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Disability and Universal Access Review

Project: Castle Street, Bray, Co. Wicklow

Project Ref 20-238

Issue No. 004 Stage 3 Submission

Issue Date: 25th April 2022

0.0 INTRODUCTION

0.1 Scope

The function of the following report is to outline the means by which compliance with Part M 2010 – Access and Use of the Building Regulations 1997 -2017 is to be achieved for the proposed development.

The development to which the application relates is located at Castle Road Bray, Co. Wicklow. The proposed works for this project are the construction of 6 storey residential development over a mix of ground floor commercial, creche and residential units and associated ancillary services located on Caste Road Bray, Co. Wicklow.

This document is subdivided into sections dealing with each of the specific requirements of the Technical Guidance Part M 2010 as follows:

1 Approach to Building

2 Access to Building

3 Circulation within Building

4 Use of Facilitates for Building

5 Sanitary Facilities for the Building

0.2 Application Evaluation

In this review we propose to show that the proposed works to the building will be constructed to the current building regulations and will be in compliance with Part M 2010 as required as per the 2009 Amendment to the Building Control Regulations Article 20.

In accordance with the Technical Guidance Document (TGD) Part M 2010- Access and Use, the Disability Access Certificate application compliance review for the development shall be based on Section 1 of the TGD Part M 2010- Access and Use of Buildings other than Dwellings for the ground floor commercial units / creche etc. and shared common areas both externally and internally in the apartment blocks.

Also in accordance with the Technical Guidance Document Part M 2010 – Access and Use, the Disability Access Certificate application compliance review for the development shall be done in accordance with guidelines given in Section 3 of the Technical Guidance Document Part M 2010 – Access and Use of Dwellings inside the individual dwelling units.

0.3 Basis for Compliance

Technical Guidance Document (TGD) Part M 2010 –Access and Use

0.4 Reference

BS 8300-2018 Design of buildings and their approaches to meet the needs of disabled people-code of practice.
BS 6465 part 1 2006+A1 2009 Sanitary Installations- Part 1 code of practice for the design of sanitary facilities and scale of provision of sanitary and associated appliances.
Technical Guidance Document G- Hygiene.
Building for Everyone - *A Universal Design Approach*- National Disability Authority.
Access Guidelines Edition 1- Irish Wheelchair Association.
Traffic Management Guidelines- Department of Transport.
Inclusive Mobility Publication A Guide to Best practice on access to pedestrian and transport infrastructure – Department of Transport UK

1.0 Approach to Buildings

For a commercial and residential development of this type all entrances must be considered as being accessible. Therefore all access routes must also be considered as being accessible to these entrances. The rationale for this is that for a residential development, many different people with different abilities (mobility) will live here and also many different people with different abilities (mobility) will visit here and both will need to be able to use all entrances. Therefore the of same level of service must be offered at each entrance i.e. they must be accessible.

1.0 Approach to Buildings

For Compliance with TGD Part M 2010- the rise of a flight between landings should not exceed 1500mm. However a single flight containing 18 risers or less is acceptable if the goings is 350mm or greater

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1.0 Approach to Buildings

For compliance with Section 1.1.3 Access Routes of TGD Part M 2010

- The minimum width of the route shall be 1500mm.
- There shall be adequate passing places on the access routes for wheelchair users of least 1800mm wide and 2000mm long on the access routes where they are more than 25 m long. If the access route is a minimum of 1800mm wide this then caters for passing places within the 1800mm wide access route.
- A level landing shall be provided at the top and bottom of any sloped ground access routes and shall have a minimum dimension of 1800mm wide and 1800mm deep clear of any door obstructions.
- Level landings have a slope of no more than 1:50.

