

Part B - Health Facility Briefing and Planning

530 ORTHOTICS UNIT

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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

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- 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

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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

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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

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- 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.

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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

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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.

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FUNCTIONAL RELATIONSHIPS DIAGRAM - ORTHOTICS UNIT

