPECIAL CARE	35	40	Type 2
INPATIENT BED ROOMS	35	45	Type 3
INTERVIEW ROOM		45	Type 3
KITCHEN	50	55	Type 5
LABORATORIES	45	50	Type 4

LOUNGES		40	Type 2
MEETING / CONFERENCE ROOMS		45	Type 3
OFFICES - EXECUTIVE	40	45	Type 3
OFFICE - GENERAL	35	40	Type 2
OBSTETRIC UNIT	45	50	Type 4
OPERATING UNIT	40	45	Type 3
OPERATING UNIT STERILISING AREA	40	45	Type 3
PHARMACY UNIT	45	50	Type 4
QUIET ROOMS		45	Type 3
RECEPTION	40	50	Type 4
RECOVERY AREAS		45	Type 3
REHABILITATION UNIT	40	45	Type 3
SPEECH THERAPY		45	Type 3
STAFF STATIONS	40	45	Type 3
TREATMENT ROOMS	40	45	Type 3
TUTORIAL ROOMS		45	Type 3
WAITING AREAS	40	50	Type 4

Typical Wall Types

785 .4.00 Typical dry wall types capable of achieving the above ratings are listed below; these are not mandatory and are subject to correct detailing and construction.

785 .5.00 TYPE 1 STC RATING - 35

Standard grade plasterboard 13 mm thick (minimum mass); 8.5 g/ m2 each side of 92 mm steel studs.

785 .6.00 TYPE 2 STC RATING - 40

Two options are available:

- Two layers of 13 mm thick standard grade plasterboard one side of 92 mm steel studs, one layer of 13 mm thick standard grade plasterboard on the other side
- One layer 13 mm thick standard grade plasterboard on each side of 92 mm steel stud. Cavity infill of:
 - 60 mm (500 g/ m2) polyester
 - 50 mm (10 kg /m3) glasswool

785 .7.00 TYPE 3 STC RATING - 45

Two layers of 13 mm thick standard grade plasterboard on one side of 92 mm steel studs, one layer of 13 mm thick standard grade plasterboard on the other

side. Cavity fill of:

- 60 mm (500 g/m²) polyester
- 50 mm (10 kg/ m³) glasswool, or
- Light or heavy Masonry.

785 .8.00 TYPE 4 STC RATING - 50

Two layers of 13 mm thick standard grade plasterboard each side of 92 mm steel studs. Cavity fill of:

- 70 mm (600 g/m²) polyester
- 75 mm (10 kg/ m³) glasswool.

785 .9.00 TYPE 5 STC RATING - 55

Staggered stud system using two layers thickness of standard grade plasterboard each side of 92 mm studs and 92 mm tracks. Cavity infill of:

- 70 mm (600 g/m²) polyester
- 75 mm (10kg/ m³) glasswool.

785 .10.00 Where a high degree of impact / abrasion resistance is required, eg. Hospital corridors, 9 mm thick fibrous cement sheeting may be substituted for 13 mm thick standard grade plasterboard. The acoustical performance for 9 mm fibrous cement sheet approximates that of 16 mm thick fire grade plasterboard.

785 .11.00 The maximum sound rating achievable for partition construction to the underside of a continuous plasterboard ceiling in STC 40. If a layer of 75 mm thick polyester or glass wool 2400 mm wide is provided over the ceiling on the partition below, a sound rating of STC 45 is achievable.

Partitions with sound ratings above STC 45 must be constructed full height from floor slab to underside of floor slab.

800 SECURITY

General

- 800 .1.00 The issue of security is raised throughout the Guidelines in areas such as hardware and external lighting. However, consideration shall also be given to the overall solution with good initial planning and detail design to overcome the principal problems of concealment of, and ease of access by the undesirable element, and containment of certain categories of patients.
- 800 .2.00 A hospital, even without an Emergency Unit, is a 24 hour operation. Visitors and staff enter and leave the building at all times, often on an informal and unscheduled basis. At these times, there is greater potential for unauthorised entry into the building and attacks on visitors and staff when walking to and from car parks and bus stops, especially at night.
- 800 .3.00 The work environment may increase or decrease the risks associated with occupational violence and aggression depending on a range of issues.
- 800 .4.00 Issues that require consideration with respect to security are:
- Areas of the building that are difficult to monitor after dark
 - Service entries where traffic might not be controlled
 - External illumination generally, in particular around car parks and entry points
 - Landscaping that might shield intruders
 - Building features that allow easy ingress of intruders
 - The role of security systems (closed circuit TV etc.)
 - Fencing
 - Drug storage location and security
 - Night staffing levels and protocol for receiving emergency or night visitors (after-hours)
 - Restricted after-hours vehicular access
 - containment of difficult, disturbed or demented patients
- This list is not intended to cover all issues, but to stimulate the designer to consider security as an important part of the design process.
- 800 .5.00 Hospital units such as Day Procedure Centres that are limited to daytime operation, especially if located in stand alone buildings, shall be well secured against unauthorised entry after-hours.
- 800 .6.00 Consideration shall be given to any additional facility requirements that result in a secure and safe environment for staff, patients and visitors.

Lockable Windows

- 800 .7.00 Opening windows create security problems. All openable external building perimeter windows and doors shall be lockable.

Lockable Doors

- 800 .8.00 All openable external building perimeter doors shall be lockable, so that they can not be opened from the outside.
- Fire Exit doors should freely open from the inside except the following:
- Mental Health, Dementia, Paediatric and Neonatal areas may require locked fire exit doors. Appropriate Operational Policies supporting alternative solutions to the BCA requirements will be required.
 - Some doors may be locked from the inside but automatically unlocked

upon a fire or smoke signal.

Entry / Exit

- 800.9.00 The workplace design should minimise public access to all areas of the workplace. Ideally, visitors should have access to one main entrance and security should be placed at this entrance if necessary. However, support services such as emergency response teams should have maximum access to all areas of the workplace to facilitate their intervention in emergencies. Staff should also have ready access to exits as escape routes if an aggressive incident occurs. All staff, including sessional specialists and casual staff should be provided with training on emergency response procedures.

Security Office

- 800.10.00 In hospitals, Security Office/s adjacent to the Main Entrance and Emergency Units is recommended.. Emergency Units should be designed to allow secure separation of treatment areas from public areas.

Note 1: Security barriers may include glass fronted counters and access doors with card or keypad access.

Note 2: In Main Entrance and Emergency Units the provision of video security is recommended.

Note 3: Any ambulance entrance should have the same level of security protection as the main entrance.

Parking

- 800.11.00 Staff parking should be provided under or within close range of the workplace. The area should be well lit and protected from the elements. Layout and landscaping should exclude dark spots or hiding places. Dedicated parking areas for evening and night staff should be close to the entrance/exit of the workplace. In high risk areas the car park may need to be monitored by security personnel or cameras.

Reception / Waiting

- 800.12.00 Reception and Waiting Areas should be easily identifiable and accessible to patients and visitors. The design and layout should provide reception staff with a clear view of all persons in the Waiting Area. The activities of clinical staff should not be visible from the Waiting Room or Reception Area.
- 800.13.00 Personal space is especially important in waiting areas particularly in Emergency Units where clients are more stressed. There is some evidence which indicates that persons experiencing high tension need greater interpersonal distance than others. Reception areas should be spacious and quiet with comfortable seating. Seating should be either individual or bench type. To reduce boredom, activities such as television, toys, books and games should be provided. Public telephones should be provided to enable ready communication with friends, relatives and employers.
- 800.14.00 Furniture should be attractive and comfortable but should be selected with regard to its safeness and the possibility that it may be used as a weapon. Colour is an important factor and should be selected for its calming rather than stimulating qualities. Climate control will help maintain a comfortable and calming environment. Provision of Public Toilets is important to enhance comfort.
- 800.15.00 In Emergency Units, unless a glass barrier is provided, counters should be high enough to discourage an adult climbing over them. They should also be wide enough to make it difficult for a client to strike a staff member. Vertical partitions or high counters should be provided to the extent required, to allow

Part C - Access, Mobility, OH & S

for some privacy when people are discussing private matters with staff. Each counter should be provided with a duress alarm system.

In Emergency Units, the provision of security glass barriers to a minimum height of 1820 mm AFFL is recommended.

- 800 .16.00 The ends of the Reception counter should be closed to prevent clients walking into staff areas. These may be full height or half height.

Screens & Grilles

- 800 .17.00 In general, openable external windows, vents and doors shall be fitted with flyscreens. Doorways that are used on a regular basis such as service and main entries need not be flyscreened but shall be fitted with a self-closing device. Other exceptions to the above are windows in multi-storey or fully air-conditioned buildings, that are used for service access, or pivot/swing/tilt for cleaning purposes.
- 800 .18.00 Security grilles, and appropriate impact resistant glass or electronic security system should be installed wherever high security areas have external windows, such as Pharmacy Stores and Workrooms; and Medical Records Stores.
- 800 .19.00 Security flyscreened doors, where installed, shall not compromise emergency egress.

Treatment / Interview

- 800 .20.00 Separate rooms should be provided to isolate distraught or emotionally disturbed patients, families or friends; people with acute behavioural psychiatric problems; and intoxicated or very noisy people.
- 800 .21.00 Treatment, Interview and Consultation Rooms that are likely to be used by Mental Health or disturbed patients should be fitted with two doors opposite each other to allow easy escape by staff. One door is to lead in from the public area and the other from the staff area, another similar room or the outside. The door to the staff area or similar room should be secure.
- 800 .22.00 Treatment and Interview Rooms likely to be used by Mental Health or disturbed patients should incorporate duress alarms and glass viewing panels on at least one door to allow observation by colleagues.

Multi-purpose treatment rooms that may be used for holding of Mental Health patients shall have secure roller doors or a similar lockable device to cover any medical service panels and sensitive wall mounted objects.

Intruder Alarm

- 800 .23.00 Intruder alarm systems are highly recommended for parts of Hospitals as well as Day Procedure Units that are closed after-hours.

Intruder alarm systems are mandatory for the following areas:

- Pharmacy Units where dangerous drugs (schedule 8) are kept
- All Satellite Pharmacy Rooms where dangerous drugs (schedule 8) are kept
- All drug safes where dangerous drugs (schedule 8) are kept
- Mortuary areas where bodies are stored
- External doors or windows to baby nurseries including NICU and Paediatric Units

- Clinical Information Unit and any remote archival areas.

800 .24.00 Many different intruder alarm systems are available. The required intruder alarm systems shall be equal to or better than, in terms of coverage and functionality the following:

- Reed Switches for doors and windows
- Movement detectors to cover spaces which can be used for access.

A required intruder alarm should adequately indicate the location where security has been breached. The acceptable systems may indicate the location by:

- A local audible alarm
- A remote indicator panel with a readout
- A security signal sent to 24 hour Security Room or Staff Station computers
- A general audible alarm and security pager signal indicating the location
- Another system with equal or better functionality.

800 .25.00 In larger facilities with sophisticated nurse call systems it is advisable to integrate the security systems including the intruder alarm, duress alarm and video with the nurse call system.

Ideally, the system will send a security signal to a dedicated Security Office or the 24 hour Staff Stations. The signal as well as video surveillance images may be seen on standard computer monitors which also pinpoint the location of the intrusion.

Duress Alarm

800 .26.00 A duress alarm system is intended for a number of purposes:

- To seek assistance for staff who may be directly exposed to a threat of violence
- To indicate inappropriate or aggressive behaviours by visitors or patients.

800 .27.00 A duress alarm system is mandatory in the following areas:

- All Staff Stations
- All Reception Counters
- All Examination / Consult / Treatment Rooms which are likely to be visited by mental health or otherwise disturbed or aggressive patients
- All Consultation Rooms in Psychiatric Units
- Emergency Unit Triage/ Clerical Reception areas.

In acute Psychiatric Units, a Mobile-Locator system shall be installed and mobile sets made available to all staff who deal directly with the patients.

800 .28.00 The requirement for duress alarms is also noted in various sections of these Guidelines including the Standard Components Room Data Sheets and Room Layout Sheets.

800 .29.00 There are three generic types of duress alarm:

AUDIBLE AND VISIBLE

This type of duress alarm is intended to immediately attract attention in the hope that the threat of violence may cease at once. The alarm is either heard or seen close to the point of activation. The alarm may also send a signal to a central security office or 24 hour Staff Station.

SILENT

This type of duress alarm is intended to call for discreet assistance without causing local alarm to the aggressor or others who may be present. The signal is sent to a Security Office or 24 hour Staff Station.

MOBILE-LOCATOR (MAN-DOWN)

This type of duress alarm is similar to a silent duress alarm. The alarm device is mobile and is worn by the staff. The device sends a signal to a Remote Security Office or 24 hour Staff Station. The device is automatically activated if the staff member collapses to the floor. The system must indicate the location of the staff member at the time of the signal activation.

- 800 .30.00 Duress alarm systems shall be installed to meet the requirements set out below:

AUDIBLE AND VISIBLE SYSTEMS

The trigger button should be close to the staff work area such as under the reception desk or a nearby wall on the staff side. Since this type of alarm relies on startling the aggressor, the trigger button may be deliberately located in a highly visible area close to the staff and if necessary, sign-posted. The trigger button itself acts as a deterrent. The audible alarm should be close to the general area where the staff are located.

The visible alarm (if provided) should be on the ceiling or nearby wall, clearly pointing attention to the problem area. The visible alarm may be similar to a flashing blue or red light. This type of alarm ideally suits busy Emergency Units.

SILENT ALARM SYSTEMS

The trigger button should be close to the staff at the time of dealing with patients or visitors. The best location tends to be under the bench or desk. The trigger button should not be visible from the patient/ visitor side of the Staff Station or desk. This type ideally suits Consult / Treatment Rooms where staff members are alone with patients.

MOBILE-LOCATOR SYSTEMS

The trigger sets are worn by the staff, typically on the belt. The central control device/s shall be in secure staffed areas.

- 800 .31.00 In certain areas with a high likelihood of disturbed patients or visitors such as Emergency Unit Waiting areas, audible and visible alarms within the same space are recommended if staff are already protected behind a security glass barrier. Such alarms may startle the violent person and result in an immediate behaviour modification. A decision to provide an audible and visible alarm in the same space should be taken in consultation with security officers and/ or the Police.

Video Security

- 800 .32.00 Video security should be considered for all areas that may be used after-hours. Video security is mandatory in the following areas:
- Emergency Unit after hours patient entrance
 - Ambulance Bay after hours entrance
 - Any entrance used for access to a Birthing Unit after hours
 - Any other entrance which is used for the above purposes after-hours
 - Corridors, courtyards and Secure Rooms in an Acute Psychiatric Unit which can not be adequately observed from a Staff Station.

The video security system required at entrance points shall have the following features:

- Show those who intend to enter
- Include an intercom system to communicate with those who intend to enter
- Provide a remote signal to open the door.

The video security system required in Psychiatric Units shall have the following features:

Part C - Access, Mobility, OH & S

- Adequately cover hidden areas
- Camera protected and discrete
- The direction of the camera should not be obvious.

The monitoring point for video security may be a dedicated Security Office or a 24 hour Staff Station.

Note: The provision of video security at the main entrance of Hospitals is not mandatory but is recommended.