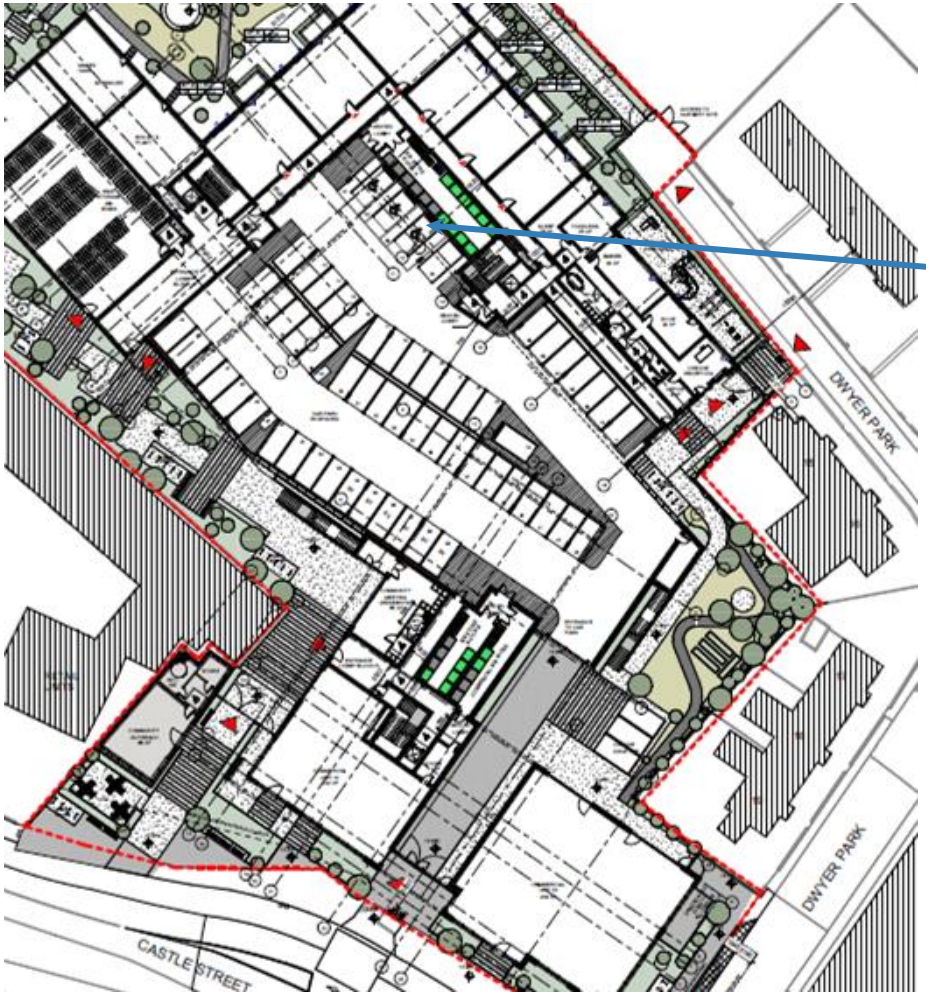
The approach routes are made of level and gently sloping areas. The ground incline is to be no more than 1 in 25.

- From the drawings it does not appear that ramps are to be included. They are necessary if an access route has a gradient of greater than 20.

On the external approach route from ground floor level to first floor podium / car park roof level. There is a stepped approach. These stairs shall be accessible and be in line with Section 1.1.3.5 and 1.3.4.5 *stepped access route* of TGD Part M 2010

- The minimum unobstructed width not less than 1200mm (between enclosing walls, strings or upstands)
- Landings have a clear unobstructed length of 1200mm clear of door swing
- The rise of the flight between landings will be no more than 1500mm
- The step risers will be uniform in height and between 150mm-180mm
- The goings of each step will be uniform and not less than 300mm deep
- Continuous handrails shall be provided on both sides be at a height of 900mm-1100m above step level and extend 300mm past end step at the top and bottom of the access stairs.
- Hazard warning surface should be incorporated at top and bottom landings as shown on accompying drawings.

1.0 Approach to Buildings



5% of Car Parking Bays need to be accessible and in line with Diagram 8 of TGD Part M 2010- this appears to have been provided in this drawing

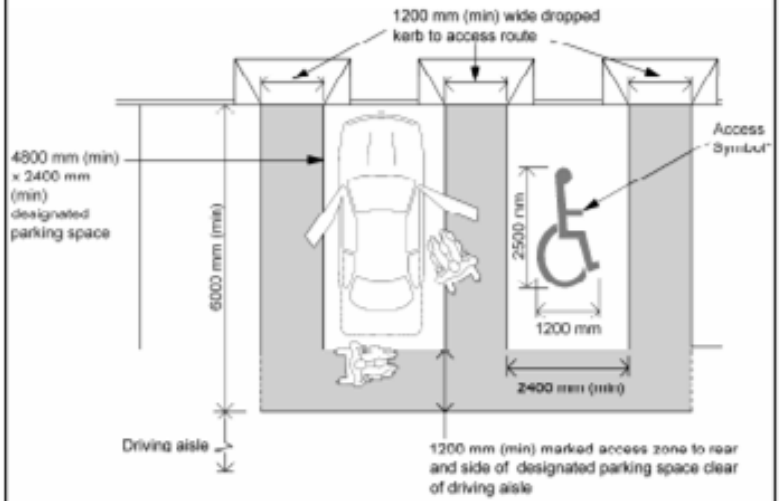
Accessible Car Parking Provision

1.0 Approach to Buildings

5% of Car Parking Bays need to be accessible and in line with Diagram 8 of TGD Part M 2010

