

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	

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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	