Part C - Access, Mobility, OH&S

COMPLIANCE CHECKLIST

Name of HPU: _____ (Print and complete one per HPU)

Agreed Role Delineation Level: _____

No	Item	Yes	No
1.0	Space standards & Dimensions:		
1.1	Corridors: Have corridors been designed with the minimum required clearance?	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Ceiling Heights: Are ceiling heights in rooms and corridors appropriate? Have the ceiling mounted items of equipment been allowed for?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
2.0	Ergonomics		
2.1	Does the facility comply with the nominated Standards in regard to access for people with disabilities?	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Are fixed equipment and furniture appropriately designed and located?	<input type="checkbox"/>	<input type="checkbox"/>
2.3	Are desk and benches suitable for the people using them and the tasks they are performing, i.e. height and depth?	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Where shelving is indicated, is the depth and height appropriate?	<input type="checkbox"/>	<input type="checkbox"/>
2.5	Has sufficient space been provided in patient rooms and bed bays for movement of objects and patients around the bed?	<input type="checkbox"/>	<input type="checkbox"/>
3.0	Human Engineering		
3.1	Have Human Engineering issues been considered and addressed?	<input type="checkbox"/>	<input type="checkbox"/>
4.0	Signage		
4.1	Is the signposting specified appropriate and sufficient?	<input type="checkbox"/>	<input type="checkbox"/>
5.0	Doors		
5.1	Have the door/s swings and clear door widths been checked for compliance?	<input type="checkbox"/>	<input type="checkbox"/>
6.0	Grab Rails & Hand Rails		
6.1	Do all grab rails and handrails comply with AS 1428?	<input type="checkbox"/>	<input type="checkbox"/>
6.2	In corridors accessed by patients, are sufficient grab rails provided?	<input type="checkbox"/>	<input type="checkbox"/>
7.0	Windows		
7.1	Have all patient rooms used for overnight stay been provided with external windows?	<input type="checkbox"/>	<input type="checkbox"/>
7.2	Do all external windows have restricted access?	<input type="checkbox"/>	<input type="checkbox"/>
7.3	Do all external windows have access for cleaning?	<input type="checkbox"/>	<input type="checkbox"/>

Part C - Access, Mobility, OH&S

No	Item	Yes	No
8.0	Floors		
8.1	Are the floor finishes for each room and corridor appropriate for the usage of the area?	<input type="checkbox"/>	<input type="checkbox"/>
8.2	Do the floor finishes specified have the appropriate slip resistance level?	<input type="checkbox"/>	<input type="checkbox"/>
9.0	Acoustics		
	Is the design capable of compliance with the Acoustic guidelines?	<input type="checkbox"/>	<input type="checkbox"/>
10.0	Security		
10.1	Are all external perimeter doors lockable?	<input type="checkbox"/>	<input type="checkbox"/>
10.2	Are security provisions in Entry, Carparking, Reception and Waiting areas appropriate?	<input type="checkbox"/>	<input type="checkbox"/>
10.3	Are duress alarms provided to the specified areas?	<input type="checkbox"/>	<input type="checkbox"/>

Checked and certified by:

Name: _____

Date: _____

Company: _____

Position: _____

Signature: _____



Part D – Infection control

820 GENERAL REQUIREMENTS

General

- 820 .1.00 Infection Control requirements are critical to the planning of a Health Care Facility and need to be incorporated into plans and specifications.
- 820 .2.00 All areas of the facility shall be designed, constructed, furnished and equipped in keeping with the principles of infection control.
- 820 .3.00 Infection control involves the prevention of possible spread of infection by minimising the transfer of micro-organisms from person to person. Consider sufficient space to allow enough room for storage of Personal Protective Equipment (PPE) i.e. gowns and gloves for protective isolation.
- 820 .4.00 A number of strategies contribute to the control of infection, such as hand-washing, careful aseptic technique and the observance of 'standard precautions'.
- 820 .5.00 By far the most important of the infection control strategies is effective hand-washing. Hand-washing facilities shall be installed in all Patient Care Areas, and also in all areas where careful attention to hygiene is essential, such as Kitchens, Laundries, Pharmacies and Laboratories. Staff Amenities Areas, such as Bathrooms, Toilets and Change Rooms shall also be equipped with hand-washing facilities. Refer to the heading 'Handwashing Facilities' for detailed requirements for staff hand-basins.
- 820 .6.00 Facets of construction and fit-out that contribute to effective infection control are covered in various sections of these Guidelines. They include ventilation; floor coverings; waste management; provision for ease of cleaning; provision for sterilisation and disinfection of equipment and instruments; and provision for the isolation of infectious patients as required.

825 HANDWASHING FACILITIES

General

- 825 .1.00 The Guidelines refer to several categories of handbasins including Type A, B, C and troughs along with various configurations for types and placement of tapware. These are addressed in the section and tables that follow.

Handbasin Types

- 825 .2.00 Type A handbasin refers to a clinical scrub basin. The handbasin type is a large 'Medicex' type. The taps are wall mounted, hands-free operation (elbow, foot or electronic). This basin is used in areas requiring clinical hand-washing for sterile procedures, for example ICU Rooms, Treatment Rooms and Cardiac Catheterisation areas.
- 825 .3.00 Type B basin refers to a general staff handbasin. The basin type is a medium wall mounted basin. The taps are either wall mounted or basin mounted with hands-free operation (elbow or wrist). This basin is used in areas requiring general staff hand-washing, for example ward corridors.
- 825 .4.00 Type C basin refers to a small staff handbasin. The basin type is a small wall mounted basin. The taps are either wall mounted or basin mounted with hands-free operation (elbow or wrist). This basin is used in areas requiring general staff hand-washing, for example Staff Amenities and Toilet Areas.
- 825 .5.00 Scrub sink refers to a long sink that can accommodate one or more staff scrubbing for a sterile procedure at the one time. Refer to Ergonomics for the heights, width of space per person and type of taps.

Handwash Basins - Placement

- 825 .6.00 Handwash Bays should be provided in the following ratios:
- Intensive/ Critical Care Units - one per enclosed room, one per two open bays
 - Emergency Unit - one per four open bays
 - Ambulatory Care Areas - one per four open bays
 - Other patient treatment areas - generally staff should not be more than 10 - 12 metres from a Handwash Bay.

Handwash Basin Types - Schedule

- 825 .7.00 Schedule of basin and tap types:

The following indicates recommended basin and tap combinations for particular rooms. For rooms not listed refer to a similar area.

ROOM / SPACE	BASIN TYPE	WALL TAP	BASIN TAP	WRIST ACTION	ELBOW ACTION	INFRA-RED	REMARKS
BAY - HANDWASHING	B	yes	optional		yes		In corridors
BATHROOM	B		yes	yes			
BIRTHING ROOM	A	yes			yes	optional	
CLEAN UTILITY	B	yes	optional		yes		

Part D - Infection Control

CLEAN-UP ROOMS	B		yes	yes			
CONSULT ROOM	B	yes	optional	yes	yes		Also includes Examination Rooms
DIRTY UTILITY	B		yes	yes			
ENSUITES	B		yes				
HIGH DEPENDENCY UNIT	A	yes			yes		
INPATIENT BEDS	B	yes			yes		
INTENSIVE CARE UNIT	A	yes			yes		Also includes Coronary Care Units, Neonatal ICU
ISOLATION ROOM - AIRLOCK / ANTEROOM	B	yes			yes		Class N
ISOLATION ROOM/ S	B	yes			yes		All Classes
PANTRY	B		yes				Includes Kitchenettes, Beverage Pantry
POST MORTEM	B	yes	optional		yes		
RECOVERY	B	yes			yes		
SCRUB-UP / GOWNING	SINK	yes				yes	Operating Unit, Day Procedures Unit, Procedure Rooms including Imaging
TOILET - PATIENT	B		yes				
TOILET - PUBLIC	C		yes				
TOILET - STAFF	C		yes				
TREATMENT ROOM	A	yes			yes	optional	

Work & Treatment Areas

- 825 .8.00 Sinks should not be provided in Clean Utility areas to avoid the risk of contamination of sterile stock stored in this area. The clinical handbasin should be located external to the room. Basin Type B is recommended for this area.

830 ISOLATION ROOMS

Class S - Standard Pressure

- 830 .1.00 Standard Pressure Rooms are for patients who require contact or droplet isolation. A standard room with normal air-conditioning is appropriate.
- 830 .2.00 Recommended elements for Class S Isolation Rooms are as follows:
- A staff handbasin within the room
 - An Ensuite Bathroom
 - A self-closing door.
- 830 .3.00 A pan sanitiser located near the room is an optional element for Class S Isolation Rooms.

Class N - Negative Pressure

- 830 .4.00 Negative Pressure Rooms are for patients who require airborne droplet nuclei isolation. The aim of placing persons in Negative Pressure rooms is to reduce transmission of disease via the airborne route.
- 830 .5.00 For elements and inclusions for Class N Negative Pressure Rooms refer to Department of Human Services Isolation Room Guidelines.

Class P - Positive Pressure

- 830 .6.00 For elements and inclusions for Class P Positive Pressure Rooms refer to Department of Human Services Isolation Room Guidelines.

Class A - Alternating Pressure

- 830 .7.00 Rooms with reversible airflow mechanisms, which enable the room to have either negative or positive pressure shall not be used.

Number of Isolation Rooms

- 830 .8.00 A minimum of 20 % of the total bed complement in Inpatient Accommodation Units (across the whole facility) used for overnight stay shall be provided as Single Bedrooms (Type S).
- 830 .9.00 All HPUs providing inpatient overnight accommodation shall provide at least one 'Class S - Standard' Isolation Room.

All facilities at Level Four and above shall provide at least one 'Class N - Negative Pressure' Isolation room per 100 overnight beds. Additional 'Class N - Negative Pressure' Isolation Rooms may be required to meet service profile and model of care for the HPU and the facility.

The provision of 'Class P - Positive Pressure' Isolation Rooms are only required to meet the requirements of the service profile and the model of care for the HPU and the facility.

Operating/ Procedures Rooms

- 830 .10.00 When bronchoscopy is performed on persons who are known or suspected of having pulmonary tuberculosis, the Operating/ Procedures Room shall meet the Negative Pressure Isolation Room ventilation requirements.

860 PHYSICAL ENVIRONMENT

Planning

- 860 .1.00 The design of the premises is fundamental to infection control and implementation of 'Standard' and 'Additional' precautions. All new or renovated Health Care Facilities should incorporate in their design and layout the physical requirements that are essential for an infection control strategy.
- 860 .2.00 The room/ ward size should be limited.
- 860 .3.00 The design of the premises should consider the movement of people and equipment in ways that minimise the risk of transmission of infection.

Air-Conditioning

- 860 .4.00 Hospital air-conditioning systems should be monitored regularly and serviced by accredited service technicians. Maintenance schedules should be documented.
- 860 .5.00 Air-conditioning or ventilation systems in critical areas such as Operating Rooms, Birthing Rooms, Tuberculosis isolation rooms, Burns Units, Intensive Care Units, Emergency Units, as well as in special treatment or procedural areas, should provide high quality air at all times. Where the Sterile Supply / Service Unit is attached to Operating Rooms, ventilation should be provided by a treated air supply and air-conditioning should comply with Part E of these Guidelines. Air-conditioning in separate Sterile Supply / Service Units should comply with the relevant Australian Standards particularly AS 4187.
- 860 .6.00 Where there is a risk of airborne transmission of pathogenic micro-organisms, there should be a sufficient number of single rooms (at least one per 100 Beds) with adequately filtered air-conditioning which should have external exhaust systems. No recirculation of air should be permitted. For tuberculosis isolation and treatment rooms, negative pressure ventilation should be made available, in accordance with nationally endorsed guidelines, and State and Territory tuberculosis guidelines. A minimum of twelve air changes per hour (ACH) are advised, including at least two outside air changes per hour, plus good air circulation within the room.

Cleaning Areas

- 860 .7.00 Separate and clearly defined operating and cleaning areas are required to maintain adequate barriers for infection control. Delineation of these areas facilitates easy identification of surfaces that should be cleaned and disinfected between patients. Both areas should have adequate lighting, good ventilation to reduce the risk of cross-infection from aerosols, bins for the disposal of hazardous waste and smooth impervious surfaces without crevices.
- 860 .8.00 The cleaning area should be divided into a contaminated section and a clean section.
- 860 .9.00 The contaminated section shall comply with AS4187 and include:
- Adequate bench space for dismantling and working on equipment
 - At least one deep sink or trough (stainless Steel) for manual cleaning of instruments and other equipment

Part D - Infection Control

- Cleaning and disinfecting materials
- Cleaning and disinfecting equipment including brushes
- Steriliser
- Mechanical disinfectant / washer.

Cleaning sinks must be located separately to clinical hand washing basins to avoid risk of contamination and must be used only for decontamination of equipment and instruments. Where filters are fitted to taps in place of anti-splash devices, they should be cleaned regularly. In office practices where there are no surgical or dental procedures being carried out, for example, in acupuncture clinics, a stainless steel or smooth hard plastic bowl dedicated to use in the cleaning and decontamination of instruments and devices, may be used as an alternative to a sink for cleaning.

- 860.10.00 The processing area should be carefully defined and protected from all vapours, splashing or aerosols produced during operating, hand-washing, equipment washing, disinfection and ultrasonic cleaning. The area should have adequate storage space and be used only for the storage of effectively covered or packaged cleaned, disinfected and/or sterilized instruments and equipment.

Work Flows

- 860.11.00 Staff eating and recreation areas must be separate from work areas and patient treatment areas.

880 SURFACES & FINISHES

Floors

- 880 .1.00 Treatment Areas should not be carpeted. Vinyl is to be located under all hand wash basins. The flooring should be easily cleaned and in good repair.
- 880 .2.00 Floors in areas used for food preparation or food assembly shall be water-resistant and greaseproof to comply with the Food Hygiene Regulations. Floor surfaces, including joints in tiles in such areas, shall be resistant to food acids (epoxy grout). In all areas subject to frequent wet cleaning methods, floor materials shall not be physically affected by germicidal cleaning solutions.

Skirtings

- 880 .3.00 Wall bases in Kitchens and all clinical areas and other areas subject to frequent wet cleaning methods shall be made integral with the floor, tightly sealed against the wall, and constructed without voids.

Walls

- 880 .4.00 Other than special treatments included as feature face work in public or staff relaxation areas, wall finishes in clinical areas shall be scrubbable with smooth surfaces, and in the immediate vicinity of plumbing fixtures, shall be smooth and water-resistant.

Ceilings

- 880 .5.00 All exposed ceilings and ceiling structures in areas occupied by patients or staff, and in food preparation or food storage areas, shall be finished so as to be readily cleanable with equipment routinely used in daily housekeeping activities.
- 880 .6.00 In food preparation and other areas where dust fallout would present a potential problem such as clinical areas, supply and storage areas and sterile stock storage, there shall be a finished ceiling that covers all conduits, piping, duct work and open construction systems.
- 880 .7.00 Ceilings in Operating and Birthing Rooms, Isolation Rooms, Nurseries, Sterile Processing Rooms, Bone Marrow Transplant Units and Oncology Units shall be monolithic from wall to wall without fissures, open joints, or crevices that may retain or permit passage of dirt particles. Light fittings shall also be recessed and flush fitting and sealed to prevent dust ingress.
- 880 .8.00 Acoustic and/or lay-in ceilings shall not be used where particulate matter may interfere with infection control.

Gaps

- 880 .9.00 A gap is defined as a space where two materials do not meet leaving a space or opening that can harbour dust, germs, mould or vermin.
- 880 .10.00 In the construction of Health Care Facilities, gaps between surfaces are not permitted, and must be properly sealed. In particular, gaps in the following area are not allowed:
- Between skirting and floor
 - Between utility benches and walls
 - Between cupboards and floor or walls
 - Between fixtures attached to floors and walls.

880.11.00 Floor and wall construction, finishes and trims in dietary and food preparation areas shall be free of spaces that can harbour rodents and insects. Details to comply with the relevant Public Health regulations.

880.12.00 Floor and wall penetrations by pipes, ducts and conduits shall be tightly sealed to minimise entry by rodents and insects. Joints of structural elements shall be similarly sealed.

Surface Materials

880.13.00 Regular routine cleaning of the Health Care Facilities premises can be carried out much more efficiently if the design of the building is adapted to its function. Unnecessary horizontal, textured, moisture retaining surfaces or inaccessible areas where moisture or soil will accumulate should, if possible, be avoided.

880.14.00 All fixtures and fittings should be designed to allow easy cleaning and to discourage the accumulation of dust. Blinds are preferable to curtains for this reason.

880.15.00 Where there is likely to be direct contact with patients, or with blood or body fluids, floors and walls should be surfaced with smooth, impermeable seamless materials, such as vinyl. In equipment processing areas, work surfaces should be non-porous, smooth and easily cleaned.

880.16.00 All surfaces in high risk clinical areas, including the Operating Unit, Intensive Care Unit, Obstetrics Unit and Neonatal Special Care Nurseries, should be smooth and impervious.

900 CONSTRUCTION & RENOVATION

Planning

- 900 .1.00 Infection control precautions during construction should be integrated into the design and documented from the beginning of the design stage. It is important that the dust and infection control principals developed during the pre-design stage are integrated at the initial stages of the design development. It is important that the pre-design team comprehensively brief the design team and submit the findings of the survey and risk profile.

Risk Management

- 900 .2.00 A formal approach to risk management must be part of all building and renovation activities. Risk management should include specific assessment of infection control risks.
- 900 .3.00 A more detailed review of risk is beyond the scope of this document, but adherence to Australian Standard 4360 - Risk Management principles will provide the framework to assemble a relevant risk management strategy.
- 900 .4.00 Airborne sampling may be part of a risk management program. Cumulative data is used to establish indoor and outdoor background levels of filamentous fungi for a particular site. This will enable establishment of risk profiles for particular locations in and around the hospital.
- 900 .5.00 The risk profile should as a minimum:
- Identify the location of high-risk patients in relation to the site
 - Identify ventilation system types and potential impact
 - Determine air monitoring requirements, methodology and frequency
 - Take air quality samples to establish a baseline
 - Identify possible contaminants and their locations (contaminants may be present in ceiling dust, service shafts, sprayed on fire retardants and bird droppings).