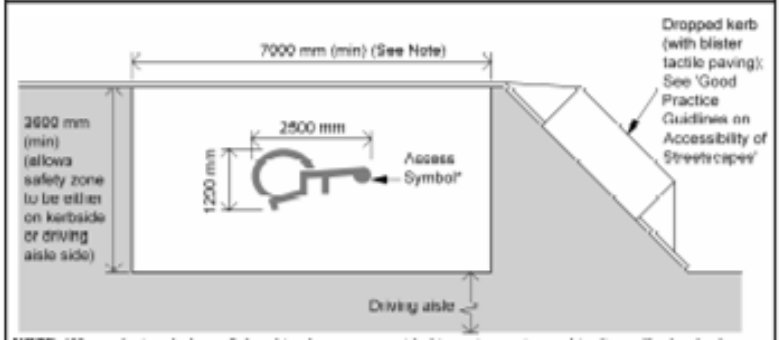
Approach to buildings other than dwellings

Diagram 8 Access around designated on-site perpendicular parking bay



* Extract from the 'Traffic Signs Manual'

Diagram 9 Example of a designated on-site parallel parking bay



NOTE: Where designated parallel parking bays are provided in series, or in combination with standard parking bays, an additional 2000 mm buffer zone should be provided at the rear of the designated space. The length of the designated parking bay may be reduced to 5800 mm long in this instance.

* Extract from the 'Traffic Signs Manual'

