

DESIGN GUIDELINES FOR DEVELOPMENT OF TUPAPA HEALTH CENTRE



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INTRODUCTION

These design guidelines have been prepared to support a review of the current infrastructure of the Tupapa Health Centre. Tupapa Health Centre in Avarua has been identified as the Health Facility of Excellence for primary care for the Cook Islands, and accordingly it will be prioritised for development in the immediate future.

In this context it is important to ensure that the capital works program delivers a facility which provides value for money, a sustainable asset, and a modern clinical environment to support the work of our health professionals. Compliance with appropriate Design Standards will also ensure that the health care facility provides a clinically safe, culturally appropriate, efficient, and comfortable physical environment for clients, visitors, and staff members.

The Design Standards used in this document have been derived from the Australasian Health Facility Design Guidelines and, as such, they comply with Australian and/or New Zealand legislation with respect to disabled access, fire safety, occupational safety and engineering Standards. All building works must comply with the Cook Islands Building Code (2019).

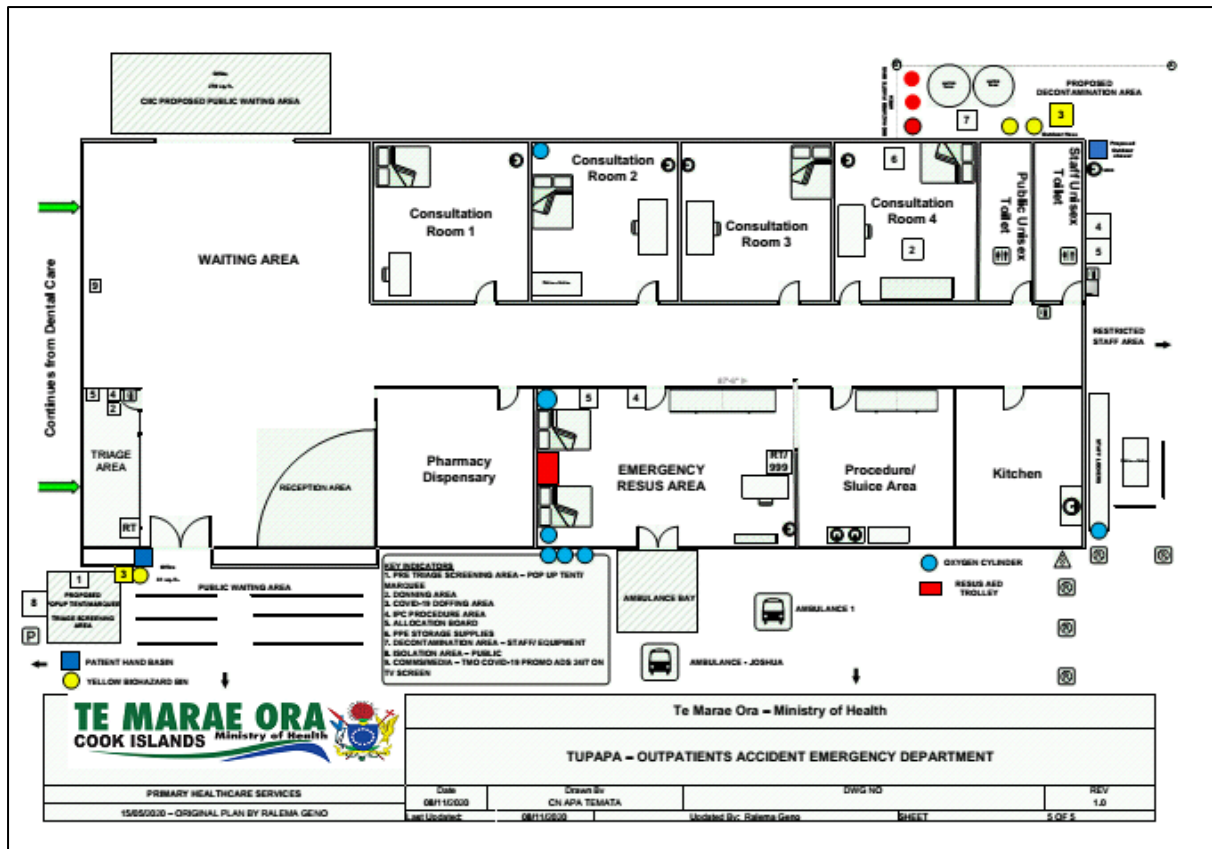
There are a number of components to the existing Tupapa Clinic, which need to be reviewed as part of the redevelopment of this important facility. The Clinic is divided into 2 sections with a shared reception and waiting area in the middle. The Waiting area is to be segregated to help address Covid patient social distancing requirements.

The Tupapa Clinic has three main functions:-

1. General Outpatients for Adults and Children
2. Emergency Service
3. Dental Clinic

The transfer of Emergency Department services to Tupapa Primary Health Care Service is a temporary measure to mitigate the risk of spread of Covid 19 at Rarotonga Hospital. Emergency Department services are being transferred back to the main hospital.

The Dental Clinic is comprehensive with 6 Treatment Rooms and support facilities. The Outpatients/ Emergency Department is very basic with limited space and support service. It has 4 Consulting Rooms and an Emergency Resuscitation area. It is unusual for the Emergency Department to be not co-located with the main Hospital. The Dental Clinic generally operates Monday to Friday between the hours of ??????. The OP/ED operates 24/7. It is therefore necessary for the Dental Clinic to be locked down after hours.



Spaces not currently provided at Tupapa.

- Specialist Consultation Clinics.
- Community Mental Health Services
- Social Work / Family Support Service
- Nutrition Clinic
- Rehabilitation (Physiotherapy, Occupational Therapy etc).
- Blood Bank. Blood Collection & Storage
- Area for support groups to meet.
- Assisted Toilet

1. DESIGN CONSIDERATIONS

The Standards for the design of particular rooms within health facilities are specified in the Room Data Sheets' and 'Room Layout Sheets' which are incorporated into the Australasian Health Facility Design Guidelines. The room data sheet firstly provides detail of the floor area, hours of operation, occupancy and a description of the purpose of each room and any special requirements. They also include information about:

- a. recommended building materials and finishes to be used in order to provide maximum durability and reduce maintenance commitments.
- b. detail of any permanent fixture to be provided in that particular room and the 'services' required to be available within the room to support those fixtures.
- c. information about access to electricity, data networks, cold water supply, hot water supply, warm (temperature controlled) water supply, taps, drains and reticulated medical gases.

Consultation with the 'end users' of these rooms with regard to the 'services' required is very important.

Relevant Room Layout Sheets for the following spaces at Tupapa Health Centre are appended to these guidelines.