Construction

- 900 .6.00 Current construction practices can impact on patient well being by the dissemination of bacteria and fungi that can cause health care associated infections.
- 900 .7.00 Building, renovation and maintenance activities within a Health Care Facility impose risks upon the incumbent population unlike any other building site. Building practices therefore require a range of precautions appropriate to the risk. Identification of the at risk population, a knowledge of the transmission route of a likely pathogen and location of the at risk population in relation to the construction, all need to be taken into account in the planning stages.
- 900 .8.00 Infection control measures to consider during construction are:
- Infection control site induction of building workers should be carried out as a major component of the OH&S induction. This induction process should be documented and signed off by each person inducted
 - Worker compliance with procedures should be monitored and the results of this monitoring should be fed back to the workers routinely through the Builder. A system must be in place to manage major breaches.
 - Ensure that adequate inspections by the nominated representatives take place during the construction of the barriers. These inspections should be monitored and reported on.

Construction

- 900.9.00 Negative pressurisation of the construction zone is recommended to maintain correct airflow direction. The exhaust/extraction systems specified in the contract documentation must be constantly monitored and maintained to ensure no failures occur. These inspections should be documented and reported on.
- 900.10.00 If HEPA filtration is required a person must be nominated as the responsible person for that duty. The filters should have differential pressure monitoring with alarms. Spare filter elements must be kept on hand. These inspections should be documented and reported on.
- 900.11.00 Routine inspections of barriers should be conducted by the hospitals nominated representative from the contractor. These inspections should be documented and reported on.
- 900.12.00 Routine air sampling should be employed by the hospital to monitor the effectiveness of the barriers, pressurisation and housekeeping procedures. The routine air sampling should be documented and reported on.
- 900.13.00 A high level of site cleanliness is essential. It is recommended that tools with efficient dust extraction systems connected to HEPA filters are to be used. Tasks such as sanding plasterboard present a high level of potential risk: therefore it is recommended that mechanical sanding should be used. Demolition and jack hammering of concrete should be undertaken with a filter unit in close proximity.
- 900.14.00 HEPA vacuuming, not sweeping, should be used to clean up. Conventional vacuum cleaners disseminate huge quantities of dust and fungal spores and should not be used.
- 900.15.00 Movement in and out of the site shall be controlled by restricting access to only those who have undergone site induction. This will assist greatly in reducing the spread of contaminants.
- 900.16.00 All inspections should be documented including a non-conformance system for defaults complete with a corrective and preventative action loop.

Air Sampling Methodology

- 900.17.00 There are two distinct sampling methodologies for the detection of viable airborne fungal spores. These are high air volume sampling and low air volume sampling. Sampling for viable fungal spores in Australia almost universally is via low air volume sampling. Low volume sampling is used to measure high spore concentrations. High volume sampling is used to measure low spore concentrations.
- 900.18.00 Along with airborne sampling, routine surface sampling should be used. A combination of settle plates and surface swabbing can be employed to augment airborne sampling. Airborne sampling has limitations due to the burst nature of fungi and the transience of bacilli.
- 900.19.00 It is important to have a clear idea of what outcomes are required of the sampling. Equally important it is necessary to have an approximate idea of the expected number of fungi that will be obtained. This will determine the appropriate sampling system.

910 VERIFICATION

General

- 910 .1.00 All infection control measures described in this section are required to be capable of verification by inspection. There must be no barriers in place to prevent the checking and validating the measures described.

Part D - Infection Control

COMPLIANCE CHECKLIST

Name of HPU: _____ (Print and complete one per HPU)

Agreed Role Delineation Level: _____

No	Item	Yes	No
1.0	Handwashing Facilities:		
1.1	Are the handbasin types specified appropriate for the room usage?	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Are sufficient numbers of handbasins provided?	<input type="checkbox"/>	<input type="checkbox"/>
2.0	Isolation Rooms		
2.1	Are sufficient numbers of Isolation Rooms of the appropriate type provided?	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Do the Isolation Rooms meet the minimum requirements for the class specified?	<input type="checkbox"/>	<input type="checkbox"/>
3.0	Physical Environment		
3.1	Do operating areas sufficiently separate clean and contaminated areas?	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Do cleaning and clean-up areas sufficiently separate clean and contaminated areas?	<input type="checkbox"/>	<input type="checkbox"/>
3.3	Are staff eating and recreational areas sufficiently separate from work areas and patient treatment areas?	<input type="checkbox"/>	<input type="checkbox"/>
4.0	Surfaces and Finishes		
4.1	Are the following finishes appropriate for the room usage? <ul style="list-style-type: none">FloorsSkirtingsWallsCeilings	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Checked and certified by:

Name: _____

Date: _____

Company: _____

Position: _____

Signature: _____



Design guidelines for hospitals and day procedure centres

Part E - Building services and environmental design

Issue 1 Release Notes

This release represents the first public issue of the new Victorian Guidelines for Hospitals and Day Procedure Centres (DGHPD). All previous releases were marked DRAFT for review and comment only.

Every effort has been made to check the new guidelines for errors and inconsistencies. Many difference stakeholders, proof-readers and reviewers have participated in this process. Nevertheless, As may be expected of issue 1 of a comprehensive set of new guidelines, errors and inconsistencies may still be found. These will be progressively corrected in future editions of the guidelines

Important Disclaimer

These Guidelines have been created as "Stand-alone" documents. Nothing in these Guidelines implies that compliance with them will automatically result in compliance with other Legislative or Statutory requirements. Similarly, nothing in these Guidelines implies compliance with the Australian Standards or the Building Code of Australia. Parts of these Guidelines such as Room Layout Sheets necessary show elements which may be subject of those Legislative or Statutory requirements. Every effort has been made to ensure such compliance, however no guarantees are made. It is the responsibility of each user to check and ensure compliance with other "Stand-alone" Legislative and Statutory requirements.

As the name suggests, the documents provided are "Guidelines". Users are advised to seek expert opinion on the important issue of Health Facility Design whilst considering these Guidelines. Many of the concepts covered by these Guidelines require a minimum level of knowledge of Health Facilities and Health Facility Design. Due to the generic nature of these Guidelines, all the individual circumstances can not be anticipated or covered. Furthermore, these Guidelines do not cover the operational policies of individual facilities. Delivery of excellence in health care as well as the provision of a safe working environment will depend on appropriate operational policies. The authors of these Guidelines as well as those involved in the checking or approval of these Guidelines accept no responsibility for any harm or damage, monetary or otherwise caused by the use or misuse of these Guidelines.

What is New?

These guidelines were specifically prepared by Health Projects International for Victoria using a specially customised database of health design knowledge. Over the last few years, thanks to a framework of cooperation between different State Departments of Health, the guidelines have been offered as the core of the proposed future National Health Facility Design Guidelines. The same database system is used to deliver the new NSW Health Facility Guidelines over the next few years. The delivery system, the structure and content database are shared, whilst each State initially has its own version meeting legislative and policy requirements. Over time, various State variations of the guidelines are expected to reduce to pave the way towards the future unified Guidelines.

Use of Other Guidelines

These Guidelines have been prepared after considering numerous other Guidelines available in Australia and overseas. Both words and concepts found in the other Guidelines have been used when appropriate, sometimes with changes to terminology or methods of measurement. Since very similar concepts and requirements are covered by many different guidelines, a clause by clause reference to other guidelines would be impractical. A short list of other Guidelines reviewed for the preparation of these Guidelines can be found under "References and Further Reading" in each section of the Guidelines. Nothing in these Guidelines implies or guarantees compliance with every requirement of those other Guidelines.

Credits

These Design Guidelines as well as the Guidelines Web Site have been prepared by:
Health Projects International Pty Limited (HPI) for the Department of Human Services, Victoria, (DHS).



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Part E- Building Services and Environmental Design

1	Engineering Services - General	4
2	Electrical Systems	7
3	Communications	11
4	Security Systems	12
5	Lifts and Escalators	13
6	Heating, Ventilation and Air-Conditioning	15
7	Ancillary Mechanical Services	34
8	Hydraulic Systems	35
9	Fire Systems	41
10	Medical Gas Systems	42
11	Structural Design	44

1 ENGINEERING SERVICES - GENERAL

General

- 1.1.00 This Guideline is performance oriented for desired results. It is assumed that accepted engineering practice, relevant codes and statutory regulations will be observed as part of normal professional services and that these aspects require no specific reference.

This Guideline is not intended to restrict innovation. In some circumstances it may be desirable to exceed the prescribed minimum standard.

- 1.2.00 Engineering services in health care facilities shall satisfy general comfort demands, health procedure and patient care relevant requirements.

- 1.3.00 An important role of engineering services is controlling specific risks characteristics within a particular Health Care Facility. Engineering services become part of the complex risk management environment which includes many other factors such as maintenance and management. The optimal solution is the structuring of risk management to suit the potential risks specifically for the facility and financial circumstances (that will vary among projects).

This guideline cannot cover all engineering options or define the requirements of a risk management system for engineering services. These systems should be developed during the design phase of the project.

- 1.4.00 As energy efficient solutions are becoming increasingly important further requirements are proposed for inclusion in the BCA in the near future. Some energy efficient solutions based on good engineering and general project development approach do not necessarily increase capital costs.

The provision of most energy recovery equipment does increase capital costs of the project, therefore life cycle cost analysis will be required to justify additional expenditure and application of this equipment will depend on budget.

- 1.5.00 It is not the intention of the Guideline to cover every aspect of public and private health facilities. Project specific issues that are expected to be covered in the project brief include:
- Involvement of affected stakeholders
 - Nomination, listing of critical and sterile areas, including unacceptable risks
 - Application of energy recovery systems, life cycle cost analysis and other financial requirements
 - Provisions for foreseeable modifications
 - Emergency power distribution
 - Facility specific requirements
 - Specific risks and risk management policy
 - Trade wastes
 - Service requirements for health care equipment
 - Specific Management and Maintenance requirements
 - Critical safety and performance parameters required being included into the maintenance regime.

- 1.6.00 Healthcare procedure specific equipment is excluded from the engineering services as the service contractors usually do not provide them. Engineering services shall be provided as necessary to suit equipment.

General

- 1.7.00 The engineering services are divided to the following main categories (in alphabetical order) in the Guideline:
- Ancillary mechanical services
 - Communication
 - Electrical power
 - Fire Services
 - HVAC (Heating, Ventilation, Air-conditioning) Services
 - Hydraulic services
 - Lift and escalator services
 - Lighting
 - Medical gases
 - Security
 - Structural
- 1.8.00 Types of services shall be easily identifiable.
- 1.9.00 Engineering services shall comply with relevant, applicable legislations and this Guideline. For a list of relevant legislation pertaining to HVAC, Medical Gases and Hydraulic Services refer to Enclosure E2.
- 1.10.00 Other guidelines are mandatory by other authorities. For a comprehensive list refer to Enclosure E2.
- 1.11.00 Services, or their loss, shall not cause any unacceptable hazard. The particular risks involved with patients and healthcare procedures shall be considered. Where loss of service could cause unacceptable risk (including post disaster function), services shall be continuously available and provide reliable operation.
- 1.12.00 All services shall satisfy the facility specific healthcare procedure requirements, patients' and other occupants' needs. All services shall be designed and installed in a manner that will minimise the opportunities for patient self-harm.
- All services shall satisfy comfort requirements as determined in Enclosure E1, including acceptable noise.
- 1.13.00 All services shall be designed for safe usage and maintenance. Maintenance shall only cause acceptable minimal disruption to healthcare procedures and minimal disturbance to patients.
- 1.14.00 Access points are recommended to be located outside patient areas and thoroughfares to avoid patient disturbance and frequent traffic.
- 1.15.00 No services shall create a hazard to or damage the environment.
- 1.16.00 Services shall be designed for minimal dust collection and easy cleaning.

Part E- Building Services and Environmental Design

General

- 1.17.00 All services shall be energy and cost efficient within the budgetary limits of the project. The requirements of Energy Efficient Government Buildings - Sustainable Energy Authority Victoria should be incorporated into all aspects of the design and construction whenever possible.

- 1.18.00 Operation, monitoring and control of services shall suit the specific patient and healthcare procedures needs of the area serviced. Controls generally shall be tamperproof.

As-built drawings and detailed Operation and Maintenance Manuals shall be supplied at the end of a project. The drawings shall be clearly marked "AS BUILT" in large lettering and submitted to the health care facility.

At the completion of the works, or section of the works, testing shall be carried out to prove the suitability and operation of the works or section of the works and that the installation complies in full with the requirements specified. Tests shall be conducted to NEBB or equivalent standard and complete and detailed results shall be submitted for review.

- 1.19.00 All equipment shall be suitable for the environment where they are located and operate (including temperature and pressure) and for the material they handle.

General acoustic requirements, acceptable noise levels shall comply with AS2107.

2 ELECTRICAL SYSTEMS

Minimum Standards

- 2.1.00 The minimum requirements for the provision of electrical installations in Health Care Facilities shall be those listed in Enclosure E1.

In addition to the minimum requirements and depending upon the type of the facility and installed services the following Australian Standards shall apply:

- Energy Efficient Government Buildings: Sustainable Energy Authority Victoria
- AS 3011 - Electrical Installations - Secondary batteries installed in buildings
- AS 2676 - Guide to the installation, maintenance and testing of secondary batteries in or on buildings
- AS 2430 - Classification of hazardous areas
- AS 2243.7 - Safety in laboratories - electrical aspects
- AS/ NZS 1680.4 - Maintenance of electric lighting systems
- AS 1768 - Lightning protection
- AS 1169 - Minimising of combustion hazards arising from the medical use of flammable anaesthetic agents.

All clauses outlined in the following section shall be in addition to statutory requirements.

Submains for Critical Care Services

- 2.2.00 Standby lighting and power systems to AS 3009 shall be provided in critical care areas.

Light and general purpose power outlets in critical care areas shall have dedicated submains originating from the main switchboard. The switchboard and submains shall be configured to ensure continuous availability of electrical supply by means of an essential section on the switchboard.

Two dedicated submains circuits shall be provided for each critical care area. At least one of the circuits shall be connected to the emergency generator supply where installed. Critical care submains cables are not required to be fire rated. Protection against mechanical damage shall be provided.

Emergency power shall be connected to all critical patient equipment involved in invasive subcutaneous procedures and diagnostic procedures. High load diagnostic equipment shall be fitted with low power modes where possible to enable connection to a UPS. This will allow clinical personnel time to complete or finalise an invasive procedure without risk to the patient.

Standby Power

- 2.3.00 The following factors shall be considered when dual high voltage electrical supplies are to be used without providing emergency generators:
- Do high voltage supply feeders originate from two independent network circuits?
 - Are high voltage supply feeders reticulated through two separate geographical routes?
 - Does the standby feeder have full capacity available all the time?
 - Are the high voltage supply feeders reticulated overhead or underground?
 - Is an automatic bus tie permitted by the Supply Authority?
 - Are either HV feeders likely to be interrupted due to weather conditions, vehicle crashes or vandalism?
 - Total life cost (initial capacity cost, authority charges and recurrent standby charges).

Emergency generators are recommended to be installed to ensure continuity of essential electrical supply in critical areas, when suitable dual supply high voltage feeders are generally not available.

Where the facility has a post disaster function or requires chilled water / cooling services for sustaining human life or critical service, this shall be achieved by providing sufficient electrical generation capacity to start and run chillers, chilled water pumps, critical air-conditioning necessary for the continued operation of all critical areas and services.

Connection of Mobile Generator

- 2.4.00 For hospitals where life-sustaining procedures are undertaken and no emergency generator is installed, a quick connection facility is recommended to be provided to enable connection of a mobile generator to the essential (emergency) section of the main switchboard. Designers shall analyse and document the risks associated with this system.

Earthquake Protection for Generator

- 2.5.00 The main electrical switchboards and emergency generators including remote cooling plant design and installation shall comply with AS 1170.4 Earthquake loads for seismic constraint requirements.

Standby Power Electrical Outlets

- 2.6.00 Power outlets and light switches connected to a UPS or automatic diesel generator shall have either toggles or plates distinctively colour coded. Engraving of outlets will be acceptable in lieu of coloured flush plates or rockers.

Emergency Light and Power (UPS)

- 2.7.00 Fixed surgical luminaries in Operating Rooms shall be connected to an Uninterruptible Power Supply (UPS) System. Examination lights in Procedure Rooms, Birthing Rooms and the like shall be connected to 'Vital (1sec)' central battery systems. Other 'Vital (1 sec)' lighting circuits may be connected to the central battery power system or may consist of self contained single point systems.

All battery supported equipment such as PABX, radio paging and fire alarm systems, together with medical gas warning, nurse call and similar systems shall be connected to 'Vital (1 sec)' circuits, (maximum delay 1 second).

Any room or enclosure containing secondary batteries with a stored capacity exceeding 1 kWh or a floating voltage which exceeds 115 volts, that installation shall comply with the installation requirements of AS 2676 'Guide to the installation, maintenance, testing and replacement of secondary batteries in buildings' and AS 3011 'Secondary batteries installed in buildings'. Note that vented batteries require specific emergency wash down and washing facilities to be provided.