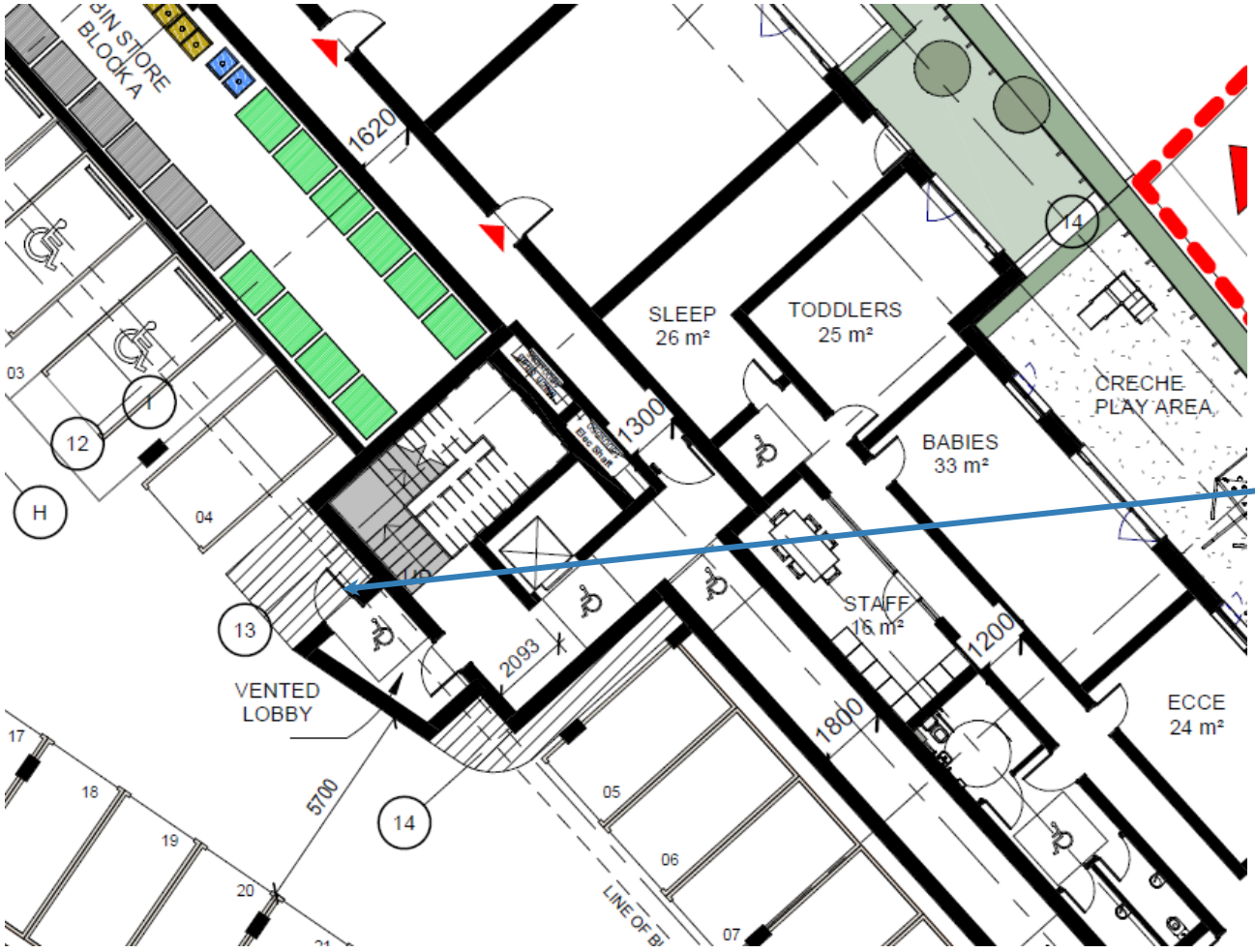
2.0 Access To Building

Ground Floor Level
Accessible Entrances

Level access to be provided at all external doors- 1800mm x 1800mm external level platform immediately outside door and gently sloping ground away to tie into general external ground level

If commercial unit is used by general members of the public e.g. a shop, day centres etc then the main accessible door will have to have a minimum clear unobstructed