- General Consulting Room
- ENT/Ophthalmology Consulting Rooms
- Patient Treatment Bay
- Minor Procedure Room
- Small Dirty Utility Room
- Dental Treatment Rooms.
- Dental Workshop
- Pharmacy Counter
- Drug Store 5 square metre
- Drug Store 10 square metre
- Staff Toilet
- Public Toilet
- Assisted Toilet

Design Considerations for Emergency Department

1. The service must be open 24 hours a day, 7 days a week.
2. The Emergency Department will be the first point of call for emergencies and all 'unbooked' outpatients.
3. The Emergency Department will provide a triage service and treatment will be scheduled on the basis of clinical need and urgency.
4. Non-urgent patients will be referred following triage to the General OPD facilities contiguous with the Emergency Department.
5. Non-urgent patients presenting outside of normal hours will be triaged and treated where required within the Emergency Department.
6. The Emergency Department will have sufficient number of adult and paediatric short stay beds where patients reasonably expected to be discharged following a short period of observation or undergoing a minor, non-surgical procedure can be accommodated.
7. SMOs will consult patients of the Emergency Department upon request and will accept patients for admission to their respective Units within the hospital.
8. The Emergency Department will normally be located at the intersection of the Ambulatory Care and Inpatient Precincts to facilitate urgent transfer of critical patients to the critical care services of the Hospital, the orderly transfer of admitted patients to respective Wards and the discrete transfer of deceased persons to the Mortuary.
9. Staff of the Emergency Department will participate in retrieval services in conjunction with the Ambulance Service when clinically indicated.

The Emergency Department will be directly supervised by the Director of Medical Services for performance monitoring and administrative purposes.

Item 8 is not possible in this situation, and alternative procedures for transfer of patients between the ED and the Hospital will need to be confirmed.

Design Considerations for General Outpatient Services

- The OPD provides space for the treatment of Adults and Children.
- The OPD incorporates general consulting rooms, treatment cubicles, an injection room and other spaces as required.
- The Facility will be available to Visiting Medical Officers on a pre-arranged booking basis.
- The Facility will be available for Allied Health Practitioners and Nurse Consultants to provide consultation services where required.

Adequate space will be provided for patient waiting, and systems will be developed for managing appointments and referrals to ensure shorter waiting times and faster service.

Design Considerations for Oral Health Services

- The Oral Health Clinic facilities will be located alongside the general outpatients' service
- Oral Surgery services for both Inpatients and Outpatients will be provided on a 0745 to 1600hrs five days per week basis with an emergency service available upon referral by a Medical Officer
- Primary oral health care will be provided at the Oral Health Clinic by appointment.
- A sufficient number of fully equipped Oral Health Surgeries are required to permit the conduct of a full range of examinations and procedures not requiring general anaesthesia.
- A Dental Prosthetics Laboratory, a Plant Room for the necessary compressors etc and Clean and Dirty Utility Rooms are required.
- An office for the OIC is required together with adequate storage for consumables and a small secondary waiting area.

The Oral Health Service will be directly supervised by the Director of Medical Services for performance monitoring and administrative purposes.

2. RECOMMENDED LAYOUTS

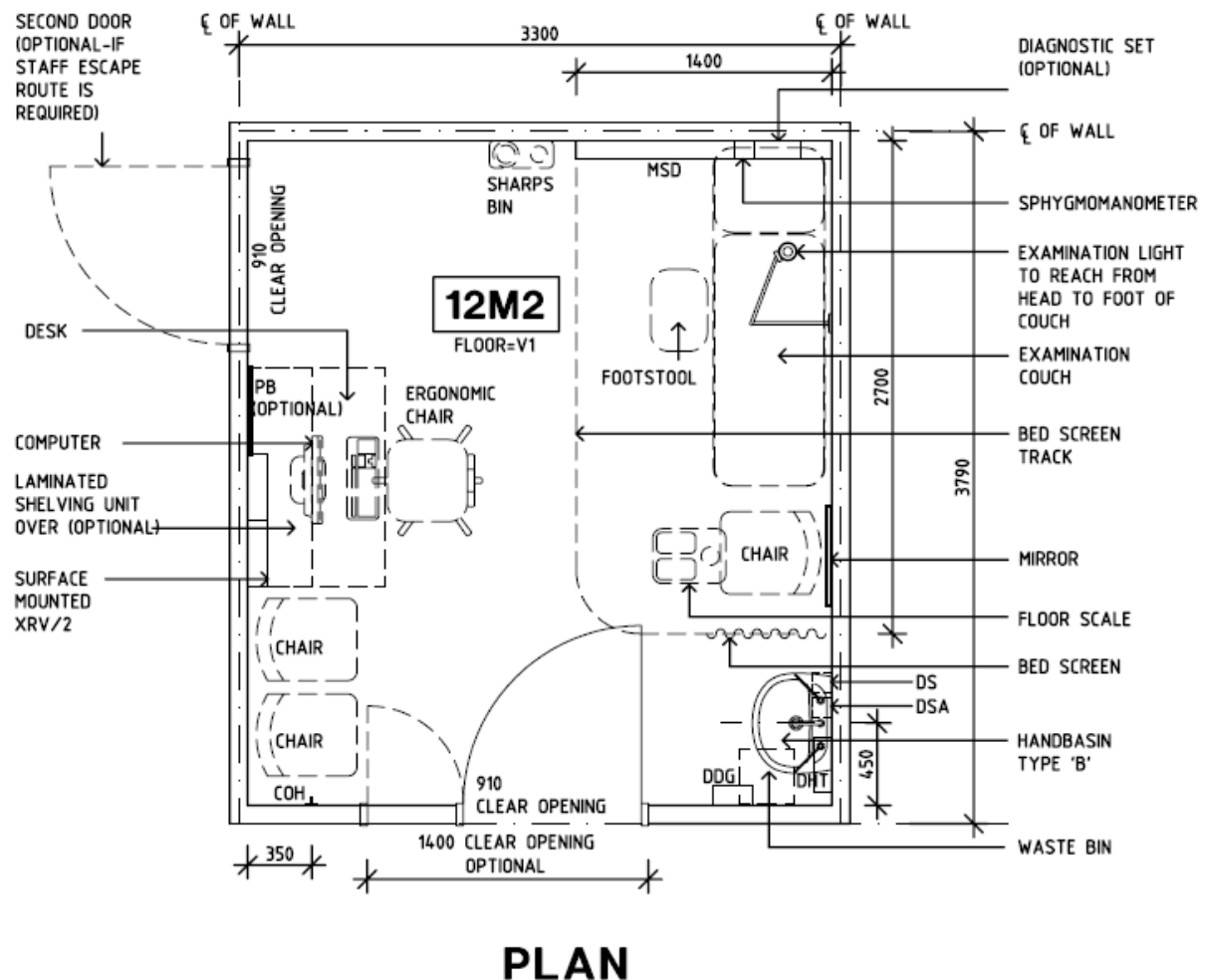
2.1 General Consulting Rooms

The Consulting Rooms provide for private consultation and examination of patients with or without support persons present. A second egress door may be required for staff safety and security.