Emergency lighting shall be provided in corridors, stairways, toilets, ensuites, utility rooms, patient treatment areas and other critical use areas for the safe management of patient care.

Planned Spare Electrical Capacity

- 2.8.00 An allowance of additional floor space to accommodate future electrical capacity shall be considered in the design phase.

Planned spare electrical capacity shall be based on predicted future building loads and future equipment loads or the following table:

BUILDING CATEGORIES		VA per m2	kVA per m2
AIR-CONDITIONING WITH NON-ELECTRIC HEATING		100	0.10
AIR-CONDITIONING WITH ELECTRIC HEATING		120	0.12
AIR-CONDITIONING REVERSE CYCLE		110	0.11
ELECTRIC HEATING NO COOLING		100	0.10
NON-ELECTRIC HEATING NO COOLING		60	0.06

Patient Electrical Protection Systems

- 2.9.00 Patient treatment areas where electrico-medical equipment may be used for procedures classified as either body-type or cardiac-type as defined by AS 3003, shall have electrical installations installed to comply with AS 3003 'Electrical installations - patient treatment areas of hospitals and medical and dental practices'.

Labelling and Identification of Outlets & Switches

- 2.10.00 All RCD protected outlets shall be labelled 'RCD Protected'. All outlets and switches shall be labelled. Circuits and phase number shall be suitably identified at each light and outlet switch position.

Outlets in Nursery and Clinical Patient Rooms shall be RCD protected and shall be fitted with safety shutters.

General Lighting

- 2.11.00 General lighting levels shall comply with the BCA and shall not be less than the recommended illuminance stated in AS 1680.1 'Interior lighting - General principles and recommendations'.

Night lights shall be installed in all Patient Care Areas and exit passages where normal lighting levels will decrease at night. Night lights shall be mounted at a low level and shall be low intensity and diffused. Night light levels shall not interfere with patient sleep.

Clinical Lighting

- 2.12.00 Light fittings with a colour rendering index complying with AS/NZS 1680.2.5 - 'Interior lighting - Hospital and medical tasks', shall be provided based on clinical need as determined by the facility.

Triphosphor lamps with a colour rendering index of 85 shall be fitted only after consultation with clinical staff.

A clinical observation light shall be provided where clinical observation is required. A patient reading light shall be mounted at each bed head. If the clinical observation light is not required to be colour corrected, clinical observation lighting and patient reading lighting can be incorporated into one fitting.

Energy Efficiency

- 2.13.00 The following energy efficiency measures are not mandatory but are recommended; a cost benefit study will often confirm these systems as cost effective:
- High efficiency motors over 1.5 kW
 - Variable speed drives installed in all pumps and fans over 4 kW to enable turn down during out of hours operations
 - Fluorescent light fittings to be fitted with power corrected, low loss ballasts; consider the installation of triphosphor light tubes
 - Power factor correction capacitors on the main switchboard to achieve a power factor of greater than or equal to 0.95
 - Automatic lighting controls.

3 COMMUNICATIONS

Minimum Standards

- 3.1.00 The minimum requirements for the provision of voice and data communications in Health Care Facilities shall be those listed in Enclosure E1.

All clauses outlined in the following section shall be in addition to statutory requirements.

Telephone

- 3.2.00 Telephone Block cabling shall conform to Austel technical standards and specifications. An expansion capacity of 25 percent is recommended to be allowed. All cableways shall be fully accessible.

Intermediate distribution frames (IDF) and (SDF) are recommended to be located in areas that are secure and fully accessible.

Combined voice-data outlets are recommended to be installed where appropriate.

Nurse Call System

- 3.3.00 Nurse call systems shall be hard wired and designed and installed in accordance with AS 3811 'Hard wired patient alarm systems'. Nurse activated emergency call buttons are recommended to be separate from the patient nurse call button.

Interfacing of Alarms

- 3.4.00 Intelligent alarm interfaces are recommended to be provided on nurse call systems to accept digital and analogue alarm inputs from duress systems, fire information panels, patient egress monitors, security systems and plant alarms such as oxygen failure.

Public Address System

- 3.5.00 A public address system shall be installed in the hospital facility and shall incorporate evacuation warning (tones or messages), area paging, intercommunication facilities, background music and other communications services as considered appropriate. Where installed, such systems should not be unduly intrusive to patients in ward areas. When functioning as a part of the facility's emergency evacuation system it shall continue to operate during periods of major power failure.

An Emergency Warning Intercom System (EWIS) shall be provided where required by the Building Code of Australia. The installation of an EWIS in other cases is recommended.

Paging System

- 3.6.00 A paging system shall be used to supplement the hospital telephone system for contact with key staff members. This facility may include arrangements for assistance call and other emergency signals. Automatic interface with the fire alarm system is recommended. Paging may be of the public address or self contained radio frequency type which produces full alpha/numeric message information.

Paging facilities shall be maintained in the event of a major power failure in accordance with AS 3009 'Electric installations - Emergency power supplies in hospitals'.

4 SECURITY SYSTEMS

Minimum Standards

- 4.1.00 The minimum requirements for provision of security systems in Health Care Facilities shall be:
- AS 2630 Guide to selection and application of intruder alarm systems for domestic and business premises
 - AS 2201.1-4 Intruder alarm systems.

All clauses outlined in the following section shall be in addition to statutory requirements.

A documented risk analysis shall be conducted to determine the appropriate level of security systems required.

Duress Alarms

- 4.2.00 Duress alarm points shall be installed in the following positions:
- Front entrances
 - Emergency Unit triage
 - Staff and nurse stations
 - Mental health counselling rooms
 - Pharmacies
 - Cashiers areas
 - Any area where staff are regularly alone with patients or the public.

Security Lighting

- 4.3.00 External lighting shall be configured to take into account security requirements.

Access and Egress Control

- 4.4.00 Building/s exteriors shall be capable of being secured against unauthorised entry.

The installation of a central monitored electronic security system linked to the fire indicator panel is recommended.

Intruder Alarms and Security Systems

- 4.5.00 Provide security systems to those categories as nominated in these Guidelines.

5 LIFTS AND ESCALATORS

Minimum Standards

- 5.1.00 The minimum requirements for provision of lifts and escalators in Health Care Facilities shall be those listed in Enclosure E1.

In addition to the minimum requirements and depending upon the type of facility and installed services the following Australian Standards shall apply:

- AS/NZS 1680.2.5 Interior Lighting - Hospital and medical tasks.

All clauses outlined in the following section shall be in addition to statutory requirements.

Requirements for Lifts

- 5.2.00 A Health Care Facility with patient services located on a level other than the ground floor shall install one or more passenger lifts.

Lift Car Size

- 5.3.00 Lift car sizes shall be determined by a traffic study which will result in a recommendation for the number, type, speed and occupancy requirements of the lift/s in the facility. The traffic study will determine the lift dimensional requirements.

Lift/s required for transporting patients on beds and emergency lift car/s shall be capable of accepting the largest hospital bed with emergency equipment attachments and attendants.

Emergency Lifts

- 5.4.00 Each lift shall start sequentially and 'home' to the Ground Floor at rated speed, open its doors and allow any passengers to alight, then shut down with doors open. The preceding lift must shut down before the next lift starts.

All lifts shall illuminate a 'Returning to Ground Floor' indicator on the car operating panel until the lift has arrived and the doors opened. Car lighting and ventilation fan within each lift shall remain operative while on emergency power operation.

On completion of the homing assignment a minimum of one lift shall continue to run and answer calls on a two button collective system and on fire service control as applicable. The other lifts shall be prevented from starting until normal mains power is restored.

Patient Transfer Lift Lighting

- 5.5.00 Patient transfer lifts shall have clinical observation lighting complying to AS/NZS 1680.2.5 'Interior lighting - Hospital and medical tasks'.

Lift Doors

- 5.6.00 Lift car doors shall be of the horizontal opening, power operated type.

Door operators shall be adjustable speed and torque type to provide positive, efficient, quiet and smooth door closing.

Each lift car door shall be provided with a passenger protection device of the solid state modulated multi-beam infra red type with extended convergence zone protection into the hallway for greater passenger protection and to reduce the doors being damaged by trolleys and hospital beds.

Automated Service Lifts

- 5 .7.00 The installation of service lifts with automated loading and unloading ability is recommended to be considered between:
- Sterile Supply Unit and Operating Units
 - Pharmacy and Inpatient Units

Good planning will minimise the need for vertical transport services. Service lifts and dumb waiters cost less to install than passenger lifts.

Telelift, Document Hoist & Pneumatic Tube Systems

- 5 .8.00 The installation of document and materials transport systems should be considered to assist in reducing demand on passenger lifts.

6 HEATING, VENTILATION AND AIR-CONDITIONING

Minimum Standards

- 6.1.00 The minimum requirements for the provision of heating, ventilation and air-conditioning in Health Care Facilities shall be those listed in Enclosure E2.

In addition to the minimum requirements and depending upon the type of facility and installed services the following Guidelines and Australian Standards shall apply:

- Guidelines for the Classification and Construction of Isolation Rooms in Health Care Facilities - Department of Human Services Victoria
- Guidelines for the Use of Glutaraldehyde in the Health Industry - Department of Human Services Victoria
- Energy Efficient Government Buildings - Sustainable Energy Authority Victoria
- AS 4508 - Thermal resistance of insulation for ductwork used in building air conditioning.
- AS 4343 - Pressure equipment - Hazard levels
- AS 4260 - High efficiency particulate air (HEPA) filters - Classification, construction and performance
- AS 3666.1-3 - Air handling and water systems of buildings - Microbial control
- AS 3653 - Boilers - Safety, management, combustion and other ancillary equipment
- AS/NZS 2982.1 - Laboratory design and construction - General requirements
- AS 2639 - Laminar flow cytotoxic drug safety cabinets - Installation and use
- AS 2593 - Boilers - Unattended and limited attendance
- AS 2243.3 - Safety in laboratories - Microbiological aspects and containment facilities
- AS 2243.6 - Safety in laboratories - Mechanical aspects
- AS 2243.8 - Safety in laboratories - Fume cupboards
- AS 1807 - Cleanrooms, workstations, safety cabinets and pharmaceutical isolators - Methods of test
- AS1668.1 The use of ventilation and airconditioning in buildings - Fire and smoke control in multi-compartment buildings
- AS1668.2 The use of ventilation and airconditioning in buildings - Ventilation design for indoor air contaminant control
- AS1668.3 The use of ventilation and airconditioning in buildings - Smoke control systems for large single compartments or smoke reservoirs
- AS/NZS 1677.2 Refrigerated systems - Safety requirements for fixed applications
- AS 1386.1 - Cleanrooms and workstations - Principles of clean space control
- AS 1386.4 - Cleanrooms and workstations - Non-laminar flow Cleanrooms - Class 3500
- AS 1228 - Pressure equipment - Boilers

All clauses outlined in the following section shall be in addition to statutory requirements.

General

- 6.2.00 Heating includes equipment, providing heating for comfort or other purposes and can be part of an air-conditioning system.

Mechanical ventilation includes toilet and general exhaust systems, fume cupboards, biohazard cabinets, exhaust hoods, smoke management and pressure and infection control systems based on pressure and airflow direction control. Mechanical ventilation can be part of an air-conditioning system.

Air-conditioning is the process of treating air to control all or some selected parameters such as temperature, humidity, pressure, air movement pattern / velocity and cleanliness.

Refrigeration means cooling equipment for coolrooms and other not comfort related cooling purposes.

- 6.3.00 Heating shall be provided and cooling is recommended to be provided for each area used by patients. Cooling is not required in any bathroom or toilet area with an exhaust system.
- 6.4.00 Ducted air-conditioning systems shall be capable of providing sufficient mechanical ventilation, even if natural ventilation is available.
- 6.5.00 Where loss of system performance will cause an unacceptable risk in critical areas, based on risk assessment, performance shall be maintained by duplex systems, monitored and an alarm shall be raised if performance lost.
- 6.6.00 Ventilation systems in critical areas such as Operating Rooms, Recovery, CCU, ICU, Emergency Unit and Infectious Diseases Units shall operate on emergency power. All ventilation systems in areas defined as patient care in section 9a of the BCA are recommended to operate on emergency power.
- 6.7.00 Access to plant rooms are recommended to not be via treatment areas. All services in occupied areas are recommended to be concealed where possible, but if exposed then arranged to limit dust and dirt build-up.
- 6.8.00 All components such as temperature sensors and wall grills within an occupied space shall be suitable for swab down cleaning. (Not waterproof).
- 6.9.00 Rooms containing heat producing equipment, such as boiler or heater rooms or laundries, shall be insulated and ventilated to prevent the floor surface above and/or the adjacent walls of occupied areas from exceeding a temperature of 6 degrees Celsius above ambient room temperature.

Infection Control

- 6.10.00 Design principles throughout the patient care areas shall, in addition to comfort requirements, comply with infection control requirements. To minimise the risk of infection the ventilation system shall be designed and balanced to provide directional air flow from clean to less clean areas. Room pressurisation shall be maintained as prescribed in Enclosure E1 (Air Movement Relationships). This will frequently require air quantities in excess of the minimum scheduled in the Australian Standard AS 1668 Part 2, and these Guidelines.
Positive flow at adequate rates is preferred to the defining of pressure differentials between areas. In some circumstances, flow may be required only on opening of doors and the system shall have adequate flexibility to accommodate this requirement.
- 6.11.00 Provision shall be made to ensure adequate air supply with varying filter resistances in areas requiring high levels of airborne contaminant control. Typically this will be in Operating Rooms, Set-up Rooms, Isolation Rooms and High Infection Risk Areas.
- 6.12.00 Rooms or booths used for sputum induction, aerosolized pentamidine treatments and other high-risk cough inducing procedures shall be provided with local exhaust ventilation in addition to infection control requirements called up in these Guidelines for the classification and construction of isolation rooms in health care facilities - Department of Human Services Victoria. See enclosure E1 for ventilation requirements.
- 6.13.00 Dirty linen and Dirty Utility Rooms shall be maintained at a negative air pressure relative to adjacent areas. Clean linen rooms in patient care areas shall be maintained at a positive air pressure relative to adjacent areas.
- 6.14.00 If individual room recirculation (unitary fan coil) units are to be used in High Risk Areas, high efficiency filters shall be installed and additional cleaning procedures approved by the Infection Control Committee shall be implemented. Additional air handling equipment will be required to achieve the necessary clean to less clean airflow patterns.
Such areas include:
- Birthing / Delivery Rooms
- Nurseries
- Protective Isolation Rooms / Units
- Special Care Units
- Treatment Rooms
- Emergency Areas
Systems incorporating central air supply and remote filter stations are recommended for these areas.
- 6.15.00 Fans in systems serving areas requiring airborne contaminant control shall be operated 24 hours per day to maintain airflow patterns from clean to less clean areas.
- 6.16.00 Air-conditioning systems shall maintain fresh air, temperature, humidity and contaminant control (dust, micro-organisms and gases) of the air within prescribed limits
- 6.17.00 Infectious diseases isolation and treatment rooms shall have negative pressure ventilation and shall be in accordance with the Guidelines for the classification and construction of Isolation Rooms in health care facilities - Department of Human Services - Victoria.

Part E- Building Services and Environmental Design

Outside Design Conditions

- 6.18.00 Outside design conditions shall be based on the most accurate climatic data available for the location of the proposed project.
- 6.19.00 Outside design conditions shall be selected as follows:
- For the locations listed in AIRAH - ACS Design Aid DA9a:
Air conditioning systems - Design Temperature Data (2).
For Operating Unit plants and Critical Care Areas use the 'Critical Process', 24 hour data if available for the location, otherwise use the 'Comfort or Non Critical' data with appropriate allowance.
- For all other plants use the 'Comfort or Non Critical Process Installations' data.
- For locations not listed in Design Temperature Data (2) use data for the nearest listed location having similar climatic characteristics. The data in reference Design Temperature Data (2) has been prepared by the Bureau of Meteorology from their archives for hundreds of locations in Australia and as such it represents a significant increase in the accuracy of data compared with what was available previously.

Room Design Conditions

- 6.20.00 Room design conditions are summarised in Enclosure E1. Table 1 contains:
- Air movement (pressure difference) relationship between rooms
 - Minimum outdoor air requirements
 - Minimum air changes per hour
 - 100% exhaust requirements
 - Minimum filtration requirements
 - Prohibition of air recirculation by room units
 - Relative humidity
 - Room design temperature.
- 6.21.00 The temperature at 1.5 metres above the floor in a room shall not vary by more than 1 degree Celsius. The temperature difference between rooms on the same zone shall vary by not more than 3 degrees Celsius. The temperature difference between floor level and 1.5 metres above the floor shall be not more than 1.5 degrees Celsius. The temperature of the floor shall be within the range 19 degrees Celsius to 26 degrees Celsius.
- 6.22.00 Average air velocity in the room shall be between 0.1 and 0.15 m/s. Particular care with the design of air distribution is required in Operating Rooms and rooms where patients are on beds and trolleys such as Patient Bed Rooms, Recovery, Emergency and Critical Care. Under no circumstances shall the supply air rate be less than 6 ACHR in any room any time. This applies to minimum air quantities on variable air volume systems as well as to constant volume systems.
- 6.23.00 Evaporative cooling shall be designed to maintain acceptable indoor comfort conditions, based on heat stress index or similar criteria.