width of 1000mm, otherwise it needs to be 800mm. For Apartment shared entrance door 800mm is the minimum clear unobstructed width requirement

2.0 Access To Building



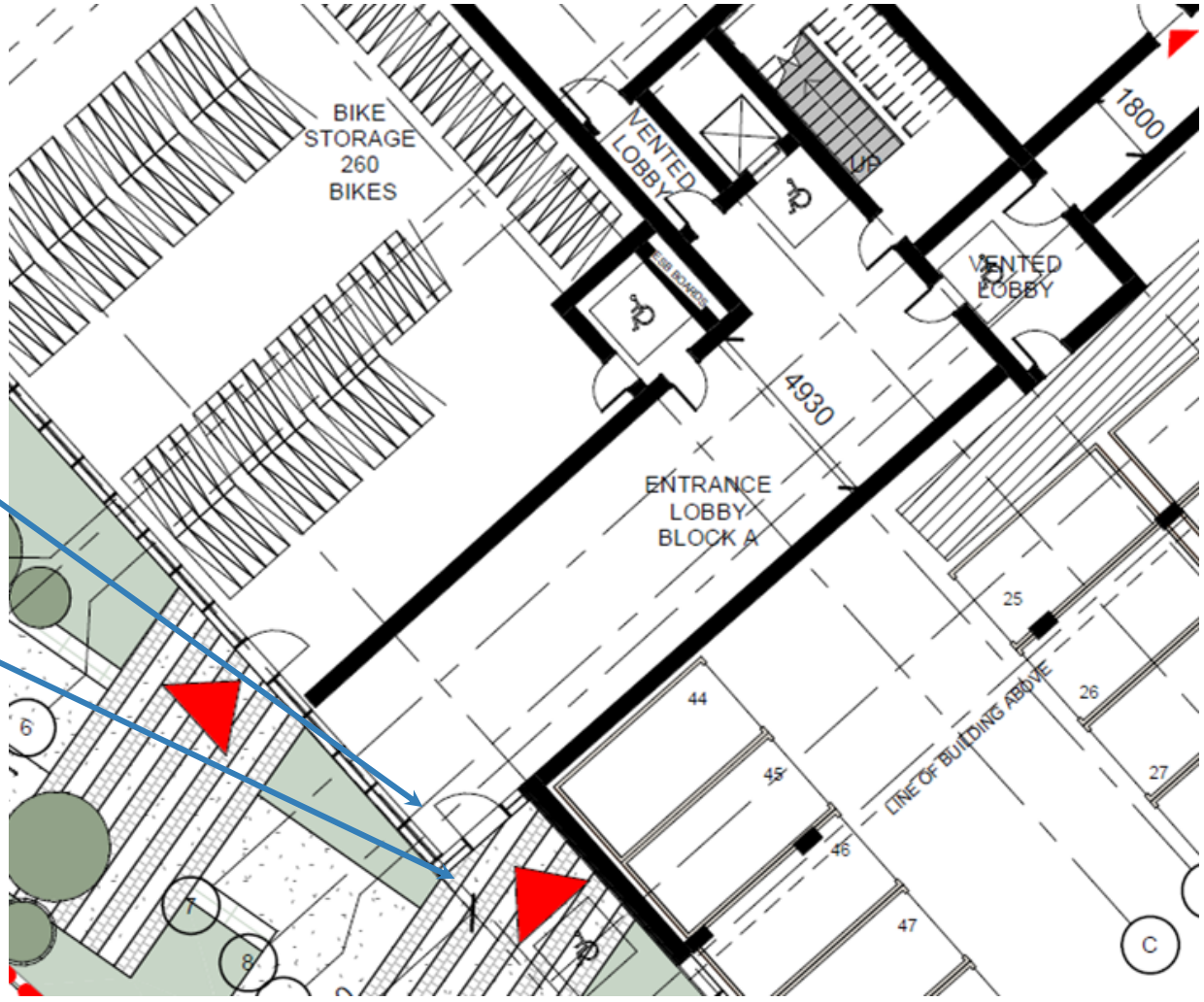
Level access to be provided at all external doors- 1800mm x 1800mm external level platform immediately outside door and gently sloping ground away to tie into general external ground level. This also applies at first floor level at external ground level