The Consulting Rooms at Tupapa Clinic are currently around 12.5 sq metres which is in line with the Australasian standard which recommends 12 sq metres. The internal layout will be assessed against the standards.

Acoustics: Sound attenuation is high; Acoustic privacy is essential.

It is a Body Protected electrical area.



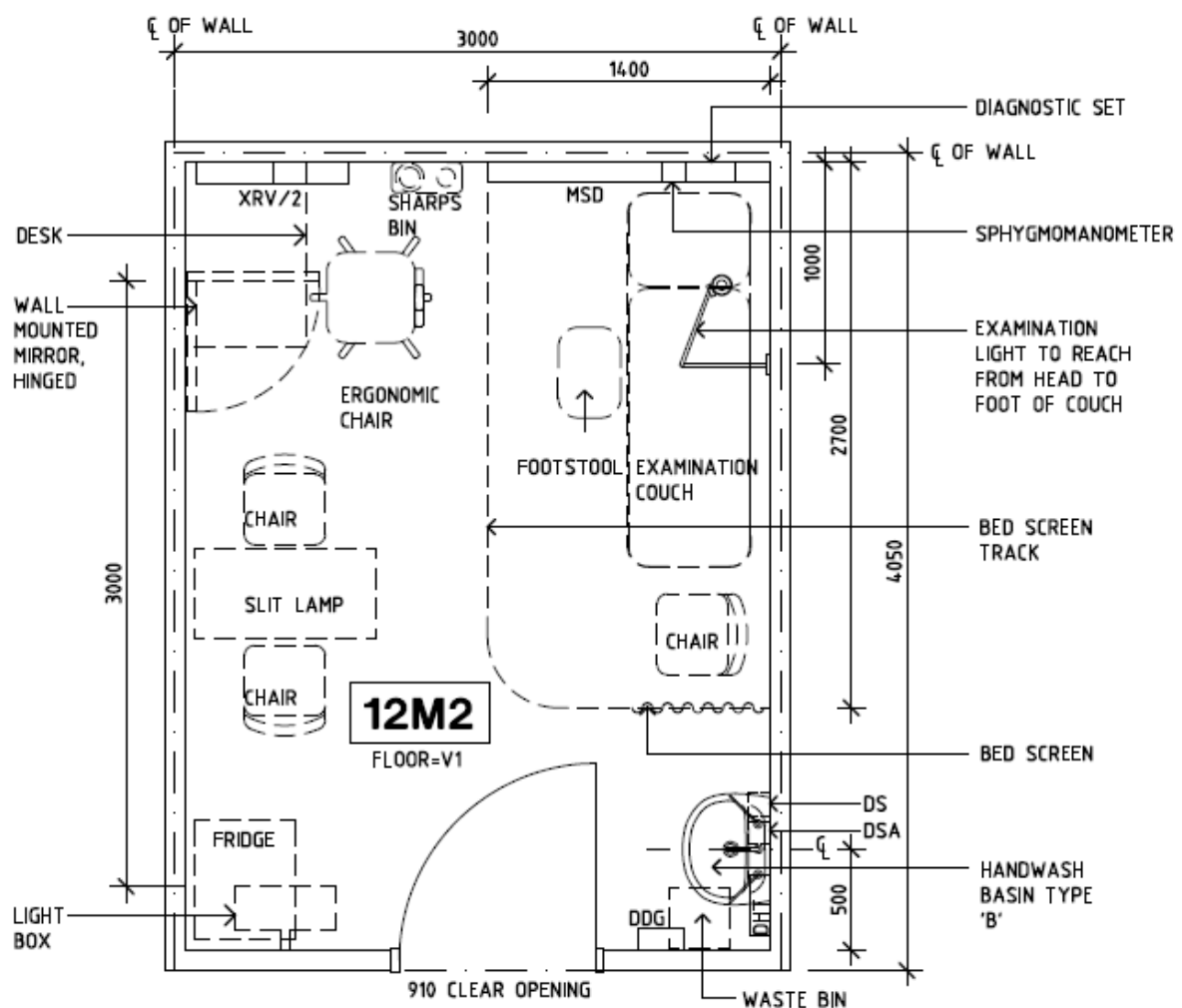
2.2 ENT/Ophthalmology Consulting Rooms

The Consulting Room ENT/ Ophthalmology provides for private consultation and examination of patients for ENT/ Ophthalmology using specialised equipment. The Consulting room may also be used for general consultations.

A distance of 3m is required between for eye chart and mirror for effective use.

Acoustics: Sound attenuation level - high; Acoustic privacy essential.

It is a Body Protected electrical area.