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Room Design Conditions

- 6 .24.00 Zoning of air handling plant shall be provided to the extent required to limit the temperature difference between rooms served by the same zone to a maximum of 3 degrees Celsius.

Heating

- 6 .25.00 All occupied areas shall be heated.
- 6 .26.00 Central heating plants are recommended to consist of a minimum of two adequately selected heating units, furnaces or boilers, to provide standby in the event of failure or maintenance of one heating unit.
- 6 .27.00 Open fires, portable heaters and unflued gas heaters shall not be installed in patient areas.
- 6 .28.00 Boiler accessories including feed pumps, heat circulating pumps, condensate return pumps, fuel oil pumps, and waste heat boilers shall be connected and installed to provide both normal and standby service.
- 6 .29.00 Heating systems shall be thermostatically controlled. Heating systems with long thermal lag, for example, most types of in-slab heating, shall only be used when there is no alternative. These systems shall incorporate a control system to hold space temperature within 2 degrees Celsius of the winter design value. Temperature control that relies on opening windows to compensate for over heating shall not be used. The surface temperature of heating equipment in occupied areas shall not exceed 50 degrees Celsius. The temperature at floor level shall not deviate by more than 1.5 degrees Celsius above the air temperature at a height of 1.5 metres.

Cooling

- 6 .30.00 Cooling tower and evaporative condenser systems shall be designed and installed in accordance with the Health (Legionella) Regulations and AS 3666 - Air handling and water systems of buildings - Microbial control.
- 6 .31.00 Cooling towers and evaporative condensers shall include a side stream filter or cyclonic separator system to provide solids removals from the circulating water systems.
- 6 .32.00 Evaporative cooling may be used for support areas where relief cooling only is required such as kitchens and workshops and some other non-critical areas, where suitable. Observe standards and codes for design as for air-conditioning.
- 6 .33.00 Central cooling plant chiller sets shall be selected to ensure that in the event of failure of a compressor, adequate standby capacity is available for selected critical areas. Select chillers that maintain reliable, energy efficient low-load operation.

Ventilation - Outdoor Air

- 6.34.00 Outside air shall be provided according to AS1668 Part 2 as adopted by the BCA. Enclosure E1 contains data from AS 1668 Part 2 with the addition of data on areas of hospitals not covered by the standard. Enclosure E1 shall be used as a supplement to Table A1 of AS 1668 and be read in conjunction with the Standard.

In areas where there are high people densities, the actual number of people in the space shall be used. It should be noted that values in AS 1668 for areas such as the Staff Cafeteria yield more people than is normal for such spaces in hospitals.

- 6.35.00 All ventilation systems shall be designed to control the high level of odours often generated within Health Care Facilities.
- 6.36.00 All bathroom and toilet exhaust systems shall be fully ducted and discharge to outside, not to common roof or ceiling space.
- 6.37.00 Variable volume supply air systems shall incorporate control devices to ensure minimum outdoor air supply to all areas is maintained at all times.
- 6.38.00 Regardless of whether the area is served via operable windows, forced fresh air shall be provided in accordance with these guidelines to all air-conditioned occupied spaces.
- 6.39.00 Sanitary compartments, Dirty Utility Rooms and similar spaces shall not be ventilated by a system which also serves areas such as Operating Rooms.
- 6.40.00 Ventilation systems for rooms where ethylene oxide (ETO) sterilizers are used and ETO store shall be designed in accordance with the Occupational Health and Safety section of these Guidelines. Upon loss of exhaust system airflow, an audible and visual alarm shall activate in the steriliser work area, and at a location that is continually staffed.
- 6.41.00 Where conditions permit, natural ventilation may be used, for non-patient areas such as boiler rooms and central storage.

Ventilation - Exhaust Air

- 6.42.00 Contaminated exhaust systems, including those serving toilets, and those necessary to attain positive air flow from clean to dirty areas shall be provided with duplex fans or fan motors and automatic change over from duty to standby in the event of a failure of the fan or motor. Alternatively, single motor fan systems are recommended to be fitted with differential pressure switches, to provide remote alarm indication of fan failure. This shall not apply to independent toilet exhaust systems serving single use toilet/shower or bath areas.

Ventilation - Exhaust Air

- 6.43.00 Each space routinely used for administering inhalation anaesthesia and inhalation analgesia shall be served by a scavenging system to vent waste gases. If a vacuum system is used, the gas collecting system shall be arranged so that it does not disturb patients' respiratory systems. Gases from the scavenging systems shall be exhausted directly to the outside.

Anaesthesia evacuation systems may be combined with the room exhaust systems, provided that the component used for anaesthesia gas scavenging exhausts directly to the outside and does not recirculate. Scavenging systems are not required for areas where gases are used only occasionally, such as emergency rooms and offices for outline dental work. Acceptable concentrations of anaesthetising agents are unknown at this time. The absence of specific data makes it difficult to set specific standards. However, any scavenging system is recommended to be designed to remove as much of the gas as possible from the room environment. It is assumed that anaesthetising equipment will be selected and maintained to minimise leakage and contamination of room air. (Refer also to the Occupational Health and Safety requirements in these Guidelines).

Air Handling Systems

- 6.44.00 In selecting air handling system types, consideration shall be given to the cost and ease of maintaining the systems. Points to be considered include:
- Plant and components located over occupied areas shall be installed in a manner so that routine maintenance does not cause disruption to normal hospital activities; in this respect plant is recommended to not, for example, be located in ceilings over patient beds
 - The level of maintenance expertise available on site and the level of technical expertise available to the hospital to operate and adjust the system
 - Preference shall be given to simple systems requiring simple maintenance and adjustment with extended periods between routine maintenance.
- 6.45.00 All supply air, return air and exhaust shall be fully ducted in areas defined as Patient Care Areas in section 9a of the BCA.
- 6.46.00 Plant room ventilation supply air shall be filtered.
- 6.47.00 The bottoms of ventilation (supply / return) openings shall be at least 75 mm above the floor.

Air Handling Systems

- 6.48.00 Humidifier systems shall comply with the following requirements:
- Humidification shall be achieved by the direct injection of low pressure steam into the supply air stream; where reticulated steam is not available an electrode type humidifier shall be used.
 - Ducting surrounding the humidifier discharge shall be constructed to minimise the possibility of corrosion by using materials such as copper or grade 321 stainless steel, for a distance of 1500 mm downstream and 500 mm upstream of the unit.
 - The base of the humidifier duct shall be graded into an open tundish through a trap next to the outlet.
 - An electrical interlock shall be provided so that the humidifier can operate only when the supply air fan is operating.
 - If duct humidifiers are located upstream of the final filter, they shall be located at least 4.5 metres upstream of the final filters.
 - Ductwork with duct mounted humidifiers shall have a means of water removal.
 - An adjustable high-limit humidistat shall be located downstream of the humidifier to reduce the potential of condensation inside the duct.
 - All duct take-offs are recommended to be far enough downstream of the humidifier to ensure complete moisture absorption.
 - Reservoir type water spray or evaporative pan humidifiers shall not be used.
 - Duct lining shall not be installed within 4.5 metres downstream of humidifiers.
- 6.49.00 Supply air and exhaust air grilles shall be made of non-corrodible material, for example, anodised aluminium section. Supply air ducting shall be designed and manufactured to prevent possible induction of contaminated air.
- 6.50.00 Air handling duct systems shall be designed to be accessible for duct cleaning.
- Access panels shall be fitted at each reheat coil and fire and smoke damper to allow annual Essential Services inspection
- 6.51.00 Duct insulation shall be external to the duct to allow internal cleaning where required.
- 6.52.00 Duct acoustic treatment and equipment such as fan coil units, conditioners and VAV boxes incorporating fibrous insulating materials shall not have fibres exposed to the airstream. Perforated facing shall have impervious linings.
- 6.53.00 All duct work of air-conditioning systems and ventilation systems which supply or recirculate air shall comply with the following requirements:
- No internal lining
 - Reasonable access for low frequency cleaning without need for major works
 - Attenuators to have impervious lining between facing and acoustic lining
 - Attenuators shall be readily removable and located within plant rooms and other accessible areas that facilitate easy removal.
- 6.54.00 Air handling units and air-conditioning units in Level 1 and 2 hospitals shall comply with the following:-
- Accessible and cleanable as per AS 3666 - Air handling and water systems of buildings
 - Internal lining shall have impervious facing on the air side

Air Handling Systems

- 6 .55.00 Air handling units and air-conditioning units in Level 3 and above hospitals shall comply with the following:
- Easy door/hatch access and space to all internal areas of units for inspection, maintenance and cleaning; door access required where size permits.
 - No internal lining
 - All internal surfaces to be hygienic and cleanable such as powder coat finish, stainless steel or high quality paint finish
 - Internal lights shall be installed in all units over 3000 l/s airflow
 - Condensate trays to be well sloped to drain with no water retention in tray and constructed of corrosion resistant materials
 - All sections downstream of filters that operate below ambient pressure shall be sealed to prevent air leakage.
- 6 .56.00 In psychiatric patient rooms ceiling mounted air devices shall be of a secure type.
- 6 .57.00 Duct linings exposed to air movement shall not be used in ducts serving Operating Rooms, Birthing/ Delivery rooms, Labour/ Delivery Rooms, Nurseries, Protective Environment Rooms and Critical Care Units. This requirement shall not apply to mixing boxes and acoustical traps that have special coverings over such lining.
- 6 .58.00 Filter frames shall be durable and dimensioned to provide an airtight fit with the enclosing ducting. All joints between filter segments and the enclosing ducting shall be fitted with a gasket or sealed to provide a positive seal against air leakage. A manometer is recommended to be installed across each filter.

Air Filtration

- 6 .59.00 Heating, ventilation and air-conditioning systems shall control the concentration of air-borne particulates in High Risk Areas to minimise the risk of infection by means of air pressure, flow control and air filtration. The level of control shall be proportional with the risk.
- 6 .60.00 Air filtration efficiencies shall be as specified in Enclosure E1. (Refer also to Chapter 'Room / Area Specific Requirements'.
- Filtration efficiency ratings are based on average efficiency according to AS 1324 - 'Air filters for use in general ventilation and air-conditioning' and AS 4260 - 'High efficiency particulate air (HEPA) filters - Classification, construction and performance'.

Control Systems

- 6 .61.00 All adjustable controls such as thermostats are recommended to be provided with locking covers to prevent tampering.
- 6 .62.00 Provision shall be made to operate the air-conditioning system within the required temperature and humidity range prescribed in Enclosure E1. The range may need to be adjusted to suit local preference or medical needs, when, for instance elderly patients and babies may require higher temperature.

Part E- Building Services and Environmental Design

Energy Conservation and Management

- 6 .63.00 Energy conservation design shall not compromise infection control systems. The requirements of AS 4187 shall be maintained in respect of ambient conditions for sterile stock.
- 6 .64.00 It may be practical in many areas to reduce or shut down mechanical ventilation during appropriate climatic and patient-care conditions and to use open windows for ventilation.
- 6 .65.00 Each mechanical ventilation system supply or exhaust is recommended to be equipped with a readily accessible means of either shut-off or volume reduction.
- 6 .66.00 To conserve energy when Operating Rooms are not in use, low air flow modes of operation can be used. Systems that maintain correct pressure gradients at lower flow rates, however, have greater temperature throttling ranges. Heating and cooling can be shut down during extended periods of non use provided supply air fans are left running. An over-ride system shall be installed to enable out of hours operation of heating and cooling.
- 6 .67.00 Air-handling systems shall be arranged to allow the closing down of whole non critical or high risk areas at times of low occupancy. The air-conditioning system shall incorporate sufficient separation of air handling systems, zoning for temperature control and smoke exhaust mode operation to maintain conditions when common air-handling plant is used.

The requirements of Energy Efficient Government Buildings - Sustainable Energy Authority Victoria should be incorporated into all aspects of the design and construction whenever possible.

Occupational Health and Safety

- 6 .68.00 Where Ethylene Oxide (ETO) is used for sterilisation:
- ETO steriliser installations shall be designed, installed, operated and maintained in accordance with AS 2647 Biological Safety Cabinets
 - Sterilisation operations involving ETO shall be isolated from all non-ETO work areas
 - Fan blades and other associated components of the ventilation system shall be made of non-sparking material
 - Local exhaust inlets shall be located at areas close to the steriliser and aerators
 - The installation design shall ensure that gases are pulled away from the operator when the door of the steriliser is opened
 - Exhaust air shall not be discharged into any work area or into the general environment without decontamination or decomposition by using a Catalytic Converter or other equivalent.
- 6 .69.00 Cooling shall be provided on the following basis:
- If natural ventilation is proven to be inadequate, laundries and workshops shall be cooled using ducted evaporative cooling systems.
 - Depending on the proximity and the intensity of the heat source to a person, spot cooling may be required. Kitchens are recommended to be served by evaporative cooling systems with facilities for tempering the supply air during winter months or be fully air conditioned if it is a cook-chill facility.
- 6 .70.00 Ducts which penetrate shielded rooms such as an X-ray Room shall not impair the effectiveness of the protection.

Occupational Health and Safety

- 6.71.00 Dark Rooms or any film processing area shall be provided with sufficient mechanical exhaust capable of removing any vapour released from the process.
- 6.72.00 Surgical plume generated during laser and diathermy use shall be exhausted. Surgical plume contains tissue particles, carbon debris, hazardous chemicals, and bacterial and viral particulates and presents a potential hazard to the health of personnel in the Operating Room.
- 6.73.00 Occupational Health and Safety (Noise) Regulations shall be fully complied with in all plantrooms, workshops and areas where noise levels exceed those required by the regulations. Certification shall be provided showing compliance.
- 6.74.00 Occupational Health and Safety (Plant) Regulations shall be fully complied with in all respects. Certification shall be provided showing compliance.

Operating Units

- 6.75.00 **SUPPLY AIR**
Supply air to Operating Rooms shall be delivered at high level in a way that minimises recirculation of potentially contaminated room air and provides the cleanest practical air supply over the operating table area. The directions of air flows within Operating Units shall always be from the Operating Room and Set-up Room, through immediately adjacent inner anterooms, Scrub-up and Anaesthetic rooms to the Entrance Foyer, Recovery, Changing and post operative Clean-up Rooms; from clean to less clean areas.

Graduated pressurisation relative to pressure in areas adjacent to the Operating Unit ranging from not less than 10 Pascal positive in the Operating Room/s to slightly positive pressure in areas like Entrance Foyer, Recovery and Change Rooms and slightly negative in Clean-up Room/s can be achieved by using carefully balanced supply air and exhaust air systems. (Refer to Enclosure E1 for details of pressurisation requirement).

- 6.76.00 Total circulated air quantity shall be not less than 20 air changes per hour when the supply air filters are at their maximum pressure drop of which a minimum of 50% shall be outdoor air.
- 6.77.00 Airflow into the Operating Unit shall be by means of a distribution system that provides a flow of clean supply air over the operating area first then away. Entry of air shall be from the ceiling to deliver a downward air movement with a minimum velocity 0.2 m/s at the level of the operating table.

The barrier effect caused by air movement and not the actual pressure difference is important. As the pressure differentials are relatively small, the preferred method for setting up the air flow is for the total of return and exhaust air to be in the order of 150 l/s to 200 l/s less than supply air with all doors and openings closed. Different designs of Operating Rooms may require some variance in the bleed air quantity. Active control of the pressure difference is not necessary, however, supply air fans are required to be selected so as to maintain constant air quantity as filter resistance increases. This can be achieved by selecting good fan curve characteristics or controls measuring supply air quantity and controlling fan speed to maintain supply air quantity. Air not exhaust or spilled outward from high risk areas may be recycled as return air.

Operating Units

- 6.78.00 Room relative humidity shall be maintained within the range of 30% to 60% relative humidity (RH), except when flammable agents are used, in which case the requirement of AS 1169 - 'Minimizing of combustion hazards arising from the medical use of flammable anaesthetic agents' - is to maintain relative humidity above 55% and noted in Enclosure E1. Where humidifiers are used they shall be of the steam type and shall comply to the requirements of clause 6.48.00. Limiting humidity range by cooling coil design is acceptable unless there is a specific surgical requirement to warrant precise control of humidity.

- 6.79.00 The Operating Room temperature shall be adjustable to suit the requirements of the procedure in progress. The temperature adjustment range is recommended to be 16 degrees Celsius to 24 degrees Celsius. The proposed function of the room will determine what degree of adjustment is provided.

