

### 280 DENTAL UNIT

#### INDEX

##### Description

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- 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

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- 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.

#### PLANNING

##### Functional Areas

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- 280 .3.00 The Dental Unit will consist of the following Functional Areas:
- 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.

##### Functional Relationships

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- 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.

#### DESIGN

##### Building Service Requirements

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- 280 .5.00 Radiation protection requirements for Dental Surgery Rooms will require assessment by radiation specialists. Compliance with any statutory authority regulations is required.

### COMPONENTS OF THE UNIT

#### Introduction

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- 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

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- 280 .7.00 Provide the Standard Components as identified in the Schedule of Accommodation.

#### Non-Standard Components

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- 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

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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 m<sup>2</sup>. 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 through 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 m<sup>2</sup>.

### 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		

### References and Further Reading

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- 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