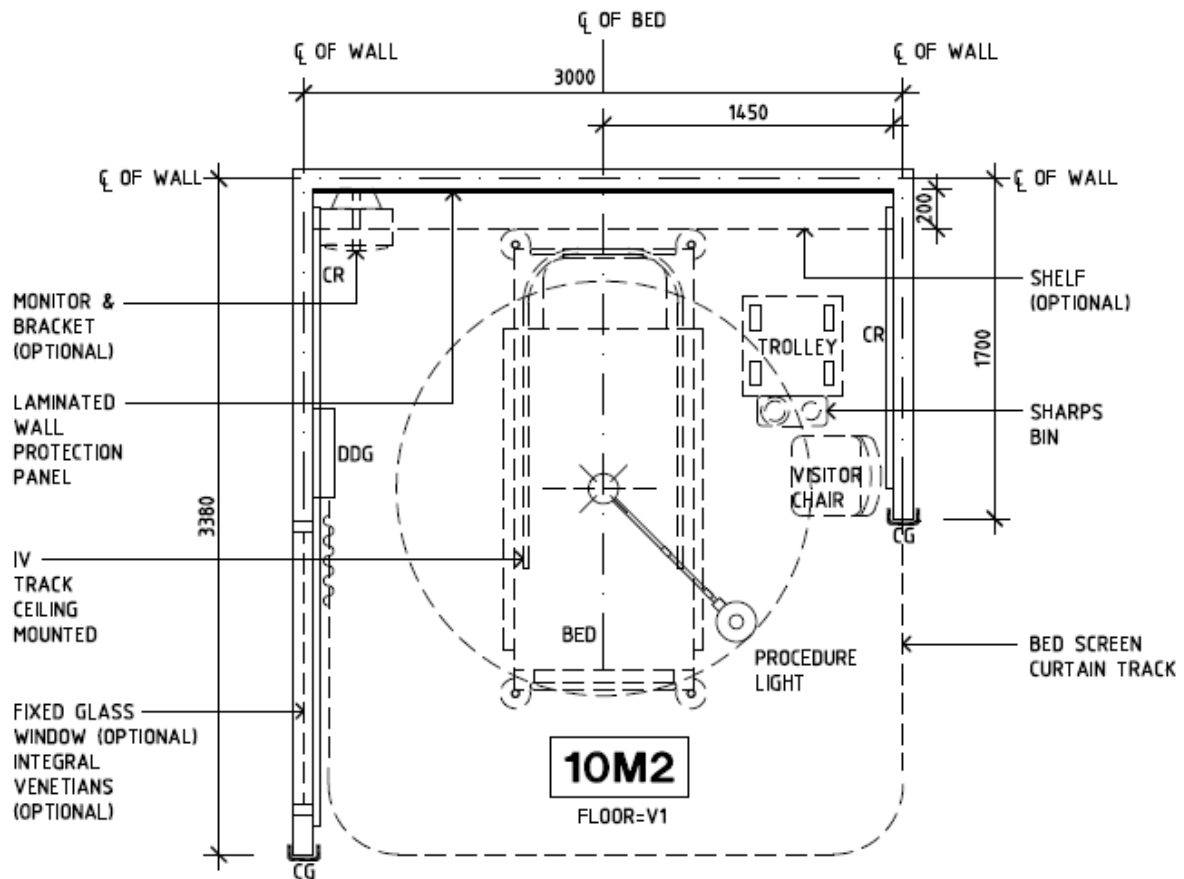


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2.3 Patient Treatment Bay

The Patient Bed Bay Acute Treatment is used for assessment and treatment of patients with acute conditions and is located within the Emergency Unit. The Bay may have partition side walls; glazing is recommended. The Patient Bay will have close access to a staff handwashing basin.

It is a Body Protected electrical area.



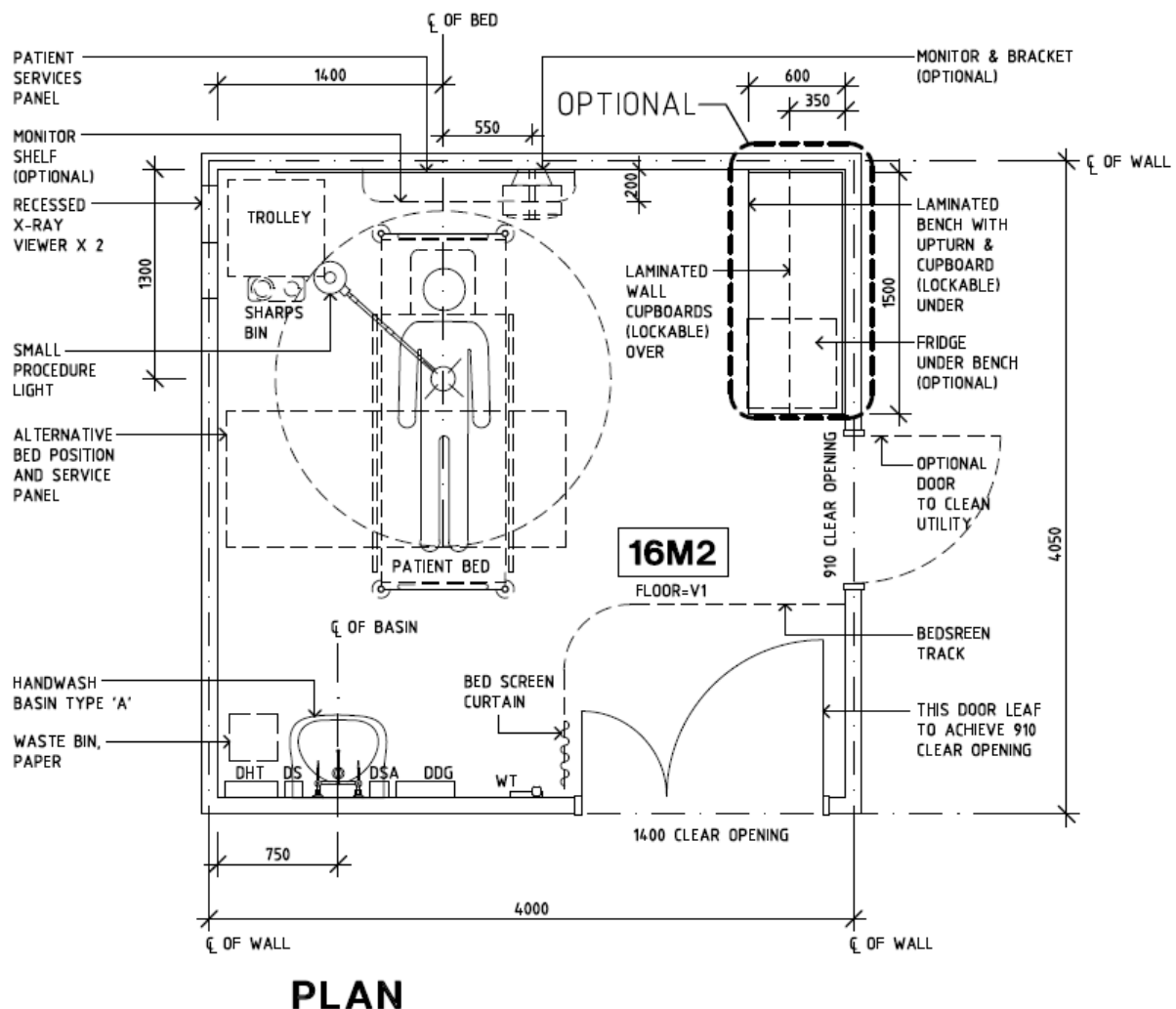
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2.4 Minor Procedure Room

The Minor Procedure Room is used for the performance of procedures that do not require the full facilities of the Operating Suite. This may include suturing or wounds, complex dressings, lumbar puncture, catheterisations, administration of local anaesthesia and use of medical gases in connection with the procedures being performed. General anaesthesia will not be administered in this room.

It is a Cardiac Protected electrical area

Acoustics: Sound attenuation level - Medium. Acoustic privacy required.