To enable individual temperature, infection and odour control, each Operating Room or pair of Operating Rooms shall be served by a dedicated air-conditioning unit which may also serve that Operating Room's adjacent sterile support rooms.

- 6.80.00 EXHAUST ARRANGEMENT

Exhaust registers shall be located so that the whole room is effectively scavenged, particularly at floor level. Special arrangement such as provision of balanced counter weighted flap to each low level exhaust point shall be installed to prevent an outflow of air from an exhaust point due to adverse air pressure when opening any of the Operating Room doors. The consultant shall account for the adverse effect of air flow pattern near the surgical field created by surgical lamps due to their shape, size location and the heat generated by the lamps. Operating Rooms for special procedures such as orthopaedic surgery, organ transplants or total joint replacement may require the provision of an Ultra Clean Air (UCA) system to suit their intended use.

- 6.81.00 Extraction of relief air and, if incorporated, return air shall be located at low to mid level. Supply air outlets shall be located directly above the operating table. Exhaust / relief air shall be extracted at a point as close as possible to the anaesthetic delivery trolley to remove anaesthetic gas leakages from the work area whilst ensuring good airflow through the room. Low level exhaust shall be extracted at 200 mm above floor level.

- 6.82.00 Low level exhaust and other provisions in accordance with AS 1169 - 'Minimizing of combustion hazards arising from the medical use of flammable anaesthetic agents', shall generally be provided where flammable anaesthetics are used. Where full provision is not made in accordance with AS1169, Operating Rooms shall have a notice, affixed as required, indication that flammable agents must not be used. Further, nitrous oxide shall not be used where low level exhaust is not provided and the range of surgical procedures undertaken in the Operating Room restricted accordingly.

- 6.83.00 DESIGN REQUIREMENTS FOR UCA SYSTEMS

UCA systems shall provide sufficient filtered air moving in the correct direction to efficiently remove the bacteria dispersed by the operating team. The air flowing from the final filter shall contain not more than 0.5 Colony Forming Units per cubic metre of air (CFU/m³).

Operating Units

6.84.00 AIR FLOW

Down flow system: the air flow at one metre from the supply air outlet shall have a minimum average velocity of 0.35m/s and at working height, not less than 0.3m/s.

Cross flow system; The minimum average velocity shall be 0.4m/s measured one metre from the filter or diffuser face.

The siting of the return air grills shall not cause short circuiting of the supply air. The control instrumentation shall include the indication of:

- Operating status such as 'in use' or 'not in use'
- Terminal filter pressure differential
- System Purging
- UCA systems.

6.85.00 Where procedures such as organ transplants justify special designs, installation shall meet performance needs as determined by applicable Australian Standards. These special designs are recommended to be reviewed on a case by case basis.

6.86.00 Engineering requirements for Orthodontic Operating Rooms shall be the same as for General Operating Rooms.

6.87.00 Operating rooms where lasers are being used shall have adequate suction / evacuation controls for the plume generated.

Procedure, Recovery, Delivery and Dental Rooms

6.88.00 Procedure Rooms in which the administration or aspiration of gaseous anaesthetics or analgesics are carried out, shall have adequate ventilation to ensure that the level of gaseous contamination does not rise above a maximum acceptable level. The utilization of a scavenge system is acceptable. Local extraction of patient exhaled anaesthetic gas at source is strongly recommended. This becomes a mandatory requirement and shall be provided where measured levels of anaesthetic gas within the area are considered excessive by the Hospital's Occupational Health and Safety Committee.

6.89.00 Total air circulation shall be not less than 10 ACHR of which the minimum outside air supply shall be the greater of 20 l/s per person or 2 air changes per hour. Alternatively, localised exhaust shall be provided at each bed achieving a minimum of 50 l/s exhaust per bed.

6.90.00 Cupboards containing anaesthetic machines shall be ventilated to remove the build-up of nitrous oxide within the cabinet.

Bronchoscopy and Sputum Induction Unit/s

6.91.00 Supply air to Bronchoscopy and Sputum Induction Units shall be delivered at high level in a way that minimises recirculation of potentially contaminated room air and provides the cleanest practical air supply over the procedure area. The directions of air flows within the Procedure Room shall always be from clean to less clean areas.

Bronchoscopy and Sputum Induction Unit/s

- 6 .92.00 Total circulated air quantity shall not be less than 12 ACHR when the supply air filters are at their maximum pressure drop of which a minimum of 25 % shall be outdoor air. Room air shall not be recirculated. Procedure Rooms and Recovery Rooms shall be maintained at a negative pressure in relation to adjacent areas. Design and construction shall be in accordance with the requirements in Guidelines for the classification and Design of Isolation Rooms in Health Care Facilities published by the Department of Human Services Victoria. A minimum filtration efficiency of F8 air filters shall be installed.
- 6 .93.00 Rooms or booths used for Bronchoscopy, Sputum Induction, aerosolized pentamidine treatments and other high risk cough-inducing procedures shall be provided with local exhaust ventilation.

Cardiac Catheterisation Unit/s

- 6 .94.00 Supply air to Cardiac Catheterisation Units shall be delivered at high level in a way that minimises recirculation of potentially contaminated room air and provides the cleanest practical air supply over the procedure area. The directions of air flows within the Procedure Room shall always be from clean to less clean areas. Graduated pressurisation relative to pressure in areas adjacent to the Procedure Room can be achieved by introducing 10 % more supply air than exhaust air. Recirculated room air-conditioning shall not be used.

Total circulated air quantity shall be not less than 15 ACHR when the supply air filters are at their maximum pressure drop of which a minimum of 20% shall be outdoor air. A minimum filtration efficiency of F9 air filters shall be installed.

Endoscopy Units

- 6 .95.00 Where manual endoscopes disinfection with glutaraldehyde occurs, the endoscopes and disinfection trays shall be contained by a system of local exhaust ventilation capable of providing adequate capture of contaminants in accordance with Department of Human Services Guidelines for the Use of Glutaraldehyde in the Health Industry. Recirculated filtered air systems shall not be used. A fume cupboard type hood with a sliding sash shall be provided. This hood is recommended to incorporate a perforated supply air plenum at the top and down draft slots and plenum exhaust to the sinks. Ventilation in workrooms where endoscopes are cleaned shall achieve a minimum of 15 air changes per hour

When a hood is installed in an Operating Unit between the Clean-Up and Set-Up Rooms, it shall be of pass-through design with interlocked sliding sashes. The relative positive pressurisation of the Suite shall not be adversely affected when either door is open.

Alternatively, complete manual disinfection of scopes may be carried out in a dedicated scope disinfection room equipped with a down draft trough with perimeter exhaust slots exhausting at a rate sufficient to contain fumes.

Endoscopy Units

- 6 .96.00 Manual disinfection of fiberoptic endoscopes is recommended to be carried out in a dedicated endoscope disinfection room equipped with a down draft trough with perimeter exhaust slots, exhausting at a rate sufficient to contain fumes.

Where automatic or semi-automatic disinfectors are used, a localised exhaust system shall be provided to achieve appropriate capture and removal of contaminated air. Fumes shall be drawn away from the operator's work position. Machine mounted filters are not always sufficient and require monitoring.

- 6 .97.00 Fiberoptic endoscopes storage cupboards shall be mechanically vented with an exhaust system to remove glutaraldehyde residuals.

Sterile Supply Services

- 6 .98.00 Sterile Supply Services shall be air-conditioned with a minimum of 10 ACHR. Air movement and ventilation shall achieve a positive airflow from clean to contaminated work areas. Ventilation rates shall be maintained when the zone is not occupied sufficient to ensure dilution rates are maintained.

Isolation Rooms

- 6 .99.00 Isolation Rooms shall be designed and installed in accordance with the requirement of Guidelines for the Classification and Design of Isolation Rooms in Health Care Facilities published by the Department of Human Services.

Alternating pressure (reversible airflow) isolation rooms shall not be installed or used.

Part E- Building Services and Environmental Design

Isolation Rooms

6.100.00 Isolation Room design and installation shall comply with the following tables:

FEATURE	Class S	Class N	Class P
SEALED ROOM WITH ADJUSTABLE DOOR GRILLE		Yes	Yes
> OR = 12 AIR CHANGES PER HOUR PER PATIENT OR 145 L/S MINIMUM		Yes	Yes
100 % FRESH AIR		Yes	
PROVISION TO INCREASE FAN SPEED		Yes	Yes
CONSTANT VOLUME SUPPLY AIR SYSTEMS	Yes	Yes	Yes
15 PA PRESSURE GRADIENT STEPS: CORRIDOR, ANTE-ROOM & ROOM		Yes	Yes
SEAL ROOM AIR-TIGHT		Yes	Yes
LOCAL FAN FAIL ALARM		Yes	Yes
FANS/ ALARMS ON ESSENTIAL ELECTRICAL SUPPLY		Yes	Yes
DIFFERENTIAL PRESSURE MONITORING		Yes	Yes
INDEPENDENT SUPPLY AIR		Yes	
HEPA FILTERS ON SUPPLY AIR			Yes
LOW LEVEL EXHAUSTS		Yes	Yes
BACK DRAUGHT PREVENTION ON COMMON DUCTS		Yes	
INDEPENDENT EXHAUST		Yes	
EXHAUST DUCT UNDER NEGATIVE PRESSURE WITHIN BUILDING		Yes	
HEPA FILTERS ON EXHAUST		Yes	Yes

6.101.00 Isolation Room Pressure Gradients:

ROOM TYPE	Room	Ensuite	Anteroom
CLASS N	-30 Pa	-15 Pa	-15 Pa
CLASS P	+30 Pa	+15 Pa	+15 Pa
CLASS P WITH NEGATIVE PRESSURE ANTEROOM	+15 Pa	+15 Pa	-15 Pa

Pathology, Autopsy and Body Holding

6.102.00 Systems serving Pathology Areas shall be independent of other systems. Exhaust from these areas shall be designed not to create any harmful effect to occupants or contamination to any adjacent areas.

Pathology, Autopsy and Body Holding

- 6.103.00 Supply air and exhaust serving autopsy and dissection areas shall be designed to protect personnel undertaking procedures and be discharged in a manner that will not contaminate any adjacent area or system.
- 6.104.00 Requirements for facilities that conduct autopsies include:-
- Single pass air-conditioning utilising 100% exhaust of all air
 - Exhaust intakes arranged to provide maximum fume and odour removal with protection of personnel
 - Operate the room at negative pressure in relation to adjacent areas
 - If necessary filter exhausted air with carbon filters
 - Install down-draught or back-draught exhaust
 - Back-draught exhaust shall have a minimum face velocity of 2.5 m/s.

Note: The above is for facilities which undertake regular autopsies.

Pharmacy, IV Additive and Cytotoxic Suites

- 6.105.00 Laboratory and Dispensing Areas in Pharmacy shall be investigated for the necessity to control air flow and exhaust to avoid any possibility of contamination to any adjacent areas.
- 6.106.00 Cytotoxic Suites shall be designed and constructed in accordance with AS 2639 'Laminar flow cytotoxic drug safety cabinets - Installation and use'. The basic design shall be that of a Class 350 Cleanroom varied in accordance with the requirements of AS 2639.

Laboratories and Clean Rooms

- 6.107.00 Laboratory Areas and Dispensing Areas in Pharmacy shall be designed to comply with AS/NZS 2982.1 'Laboratory design and construction - General requirements' and AS 2243.8 'Safety in Laboratories - Fume cupboards'.
- 6.108.00 Physical Containment (PC) laboratories shall be designed and constructed according to the requirements of the Genetic Manipulation Advisory Committee publication 'Guidelines for Small Scale Genetic Manipulation Work' when any work involving genetic manipulation is undertaken.

Dark Rooms and Film Processing Areas

- 6.109.00 Air spill shall not occur from the Dark Room to adjacent spaces. Dark Room exhaust shall balance or exceed supply and shall be balanced considering equipment connected exhaust systems.
- 6.110.00 Daylight processing equipment shall be provided with adequate local exhaust ventilation to prevent the uncontrolled escape of chemical emissions. Fumes or potentially contaminated air shall be exhausted to outside air and not recirculated.
- 6.111.00 Special ventilation requirements shall be dependent upon the type of film processor (automatic or manual) to be installed in an X-ray Dark Room, Processing and Viewing Areas. Adequate ventilation is required to contain the uncontrolled spread of fumes from potentially harmful chemicals into occupied spaces.

Dark Rooms and Film Processing Areas

- 6.112.00 Through-the-wall processors require local exhaust ventilation to each side of the wall. Most processors also require indirect connection of the drier fan discharge to an exhaust system, in addition to general room exhaust for fumes emitted from stored chemicals and the machine cleaning process. Ventilation shall be provided to film processors in accordance with the manufacturers' recommendations.
- 6.113.00 If remote chemical mixing, reticulated chemical supply and silver reclaiming is utilised, the chemical mixing tank or silver reclaiming unit shall be contained within a ducted enclosure, connected to an exhaust system as described above.
- 6.114.00 Local exhaust ventilation shall be provided above sink units used in connection with the regular cleaning of X-ray processor equipment components.
- 6.115.00 Work areas and enclosures used in connection with the manual processing of x-ray film such as dental clinics, shall be provided with dilution ventilation and temperature controls to prevent the build up of fumes.
- 6.116.00 Vapour emissions from tundishes into which liquid photographic waste discharges shall be controlled.
- 6.117.00 Ducts that penetrate construction intended to protect against X-ray, magnetic, Radio Frequency Interference, or other radiation shall not impair the effectiveness of the shielding protection.

Podiatry, Prosthetics, Dental & Orthodontic Workshops

- 6.118.00 Fresh air, ventilation and air-conditioning systems shall be provided with a minimum supply air quantity of 20 litres per second per square metre of facility floor space. Extraction shall be localised as close as practicable to the sources of contamination identified above. Exhausts from this area shall be suitably filtered and discharged in a manner that will not contaminate any adjacent area or system. Capture velocities at the point of localised extraction shall exceed 2 m/s. Consideration is recommended to be given to acoustics to prevent noise nuisance.
- 6.119.00 Fume cupboards complying with AS 2242.8 'Safety in Laboratories - Fume cupboards' shall be installed in chemical mixing areas.

Linen Processing Areas

- 6.120.00 Air filtration, mechanical ventilation and air-conditioning systems servicing linen processing areas shall be designed to ensure appropriate lint and dust control. Mechanical ventilation systems shall be designed to remove the heat generated by laundry drying processes utilising systems such as exhaust registers over the dryers or dryers ducted direct to outside air with lint collection provision on all exhaust discharges. Provision shall be made for regular maintenance to prevent the excessive build up of lint which can be the source of a fire hazard.

Linen Processing Areas

- 6.121.00 Spot cooling with air-conditioned or evaporative cooled supply air is recommended to be considered to provide adequate operator comfort in laundries.
- 6.122.00 Ventilation shall be provided in accordance with AS1668 Part 2 'Mechanical ventilation for acceptable indoor-air quality'. Where air-conditioning is installed, a minimum of 25 ACHR is recommended. For evaporative cooling a minimum of 36 ACHR is recommended. Airflow shall be from clean to less clean areas.
- 6.123.00 Soiled linen rooms shall be exhausted through a dedicated exhaust system to reduce the risk of cross infection.
- 6.124.00 The Clean Linen Store shall be supplied with clean, filtered air. Air pressure shall be positive in respect to the rest of the Laundry.
- 6.125.00 Air conditioning shall be installed to reduce the moisture content of linen.

Noise and Acoustic Attenuation

- 6.126.00 Noise levels in any area shall not exceed the exposure standard established in the Occupational Health and Safety (Noise) Regulations. For the purposes of the regulations, the exposure standard means the eight (8) hour equivalent continuous sound pressure level of 85 dB(A) measured in A-weighted decibels referenced to 20 micro Pascals. Due consideration shall be given to the amplification of noise due to multiple sound sources to ensure the exposure standard is not exceeded.
- 6.127.00 Noise breakout from any plant areas shall not exceed the values for interior noise as determined in AS 2107 - 'Acoustics - Recommended design sound levels and reverberation times for building interiors'. Due consideration shall be given to exterior noise levels to prevent nuisance to the external environment by noise generated by plant.

Mental Health Units

- 6.128.00 Consideration shall be given to the type of heating and cooling units, ventilation outlets, and equipment installed in patient occupied areas of Mental Health Units. Special purpose equipment designed for psychiatric or prison use shall be used to minimise opportunities for self harm. The following shall apply:
- All air grilles and diffusers shall be of a type that prohibits the insertion of foreign objects
 - All exposed fasteners shall be tamper-resistant
 - All convector or HVAC enclosures exposed in the room shall be constructed with rounded corners and shall have closures fastened with tamper-resistant screws
 - HVAC equipment shall be of a type that minimises the need for maintenance within the room.

7 ANCILLARY MECHANICAL SERVICES

Pneumatic Transport Systems

- 7.1.00 Pneumatic transport tubes systems with leak proof carriers which have a clear see through section to enable visual inspection of content prior to opening are recommended.