Ground Floor Level
Accessible Entrances

2.0 Access To Building

For Apartment shared entrance door 800mm is the minimum clear unobstructed width requirement

Level access to be provided at all external doors- 1800mm x 1800mm external level platform immediately outside door and gently sloping ground away to tie into general external ground level



Ground Floor Level
Accessible Entrances

3.0 Circulation

Circulation can be looked at in two main categories

1. Horizontal Circulation
2. Vertical Circulation

1. Horizontal Circulation – Shared Space

Extract from Diagram 12 of TGD Part M 2010 shows the main Horizontal Requirements for shared communal spaces. It appears that these have been catered for in the floor plans. Circulation corridor doors should have Vision Panels so that a person can see if another persons is behind the doors to prevent collision. Doors to have a minimum clear unobstructed width of 800mm

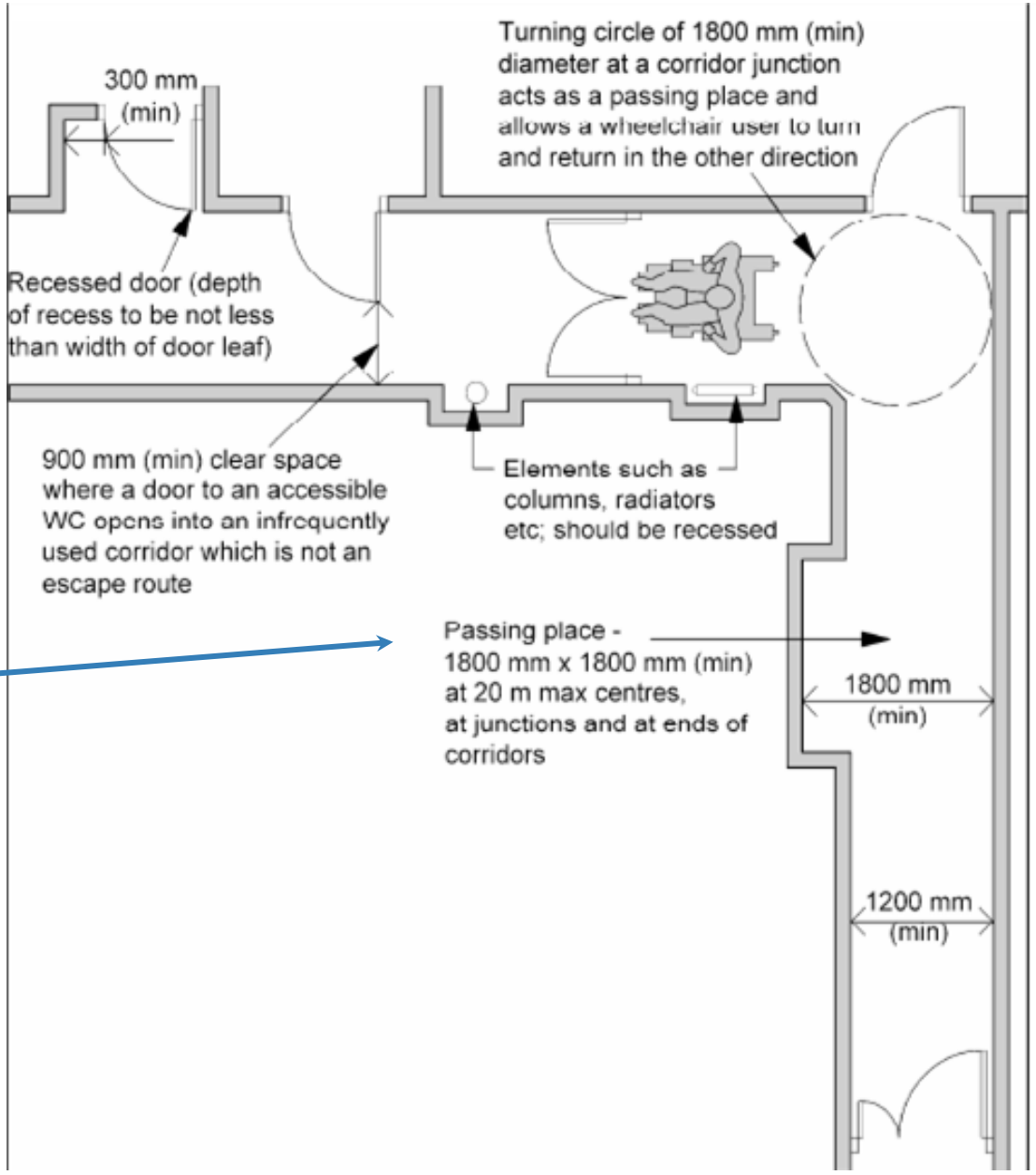
1. Horizontal Circulation - Private Dwelling Apartment Space

Doors to have a minimum clear unobstructed width of 800mm. Circulation corridors/ hall in to be 900mm wide minimum