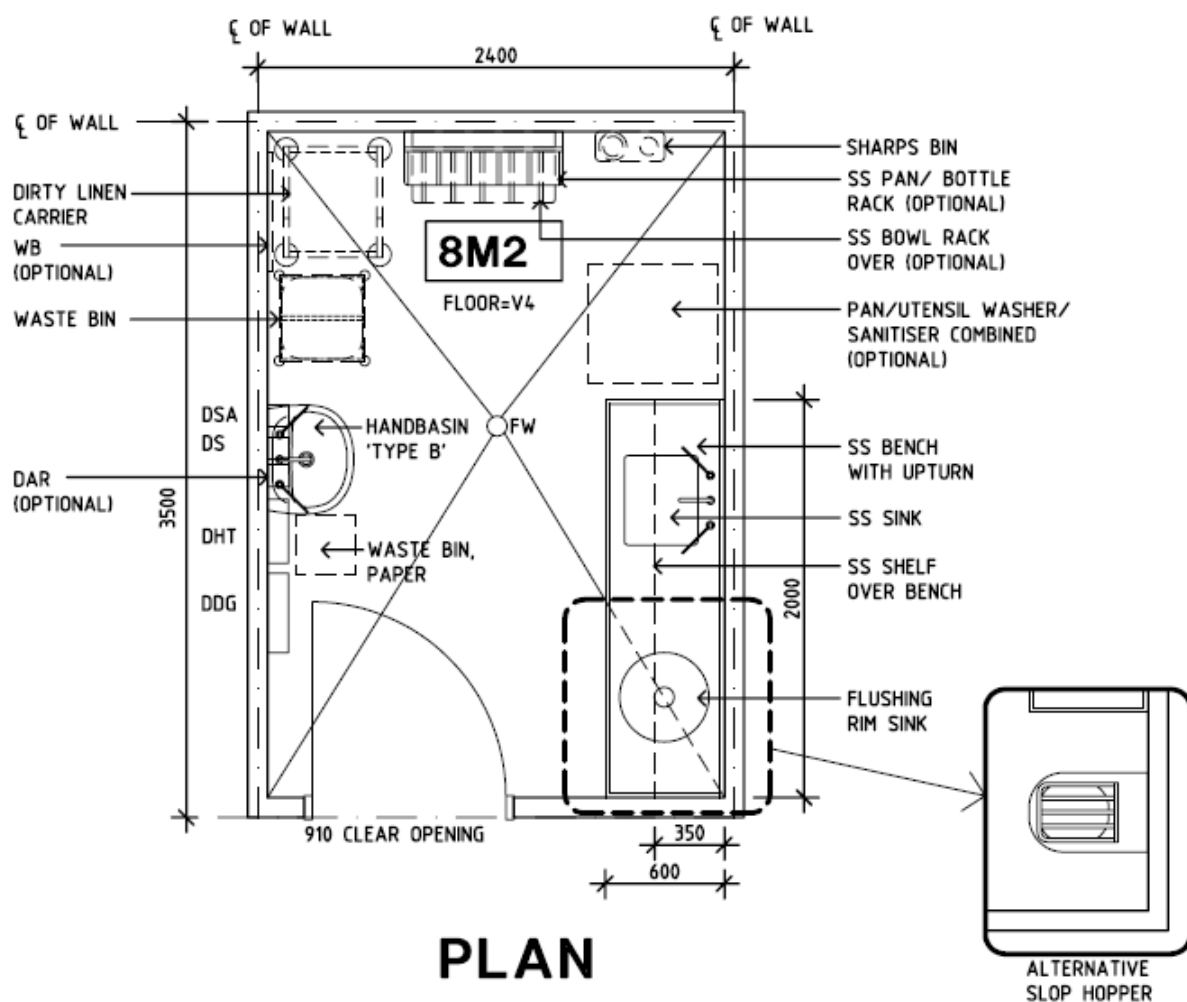
2.5 Small Dirty Utility Room

The Dirty Utility - Sub 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 may be located in Ambulatory Day Care areas but is not suitable for Inpatient Units used for overnight stay.

Acoustics: Sound attenuation level - high; Acoustic privacy is required



2.6 Dental Treatment Rooms.

The Dental Treatment Room provides for dental consultation, examination and treatment for patients. An external outlook is desirable. The room may include provision for two door access if required.

Dental Treatment rooms at Tupapa Clinic are currently around 12.5 sq metres. This is a bit below the Australasian standard which recommends 14 sq metres. The internal layout will be assessed against the standards.

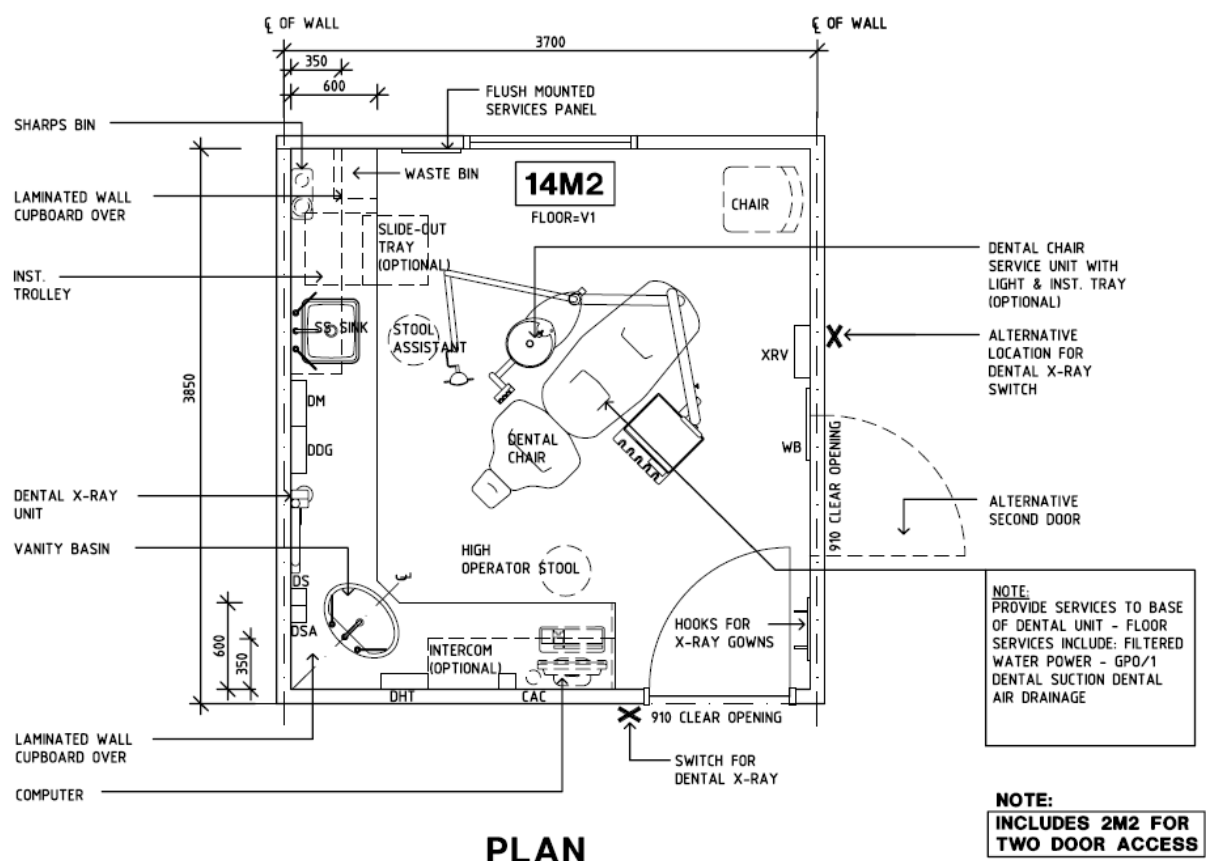
Acoustics: The sound attenuation level is high; Acoustic privacy is required.

It is a Body protected electrical area.