Use of a clear, leak-proof inner bag system is recommended.

The pneumatic piping system is to be designed and suitable to permit clean out of piping and disinfection via use of a special dispensing tube or other strategy.

Transport tube system carriers shall be capable of being sterilised or disinfected.

- 7.2.00 If pneumatic transport systems are installed, a pneumatic transport station is highly recommended to be located in or adjacent to the Operating Unit.

8 HYDRAULIC SYSTEMS

Minimum Standards

- 8.1.00 The minimum requirements for the provision of potable water supply, hot water supply, warm water systems, sanitary plumbing and drainage, stormwater drainage and gas installations in Health Care Facilities shall be those listed in Enclosure E1.
- 8.2.00 In addition to the minimum requirements and depending upon the type of facility and installed services the following Regulations and Australian Standards shall apply:
- Plumbing (Cooling Towers) Regulations
 - Building (Cooling Tower Systems Register) Regulations
 - AS 4343 - Pressure equipment-hazard levels
 - AS 4032 - Thermostatic mixing valves - Materials, design, and performance requirements

All clauses outlined in the following section shall be in addition to statutory requirements.

General

- 8.3.00 Materials shall be selected that are suitable for the specific characteristics of the service being installed. This shall include consideration of parameters such as temperature and concentration of wastes, corrosion, leaching and chemical attack.
- 8.4.00 Where loss of a service can cause unacceptable risk, service shall be monitored, alarmed and provided with a back-up. Critical areas such as Renal Dialysis, Operating Unit, ICU, CSSD, Acute Inpatient Units (one Dirty Utility and one Bathroom), Biochemistry and activities where relevant unacceptable risk can occur, shall be defined in the project brief.
- 8.5.00 Fixed services and maintenance points shall be located in a manner that does not create unacceptable risk or disturbance to patients, staff including maintenance personnel and health care procedures.
- 8.6.00 Service elements such as pipes, isolating valves operating switches and alarms shall be clearly identified.
- 8.7.00 Location and operation of fixtures shall suit to the application and shall not cause health risk.
- 8.8.00 Fixtures shall be easily cleanable. Water discharge devices such as flushing tanks and shower roses, shall be selected to enhance water conservation.

Water Supply

- 8.9.00 Where water quality does not comply with Health - Quality of Drinking Water - Regulations, National Health and Medical Research Council / Australian Water Resources Council 1987 Guidelines or local guidelines, water treatment / filtration plant shall be provided to maintain the integrity of hot water equipment, tapware, specialist health equipment and air-conditioning plant pipework.

Part E- Building Services and Environmental Design

Water Supply

- 8.10.00 Water quality shall not cause risk to patients and shall be suitable for intended medical procedures
- 8.11.00 Where water supply is critical it shall be available all the time.
- 8.12.00 Where the water supply is unreliable, local critical demand shall be satisfied with individual local back-up. Duty and standby pumps shall be designed and installed if the supply system includes pumping.
- 8.13.00 Where possible, locate reticulation pipes in the roof spaces, clear of mechanical equipment with droppers connected to the sanitary fixtures and equipment. Avoid locating pipework over inpatient areas and other areas that could be adversely affected by noise generated in water pipes. Hot and cold water pipes shall be separated by enough distance to avoid heat transfer. Hydraulic services shall not be located above electrical services.
- 8.14.00 Water supply systems shall be adequately zoned and isolated to provide local safety shut downs whilst maintaining maximum availability.
- 8.15.00 If practicable, the water service is recommended to be supplied from an external ring main. The service is recommended to be connected at two locations with a valve midway to maintain a continuity of supply in each section of the building should maintenance be required. Isolation valves shall be located on service lines to individual fixtures or group of fixtures. All valves are recommended to be easily accessible adjacent to/from roof-space access walkway.
- 8.16.00 Pipework shall be identified in accordance with AS 1345 'Identification of the contents of pipes, conduits and ducts'.
- 8.17.00 Single fixture or zone backflow prevention devices shall be designed to comply with AS 3500.1 'Water supply'. Vacuum breakers shall be installed in hose bibs and supply nozzles used for connection of hoses or tubing in laboratories, cleaner's sinks, bedpan-flushing attachments and autopsy tables.
- 8.18.00 To prevent condensation, closed cell foam insulation shall be installed on pipework where the dew point can be reached. Insulation shall have a continuous vapour barrier.
- 8.19.00 All isolation valves for hydraulic services shall have permanently fixed plastic or brass identification discs. Discs shall be clearly permanently engraved to identify the item.
- 8.20.00 When the operational policy includes haemo-dialysis, continuously circulated filtered cold water shall be provided.

Hot Water Supply

- 8 .21.00 System design generally shall comply with AS3500.4 'Hot water supply systems'.

A minimum of two hot water units is recommended to be installed in each main system. Remote point of use type systems may utilise a single unit.

- 8 .22.00 Hot water piping is recommended to be arranged in a ring main or a number of ring mains and incorporate a hot water return pipe. Branch pipework to individual outlets or groups of outlets shall not exceed three metres for 15 mm diameter pipe in order to minimise deadlegs. Each branch shall be equipped with an isolation valve for maintenance purposes located adjacent to the cold water supply branch isolation valve serving the same outlets.

Hot water supply to areas such as Dirty Utilities is recommended to be separated from the remainder of the hot water system using approved back-flow preventers.

- 8 .23.00 Central hot-water distribution systems serving patient care areas shall have a flow and return to provide continuous hot water at each hot water outlet. The temperature of hot water for showers and bathing shall be appropriate for comfortable use but shall comply with AS 3500.4 'Hot water supply systems'.

When the cold water supply fails, the hot water supply shall be shut down automatically to avoid risk of scalding. Circulation pumping shall be designed and installed with both a duty and stand-by pump. Calorifiers shall be of a failsafe design.

Warm Water Supply

- 8 .24.00 Thermostatic mixing valve (TMV) designs shall comply to AS 4302 'Thermostatic mixing valves - Materials, design and performance requirements', and installation shall comply to AS 3500.4 'Hot water supply systems'. Tempering valves shall not be used. Where concealed TMVs shall be identified with clear signage in a visible location to ensure servicing is carried out.

- 8 .25.00 Warm water systems producing water in the temperature range of 30 to 60 degrees Celsius, shall be designed and installed to achieve compliance with the Health (Legionella) Regulations and DHS Legionella Risk Management, Supplementary Notes for Hospitals, Chapter 'Warm Water Systems'.

Sanitary Plumbing and Drainage

- 8 .26.00 Drain pipes shall be designed and installed to comply with AS 3500.2 'Sanitary plumbing and sanitary drainage' and to suit the waste carried and the temperature of waste. Where possible, pipework is recommended to be concealed. Vents are recommended to be interconnected in roof or ceiling spaces to reduce the number of roof penetrations.
- 8 .27.00 Inspection and cleaning openings shall be positioned external to the building fabric. Where this is not possible, inspection and cleaning openings shall be positioned in ducts or within the wet areas it serves. Inspection and cleaning openings shall not be positioned in ceiling spaces.

Part E- Building Services and Environmental Design

Sanitary Plumbing and Drainage

- 8 .28.00 Access pits suitable for cleaning and pumping out are recommended in service areas rather than cleanout openings within pipes and junctions. Access pits are recommended to be located adjacent to vehicular access.
- 8 .29.00 Gravity drain systems shall be installed wherever possible. If pumping systems for the disposal of sewerage or effluent are installed they shall be installed in duplicate and shall be connected to the hospital standby generator power supply. Alternatively, the systems shall incorporate a minimum of four (4) hour storage in the event of disruption in normal power supply.
- 8 .30.00 Mixing of chemicals wastes that result in fume emissions shall take place within a vented drainage system and not at a common tundish.
- 8 .31.00 Waste water systems access covers, inspection openings and inspection chamber covers shall not be located within High Risk areas.
- 8 .32.00 Waste water systems shall be planned to eliminate access covers, inspection openings and inspection chamber covers being located within functional areas.
- 8 .33.00 Waste pipes are recommended to be located in service areas and not pass through walls and ceiling spaces of patient rooms and treatment rooms.
- 8 .34.00 Floor drainage grates shall not be installed in the clean area of a Sterile Supply Unit or treatment area. Floor drains are recommended to be rationalised to an absolute minimum due to their ability to harbour bacteria.
- 8 .35.00 Floor drains or open tundishes shall not be installed in Operating and Birthing / Delivery Rooms.
- 8 .36.00 Drain liners serving automatic blood-cell counters shall be carefully selected to eliminate the potential for undesirable chemical reactions (and/or explosions) between sodium azide wastes and copper, lead, brass, and solder.
- 8 .37.00 Drainage piping is recommended to not be installed within the ceiling or exposed in Operating and Delivery Rooms, Nurseries, food preparation areas, food serving facilities, food storage areas, computer centres and other sensitive areas. Where exposed overhead drain piping in the areas in unavoidable, special provisions shall be made to protect the space below from leakage, condensation, or dust particles.

Trade Waste

- 8 .38.00 The treatment of industrial wastes shall be in accordance with the requirements of the local Water Supplier and other relevant regulations and statutory codes / rules.

Trade Waste

- 8 .39.00 Copper pipes shall not be used to convey trade waste products as photographic wastes corrode copper. UPVC is the preferred material. Fixer and developer shall be collected and stored for off-site treatment and disposal. Fixer and developer shall not be discharged to sewer.
- 8 .40.00 A silver recovery system shall be installed in accordance with the trade waste agreement or provision made for the collection of all spent solution that contains silver (such as bleach fix). All solution shall pass through this system.
- 8 .41.00 In Radiology, close attention shall be given to the discharge of waste from X-ray film processing machines as only rinse water can discharge to sewer. Associated chemicals are not permitted to be discharged to sewer and must be disposed off-site.
- Connect mechanical plant equipment drains to the sewage system, in particular, plant which discharges water containing chemicals. Drains from fan coil and air handling units may discharge to sewer or stormwater.
- 8 .42.00 Kitchen grease traps shall be located and arranged to permit easy access without the need to enter food preparation or storage areas. Grease traps shall be accessible from outside of the building without need to interrupt any services.
- 8 .43.00 Plaster traps shall have easy access for emptying and cleaning. Plaster traps should be located outside the treatment room or should be accessible from outside the room. Servicing should be able to be carried out with minimum disruption.
- 8 .44.00 All pre-treatment waste systems such as dilution pits, arresters and strainer baskets shall be located in the service / dirty zones of the department if the system cannot be installed externally.

Storm Water Drainage

- 8 .45.00 Storm water system design generally shall comply with AS3500.3 'Stormwater drainage' as referred to in the BCA and local Authorities' by-laws that are applicable.
- Roof drainage systems shall be designed to handle a 1:100 year intensity based on available Bureau of Meteorology statistics and incorporate separate overflow relief discharge to minimise roof gutter overflow and consequent building damage and service interruptions.
- Consideration shall also be given to ways of preventing leaf build up in gutters to prevent building damage and service interruption due to gutter overflow.
- 8 .46.00 Storm water drainage grates shall be cross-webbed in car parks and paths and not be located in wheel chair access areas or trolley areas.
- 8 .47.00 Pumps, if required, shall be as previously specified for sewer pumps.

Part E- Building Services and Environmental Design

Gas Installations

- 8 .48.00 Provision shall be made for the continuity of gas supply where the facility has a post-disaster function or requires gas services for sustaining human life, by duplication of the gas supply provided it is an independent supply or dual fuel firing of critical plant.
- 8 .49.00 Kitchens shall be provided with appropriately labelled gas isolation valve/s at the main entry point for isolation in event of fire.

9 FIRE SYSTEMS

Minimum Standards

- 9.1.00 The minimum requirements for the provision of fire control systems in Health Care Facilities shall be those listed in Enclosure E1.

In addition to the minimum requirements and depending upon the type of facility and installed services the following Regulations, Department of Human Services Guidelines and Australian Standards shall apply:

- AS 4214 - Gaseous fire extinguishing systems
- Capital Development Guideline 7.2 Fire Risk Management Guidelines, Capital Management Branch, Department of Human Services Victoria

All clauses outlined in the following section shall be in addition to statutory requirements.

General

- 9.2.00 Where specific facility related fire risks are not covered adequately in the BCA and other relevant regulations, the risk shall be analysed and a suitable engineering solution shall be developed and implemented to maintain an acceptable risk level. The need for additional measures for a specific facility and the suitable solution shall be established during the design process.

- 9.3.00 Fire services include the following:
- Fire fighting equipment
 - hydrants
 - hose reels
 - fire extinguishers
 - fire sprinklers
 - Smoke management systems
 - Emergency lighting, detection and warning systems.

Note: Some smoke management relevant sections of the BCA are strongly linked to HVAC services. Consequently relevant issues are discussed in the HVAC section of the Guideline.

- 9.4.00 When sprinkler systems are installed in areas used by mental health patients, concealed type, ceiling mounted sprinkler heads shall be installed.

Sprinklers

- 9.5.00 Health buildings shall be planned to minimise the need for sprinkler systems.

The need for fire sprinklers for a specific facility and the suitable solution shall be established during the design process by a Certified Fire Engineer.

10 MEDICAL GAS SYSTEMS

Minimum Standards

- 10.1.00 The minimum requirements for the provision of medical gas systems in Health Care Facilities shall be:
- AS 1169 - Minimising of combustion hazards arising from the use of flammable anaesthetic agents
 - AS 2568 - Medical gases - Purity of compressed medical breathing air
 - AS 2896 - Medical gas systems - Installation and testing of non-flammable medical gases pipeline systems.

All clauses outlined in the following section shall be in addition to statutory requirements

General

- 10.2.00 Medical gas systems include the following services:
- Oxygen
 - Nitrous oxide
 - Medical breathing air
 - Surgical tool gas
 - Mixtures of medical gases
 - Carbon dioxide
 - Medical suction

Medical suction systems can be:

- Central vacuum
- Venturi ejector operated type

The major difference between the two types of suction systems is that the available pressure difference in venturi system discharge pipes is low and consequently discharged (contaminated) gases are difficult to filter and pipe runs are recommended to be kept short.

- 10.3.00 Each medical gas is recommended to emanate from a central storage or generation point and reticulated to outlets throughout the hospital.

Medical oxygen, compressed air and nitrous oxide multi-bottle storage manifolds shall be arranged in a 'Duty' and 'Reserve' configuration incorporating automatic change-over facility. Each manifold is recommended to include sufficient bottle storage to meet two days demand with additional bottles held in storage to meet three days or holiday period demand. All medical gas bottle manifolds are recommended to be sited adjacent to each other in a location which facilitates ease of access for bottle delivery and pick-up.

- 10.4.00 The medical gases installation shall incorporate an appropriate low and high pressure audible and visual alarms for each medical gas system and vacuum system respectively. The alarm system shall also be hard wired from the essential power supply if available with status indication panels sited strategically throughout the hospital on a master and slave arrangement. The master panel shall be in a permanently manned location such as the Emergency Unit with slave panels sited in critical areas such as Operating Unit and Intensive Care Unit. Alternatively, an independent alarm panel can be provided for Operating Unit and Intensive Care Unit. These panels would sense pressures in gas pipelines serving each respective area by means of pressure switches located downstream of isolation valves.

Part E- Building Services and Environmental Design

General

- 10 .5.00 Readily accessible isolation valves shall be provided in each main gas branch pipe to special areas such as Operating Unit and Intensive Care Unit. Valves shall be located in a wall mounted dedicated valve box incorporating a clear Perspex cover and suitably labelled.
- 10 .6.00 Patient rooms shall have oxygen and suction from a fully reticulated system. The minimum provision shall be an oxygen and suction point provided to each single bedroom and shared oxygen and suction points between two beds within multiple bedrooms.
- 10 .7.00 An active aspirated gas scavenging system shall be provided where anaesthetic gases are administered. This requirement does not apply to areas where analgesic gases are administered and adequate ventilation is provided.
- 10 .8.00 Vacuum (suction) systems utilising central vacuum is recommended to be reticulated to each point, except for suction scavenging points which will scavenge flammable anaesthetic gases or a high content of oxygen. These are recommended to utilise Venturi-suction with discharges as per requirements for suction pump discharges in AS 2896 'Medical gas systems - Installation and testing of non-flammable medical gas pipeline systems'.
- 10 .9.00 Venturi type suction systems shall not be used in rooms where infection control is required.

Room / Area Specific Requirements

- 10 .10.00 SPECIALISED EQUIPMENT FOR NITROUS OXIDE SEDATION

When nitrous oxide is being used to provide sedation an appropriate method for scavenging of expired gases shall be provided. The risks of chronic exposure to nitrous oxide is recommended to be considered.
- 10 .11.00 Each Recovery bed space shall be provided with an oxygen outlet and medical suction outlet.