2nd Floor Part Plan- Showing Circulation Corridor

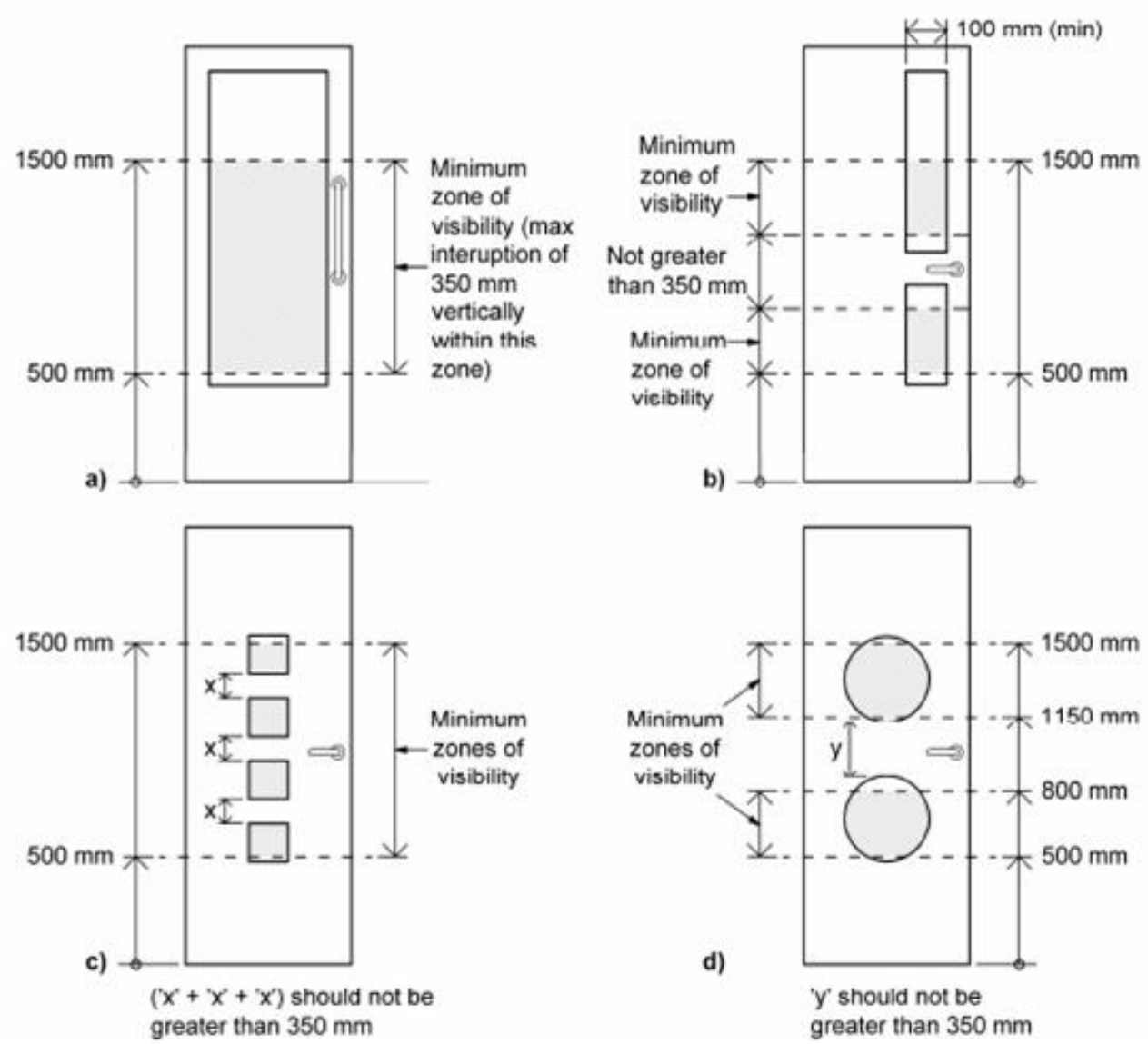
3.0 Circulation

Extract from Diagram 12 of TGD Part M 2010 shows the main Horizontal Requirements for shared communal spaces. It appears that these have been catered for in the floor plans