Additional Design Considerations:

- Radiation shielding to be included if required.
- Services are required for the dental chair unit which will be dependant on the chair model and supplier. This may include dental air, dental suction, filtered water, power and drainage.

This is the recommended standard design for a Dental Treatment Room.

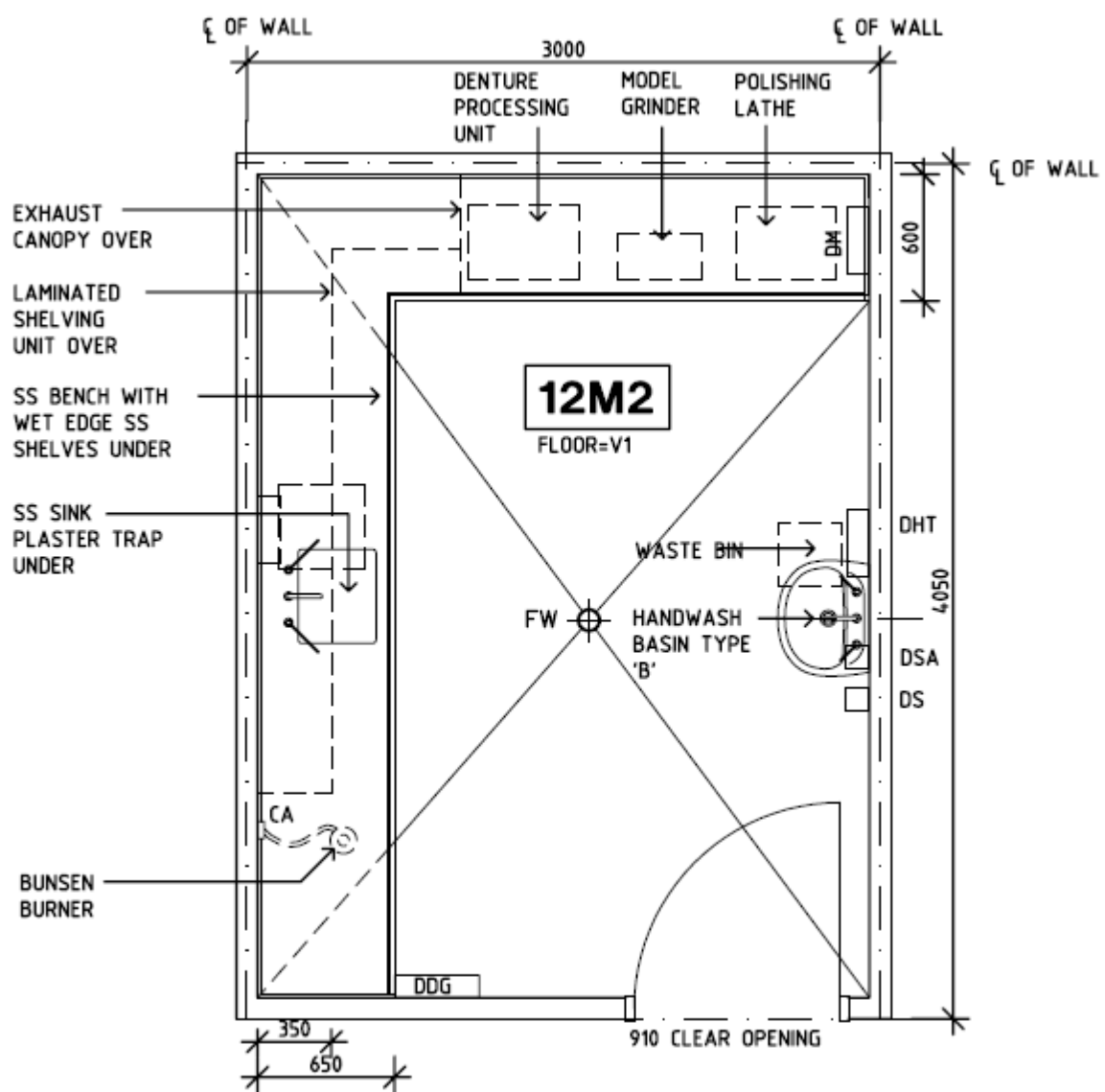


2.7 Dental Workshop

The Dental Workroom provides facilities and equipment for dental technicians to make adjustments to dentures or other dental prosthetics, and to store prosthetic supplies.

Sound attenuation is high: Acoustic privacy is required.

There is a room marked as Dental Room on the Floor Plan for Tupapa Clinic which may be the space used by the Dental Technician as a Workshop. This room is 28 sq metres which is larger than the space required under the Australasian standard which only requires 12 sq metres with 1 or 2 people working in this room at any one time.



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2.8 Pharmacy Service

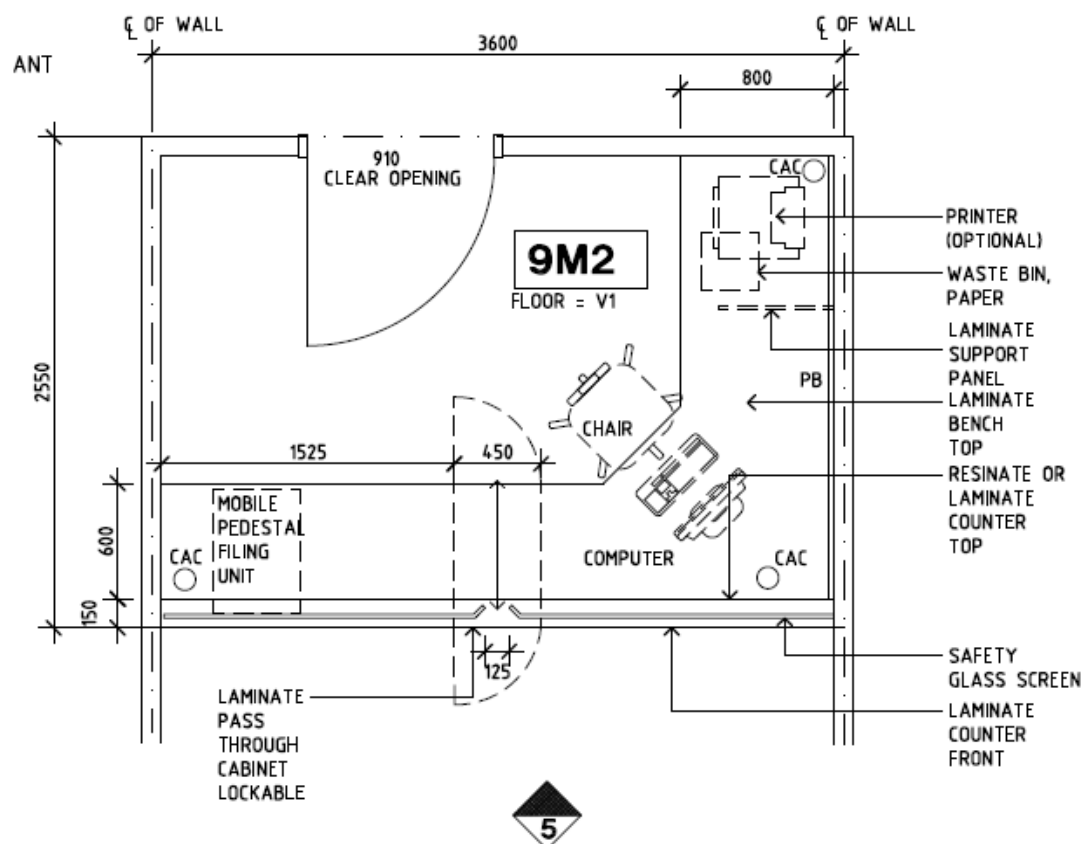
The Chief Pharmacist at TMO has expressed his concern around the capacity afforded by the existing pharmacy size and design at Tupapa Health Centre. The pharmacy lacks the space and physical facilities required for a primary healthcare pharmacy facility. He advises that there is not enough:

- dispensing space (benches are not wide enough)
- shelf/cupboard/drawer space for the range of medicines and consumables that is dispensed
- space for staff to move between computers, dispensing stations, and patient hatches without getting in each other's way
- space and privacy to counsel patients on how to take their medicines, and
- storage space for bulk supplies of medicines and containers required for such a busy pharmacy.

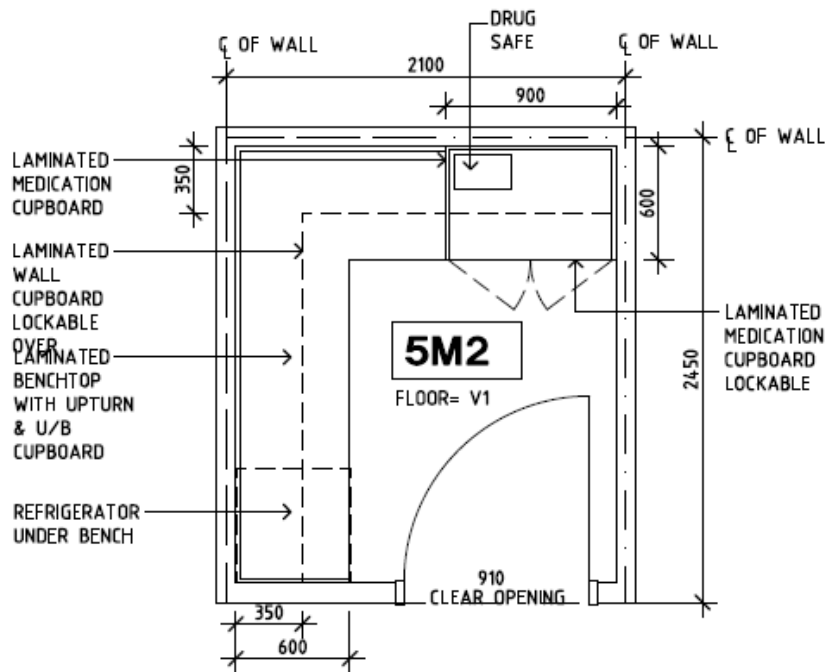
In addition, the safe for storage of controlled drugs needs to be upgraded to meet the legislative requirements. Wall space is needed for the safe to be securely attached to the building (Narcotics Regulations 1966). A fit-for-purpose pharmacy will require quite an extensive refit/renovation to expand the existing footprint and make it a safer and much more functional workspace.

The Australasian Health Facility Design Guidelines include recommendations for the Pharmacy Counter as well as the options for a 5 sq metre and a 10 sq metre drug store. The Tupapa Health Centre Pharmacy is currently 14 sq metres and there is no separate drug store.

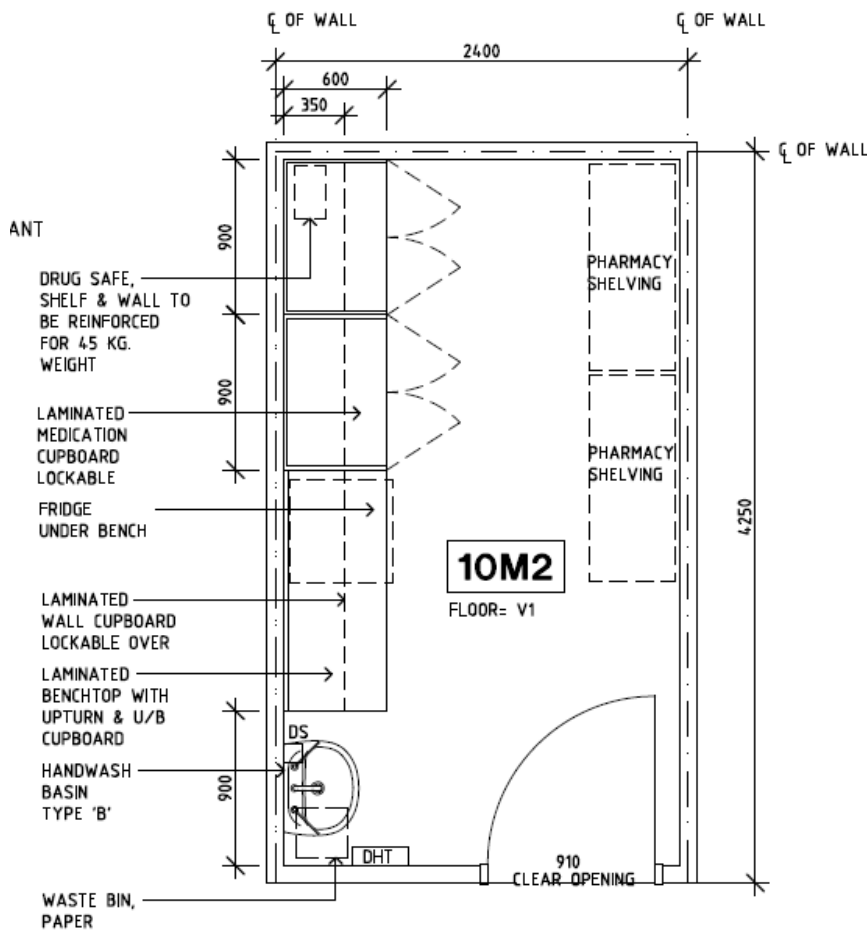
Pharmacy Counter



Drug Store (5 sq metres)



Drug Store (10 sq metres)