11 STRUCTURAL DESIGN

Minimum Standards

- 11 .1.00 The minimum requirements for structural design in Health Care Facilities shall be those listed in Enclosure E1.

All clauses outlined in the following section shall be in addition to statutory requirements.

Compliance With Regulations

- 11 .2.00 The design and construction of all building elements shall be in accordance with the current Victorian Building Act.

Cost Effectiveness

- 11 .3.00 It is the policy of The Department of Human Services to actively encourage the design and construction of health facilities for the minimum cost consistent with the minimum requirements set out in the Benchmark and Guidelines reference documents. The following principles have been adopted to achieve this objective:
- Alternative structural systems may be considered
 - Minimum loading requirements may be adopted
 - Rationalised and repetitive structural systems are most likely to be more cost effective
 - Standardised structural details and connections are recommended to be adopted
 - Services integration shall be considered
 - Prefabrication and modularisation is recommended to be considered
 - Future flexibility which involves additional costs shall be approved by the Department of Human Services
 - Rigorous commercial approaches and practices are recommended to be adopted.
- 11 .4.00 Where possible, the design and structure is recommended to offer maximum opportunity for local trades, materials and Australian products.

Structural Drawings and Documentation

- 11 .5.00 Structural drawings shall include a set of general notes with the following information:
- The design codes used in the design
 - The design live loading including service loads
 - The design wind loading (ultimate) and terrain category
 - Any imposed construction / erection loadings such as earth moving equipment
 - Foundation design parameters
 - Required concrete strength and cover to reinforcement and slump
 - Welding categories
 - Corrosion protection treatment.
- 11 .6.00 A set of 'As Constructed' drawings shall be handed over to the occupier during the 'Approval to Occupy' inspection.

Design Loads

- 11 .7.00 WIND LOADS
Refer to Architectural section.

SEISMIC LOADS
Refer to Architectural section.

LIVE LOADS
Areas designed for compactus loadings shall be clearly identified on the drawings. Final locations of these compactus areas shall be determined during the planning of the building.

Superstructure

- 11 .8.00 STRUCTURAL RESISTANCE AND DURABILITY
The structure is recommended to be designed to provide a projected building life equivalent to either the anticipated useful economic life of the facility, or 50 years, whichever is the greater.
- 11 .9.00 DEFLECTION
The structure shall be designed to avoid excessive deflections, vibrations or resonance that may affect the serviceability of the structure, services, Operating and Procedure Room light fittings, applied finishes, equipment or any secondary construction such as partition walls.
- 11 .10.00 PLANNING CONSIDERATIONS
Attention is recommended to be paid to the ability to change floor layouts at reasonable cost without undue effect on other parts of the building. Load bearing is recommended to be restricted to those elements which will not inhibit future planning.
- 11 .11.00 The spacing, size and nature of the elements shall be appropriate for the functions of the buildings, after consideration of the cost economics of various spans and planning flexibility.
- 11 .12.00 ROOF
Complex roof designs, internal box guttering and high maintenance features are recommended to be avoided. The roof design shall be appropriate to the intended use. Open vented roof types such as sheet metal decking on purlins with suspended ceilings shall not be used over critical care areas.
- 11 .13.00 COVERED WAYS
External walkways, footpaths and entrances shall be designed and constructed, taking due account of ground movement, storm water drainage, surface type to prevent slipping when wet or icy, thermal movement and durability.
- 11 .14.00 Coverings to walkways shall be designed and constructed to provide waterproofing, protection from weather and well lit for users both day and night. They shall be braced for stability.
- 11 .15.00 Roofs may be constructed with metal sheeting supported on timber or steel purlins spanning between timber or steel trusses or beams. Columns may be timber, steel, concrete or brick. All timber used shall be properly seasoned. Unless alternative paving is required, all areas are recommended to be concrete paved with appropriate edge thickenings and column footings.

Part E- Building Services and Environmental Design

Modifications & Alterations to Existing Structures

- 11.16.00 The existing structure shall be reviewed and a report provided to the Department of Human Services stating current condition and compliance with the requirements of these Guidelines.
- 11.17.00 Projects involving alterations and/or additions to existing buildings shall be programmed and phased to minimise disruption of retained existing functions.

Competence / Certification

- 11.18.00 The Department of Human Services has the authority to require an independent check of the structural design if deemed necessary. Design calculations and assumptions may be requested by the commissioned independent consultant to verify the structural adequacy, and shall be made available as required. Copies of calculations are acceptable provided they are legible.

Site / Civil Works

- 11.19.00 Paved roads shall be provided within the boundaries of the site for access to all entrances, parking areas, service, delivery and maintenance points and emergency receiving points (if applicable).
- 11.20.00 Paved pathways shall be provided for external pedestrian traffic within the site. Fortis shall include movement from bus stops to all accessible on-site locations. Where applicable, Council crossovers are recommended to be considered when designing site roadways, as their impact on public roadways will affect the neighbourhood by impacting local traffic patterns and road design.
- 11.21.00 All side entry pits, lintels, kerbs, channels and grated drains shall be constructed of reinforced concrete. Road surfaces are recommended to be bitumen paved with appropriate base, sub-base and sub-grades, all formed to provide adequate storm water drainage. Aprons to the ambulance bay, the main entry and the loading docks are recommended to be constructed of reinforced concrete on the appropriate base, sub-base and sub-grades.
- 11.22.00 Bulk oxygen vessel foundation slabs and truck loading aprons shall be constructed of concrete. Bitumen products shall not be used due to the risk of ignition if an oxygen leak occurs during filling.

VENTILATION REQUIREMENTS**VENTILATION REQUIREMENTS FOR AREAS AFFECTING PATIENT CARE HOSPITALS AND OUTPATIENT FACILITIES**

Area Designation	Air pressure relationship to adjacent area	Minimum air changes of outdoor air per hour	Minimum total air changes/hour	All air exhausted directly to outdoors	Filtration Efficiency ²	Re- circulated by means of room units	Relative humidity (%)	Design Temp °C
SURGERY AND CRITICAL CARE								
Operating/surgical Cystoscopic Rooms	Positive	AS 1668.2 ⁽³⁾	20	50%	G4-F8 HEPA ¹	no	30-60	19-24
Operating Rooms - Cardiac, UCV	Positive	AS 1668.2 ⁽³⁾	20	50%	G4-F8 HEPA ¹	no	30-60	16-27
Birthing/ Delivery Room	Positive	5	20		G4 - F9	no	30-60	20-23
Set-up Room and Sterile Store	Positive	AS 1668.2 ⁽⁴⁾	15		G4-F8 HEPA	no	30-60	20-23
Recovery Room	Positive	AS 1668.2 ⁽⁵⁾	10		G4 - F8	no	30-60	21
Critical and Intensive Care	Positive	2	6		G4 - F8	no	30-60	21-24
Neonatal Intensive Care	Positive	2	6		G4 - F8	no	30-60	22-26
Burns	Positive	3	10		G4 - F8	no	30-95	21-32
Treatment room	Positive	2	6		G4 - F8			24
Trauma room	Positive	3	15		G4 - F8	no	45-60	21-24
Anaesthesia gas storage	Negative	2	8	Yes	G4 - F8	no		
Endoscopy	Negative	2	6		G4 - F8	no	30-60	20-23
Bronchoscopy, Sputum Induction and Pentamidine	Negative	3	12	Yes	G4 - F8	no	30-60	20-23
Emergency Unit & Radiology Waiting Room	Negative	2	12	Yes	G4 - F8	no	30-60	20-23
Emergency Unit Triage	Negative	2	12	Yes	G4 - F8	no	30-60	20-23
NURSING								
Patient Room	Positive	2	6		G4 - F8			21-24
Toilet Room	Negative	2	10		G4 - F8			
Newborn Nursery Suite	Positive	2	6		G4 - F8			24
Protective Environment Room	Positive	AS 1668.2 (4)	12		G4-F8 HEPA			24
Airborne Infection Isolation Room	Negative	AS 1668.2 (4)	12	Yes	G4 - F8	no		24
Isolation alcove or anteroom	Neg or Pos	AS 1668.2 (4)	12		G4 - F8	no		
Labour/ Delivery/ Recovery/ Postpartum Room (LDRP)	Positive	2	6		G4 - F8			21-24
Patient Corridor		2	6		G4 - F8			
DIAGNOSTIC AND TREATMENT								
Examination Room		2	6		G4 - F8			24
Medication Room		2	6		G4 - F8			
Treatment Room		2	6		G4 - F8			24
Physiotherapy and Hydrotherapy	Negative	2	6		G4 - F8			24
Soiled Workroom or Soiled Holding	Negative		10	Yes	F4	no		
Clean Workroom or Clean Holding		2	6		G4 - F8			
Haemodialysis		2	6		G4 - F8	no		20-25
ANCILLARY								
<i>Radiology</i>								
Radiology (surgical/critical care and catheterisation)	Positive	3	15		G4 - F9	no	30-60	21-27
Radiology (diagnostic & treatment)		2	6		G4 - F8			21-24
Darkroom	Negative	3	10	Yes	F7	no		

VENTILATION REQUIREMENTS**VENTILATION REQUIREMENTS FOR AREAS AFFECTING PATIENT CARE HOSPITALS AND OUTPATIENT FACILITIES**

Area Designation	Air pressure relationship to adjacent area	Minimum air changes of outdoor air per hour	Minimum total air changes/ hour	All air exhausted directly to outdoors	Filtration Efficiency ²	Re- circulated by means of room units	Relative humidity (%)	Design Temp °C
<i>Laboratory</i>								
General			6		F7			24
Biochemistry	Positive	2	6	Yes	F7	no		24
Cytology	Negative	2	6	Yes	F7	no		24
Glass washing	Negative	2	10	Yes	F7	no		
Histology	Negative	2	6	Yes	F7	no		24
Microbiology	Negative	2	6	Yes	F7	no		24
Nuclear Medicine	Negative	2	6	Yes	F7	no		24
Pathology	Negative	2	6	Yes	F7	no		24
Serology		2	6		F7	no		24
Sterilising	Negative	2	10	Yes	F7	no		24
Autopsy room	Negative		12	Yes	F7	no		
Non-refrigerated Body Holding Room	Negative	2	10	Yes	F7	no		21
Pharmacy		2	6		G4 - F8			
STERILISING AND SUPPLY								
ETO steriliser room	Negative	2	10	Yes	G4 - F8	no		24
Steriliser Equipment Room	Negative	2	10	Yes	G4 - F8	no		
<i>Central Medical and Surgical Supply</i>								
Soiled or Decontamination Rm	Negative	2	6	Yes	F4	no		20-23
Clean Workroom	Positive	2	6		G4 - F8	no	30-60	
Sterile Storage		2	6		G4 - F8		max 70	
SERVICE								
Food Preparation		3	10		F4	no		
Dish/ Pot Washing	Negative	3	10	Yes	F4	no		
Dietary Day Storage	Negative	2	6		F4			
Laundry General		3	10	Yes	F4	no		
Soiled Linen (sorting and storage)	Negative	3	10	Yes	F4	no		
Clean Linen Storage		2	6		G4 - F8			

Notes:

1. HEPA filters shall be installed at the air outlet
2. Filtration Efficiency: First filter listed is the prefilter if two filters are listed, second is the main filter and the HEPA if listed is the final terminal filter
3. The minimum outdoor airflow rate shall be 20 L/s per person at an occupancy of 5m² per person or 50%, whichever is greater
4. The minimum outdoor airflow rate shall be the greater of 10 L/s per person or 2m² per person
5. The minimum outdoor airflow rate shall be the greater of 10 L/s per person or 4m² per person

ENGINEERING SERVICES - GENERAL REQUIREMENTS**Legislative Environment**

The following requirements refer to Australian Standards and shall be complied with where applicable:

- Building Code of Australia
- Building Act
- Building (Legionella) Act
- Building Regulations
- Plumbing Regulations
- Health (Legionella) Regulations
- Plumbing (Cooling Towers) Regulations
- Building (Cooling Tower Systems Register)
- Building (Legionella Risk Management)
- Occupational Health and Safety (Noise)
- Occupational Health and Safety (Plant)
- Health Quality of Drinking Water Regulations
- National Health and Medical Research Council /
- Electrical Safety Act
- Electrical Safety Regulations
- Austel Technical Standard TS 009
- Austel Technical Standard TS 008

Authorities

The following Authorities may have interest and have jurisdiction over health care facilities and related services:

- Health Department
- Environmental Protection Authority
- Sustainable Energy Authority
- WorkSafe Authority
- Building Commission
- Plumbing Industry Commission
- Local Councils
- Office of Gas Safety
- Office of the Chief Electrical Inspector
- Fire Brigade
- Supply (Reporting) Authorities

Australian Standards

The following list of Australian Standards shall be complied with and includes Standards referred to in the Guidelines as well as additional Standards:

AS No	Australian Standard Title
AS 1170	SAA Loading Code
AS 1221	Fire hose reels
AS 1324.1	Air filters for use in general ventilation and air-conditioning - Application, performance and construction
AS 1603	Automatic fire detection and alarm systems
AS 1670	Fire detection, warning, control and intercom systems - System design, installation and commissioning
AS 1668.1	The use of mechanical ventilation and air-conditioning in buildings - Fire and smoke control in multi compartment buildings
AS 1668.2	The use of mechanical ventilation and air-conditioning in buildings - Mechanical ventilation for acceptable indoor-air quality

ENGINEERING SERVICES - GENERAL REQUIREMENTS**Australian Standards**

AS 1668.2	Supplement 1 - Mechanical ventilation for acceptable indoor-air quality
AS 1668.3	The use of mechanical ventilation and air-conditioning in buildings - Smoke control systems for large single compartments or smoke reservoirs
AS 1680.0	Interior Lighting - Safe movement
AS 1680.1	Interior Lighting - General principles and recommendations
AS/NZS 1680.2	Interior Lighting - Hospital and medical tasks
AS 1735.1-16	Lifts, escalators and moving walks
AS 2107	Acoustics - Recommended design sound levels and reverberation times for building interiors
AS 2118	Automatic fire sprinkler systems
AS 2293	Emergency evacuation lighting for buildings
AS 2419	Fire hydrant installations
AS 2500	Guide to the safe use of electricity in patient care
AS 2901	Medical devices - Characteristics of audible and visible alarm signals
AS 3000	Wiring rules
AS 3003	Electrical installations - Patient treatment areas of hospitals and medical and dental practises
AS 3008	Electrical installations - Selection of cables
AS 3009	Electrical installations - Emergency power supplies in hospitals
AS 3080	Telecommunications installations - Integrated telecommunications cabling systems for commercial premises
AS 3084	Telecommunications installations - Telecommunications pathways and spaces for commercial buildings
AS/NZS 3500	National plumbing and drainage code
AS 3666.1-3	Air-handling and water systems of buildings-Microbial control
AS 3811	Hard wired patient alarm systems
AS 3892	Pressure equipment - Installation
AS 4254	Ductwork for air-handling systems in buildings
AS 4426	Thermal insulation of pipework, ductwork and equipment - Selection, installation and finish
AS 4428	Fire detection, warning, control and intercom systems - control and indicating equipment
AS 5601	(AGA 601) Gas installations

Part E - Building Services and Environmental Design

COMPLIANCE CHECKLIST

	Item	Yes	No
1	Mechanical		
	Have all mandatory elements of Enclosure E1 been met?	<input type="checkbox"/>	<input type="checkbox"/>
	Have all mandatory elements of Part E been met?	<input type="checkbox"/>	<input type="checkbox"/>
Checked and certified by: _____ Date: _____ Company: _____ Position _____ Signature: _____			
2	Electrical	Yes	No
	Have all mandatory elements of Part E been met?	<input type="checkbox"/>	<input type="checkbox"/>
Checked and certified by: _____ Date: _____ Company: _____ Position _____ Signature: _____			
3	Structural	Yes	No
	Have all mandatory elements of Part E been met?	<input type="checkbox"/>	<input type="checkbox"/>
Checked and certified by: _____ Date: _____ Company: _____ Position _____ Signature: _____			
4	Hydraulics	Yes	No
	Have all mandatory elements of Part E been met?	<input type="checkbox"/>	<input type="checkbox"/>
Checked and certified by: _____ Date: _____ Company: _____ Position _____ Signature: _____			
5	Fire	Yes	No
	Have all mandatory elements of Part E been met?	<input type="checkbox"/>	<input type="checkbox"/>
Checked and certified by: _____ Date: _____ Company: _____ Position _____ Signature: _____			
6	Vertical Transport	Yes	No
	Have all mandatory elements of Part E been met?	<input type="checkbox"/>	<input type="checkbox"/>
Checked and certified by: _____ Date: _____ Company: _____ Position _____ Signature: _____			
7	Communications	Yes	No
	Have all mandatory elements of Part E been met?	<input type="checkbox"/>	<input type="checkbox"/>
Checked and certified by: _____ Date: _____ Company: _____ Position _____ Signature: _____			