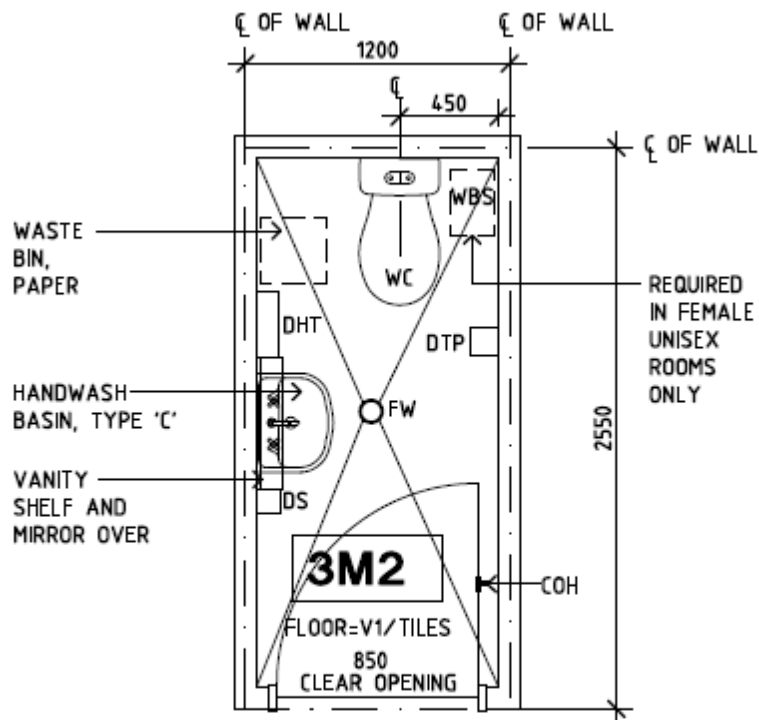
2.9 Toilets

Staff Toilet

A toilet and handbasin for staff use; may be Unisex or gender specific.

Staff only access may be required.

Acoustics: Sound attenuation level - high; Acoustic privacy required.

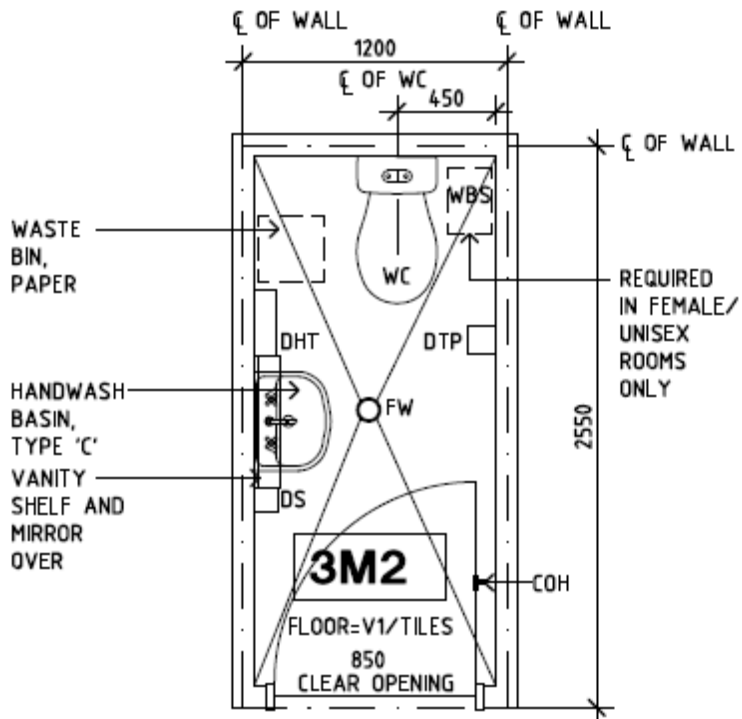


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Public Toilet

A room containing a toilet and handbasin for public or visitor use.

Acoustics: Sound attenuation level - high; Acoustic privacy is required.

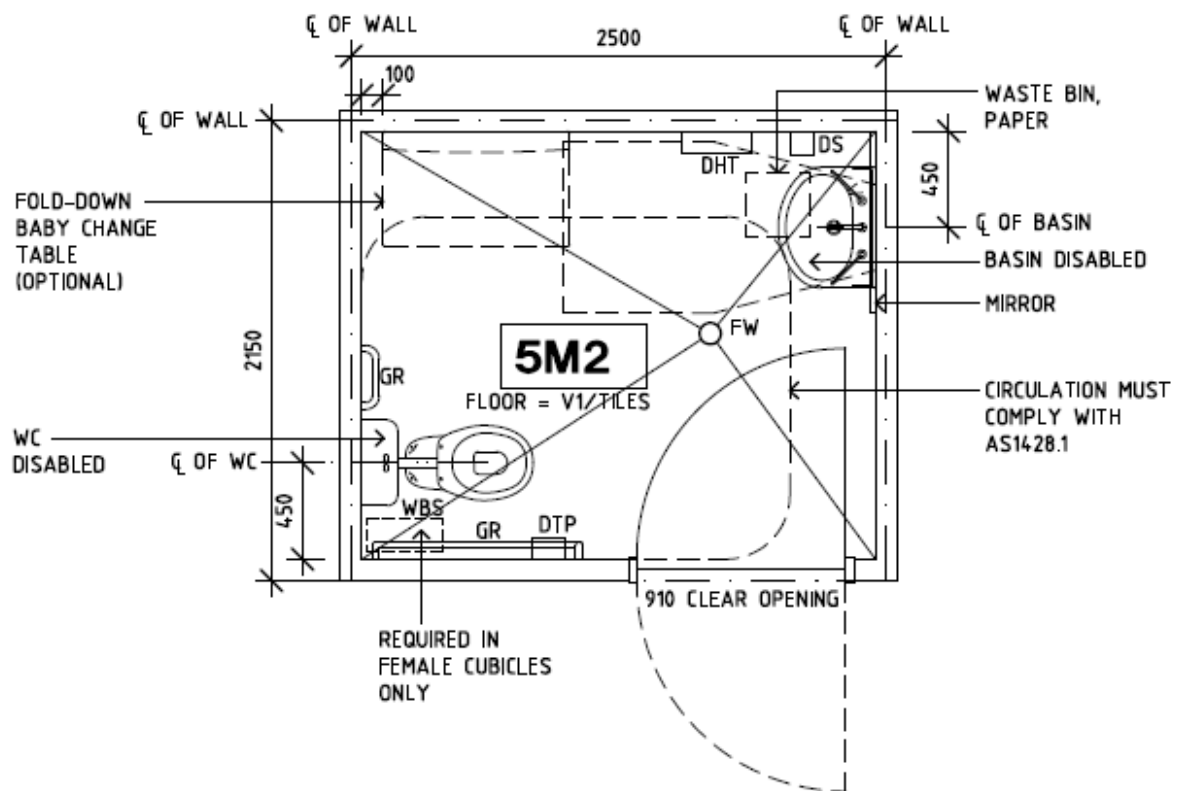


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Assisted Toilet

A toilet and handbasin for use by disabled persons with or without assistance. The room shall comply with AS 1428; Baby change facilities may also be located in this room. The room may be used by patients or visitors. If the Accessible Toilet is located in a patient care area the patient/nurse call and emergency call points should be included.

Acoustics: Sound attenuation level - High - Acoustic privacy.



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