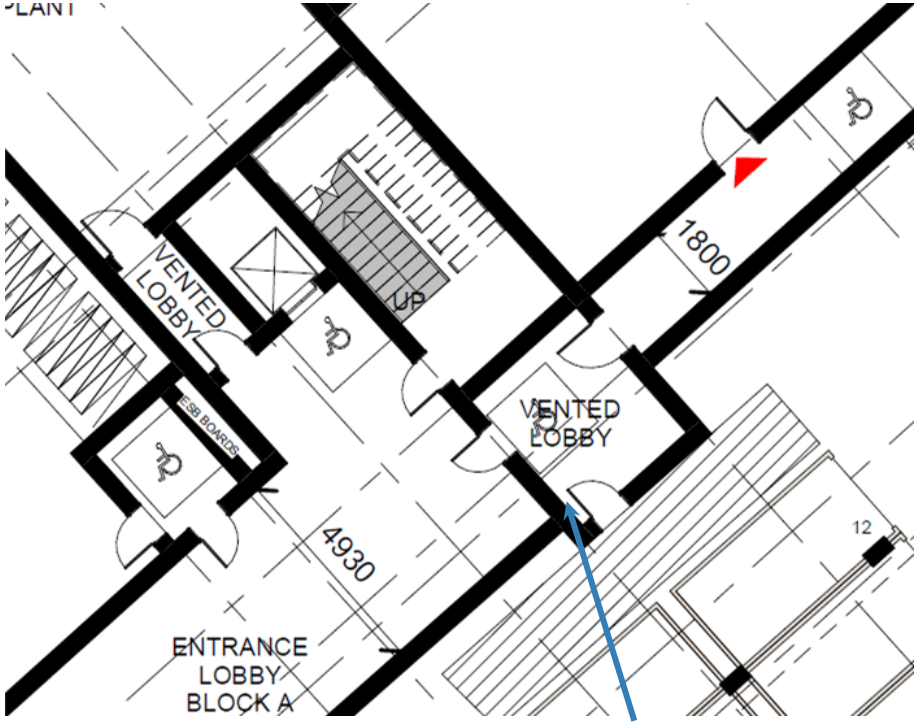


Dimensions and space allowance for corridors

Vision panels -Details

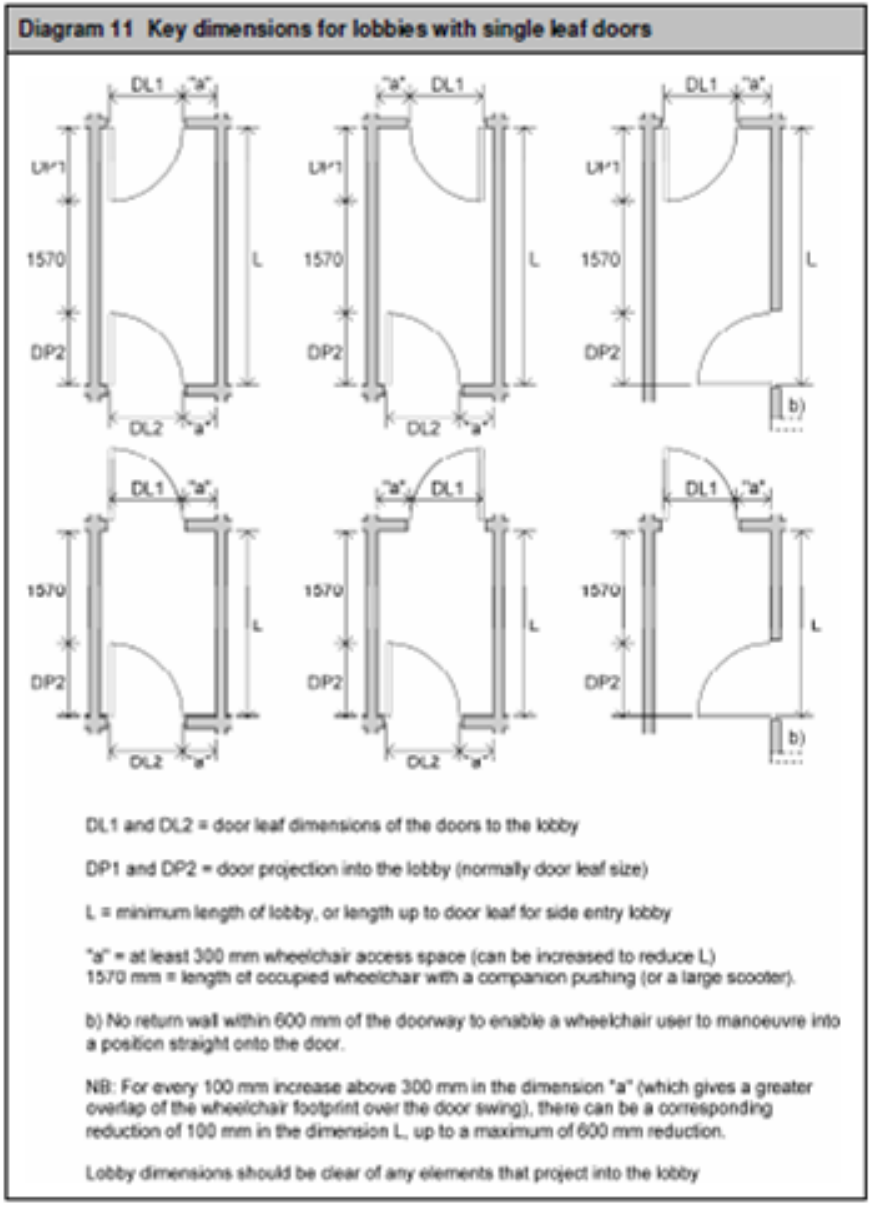


3.0 Circulation



Internal lobbies to comply with Diagram 11 of TGD Part M 2010- this is facilitate ease of manoeuvre and to make sure a wheelchair user does not get caught between two open doors. Minimum dimension between door swings 1570mm

Ground Floor Level Entrance lobby – Horizontal Circulation



3.0 Circulation

Circulation can be looked at in two main categories

1. Horizontal Circulation
2. Vertical Circulation

2. Vertical Circulation – Shared Space

Vertical Circulation in the shared communal space shall be served by either an Access Stairs or a passenger Lift.

All access stairs throughout development are to be accessible.
All passenger lifts throughout the development are to be accessible

Passenger Lift

Access Stair

2nd Floor Part Plan- Access Stair and Passenger Lift

3.0 Circulation

Vertical circulation to the upper floors shall be served by passenger lifts and shall be is in line with Section 1.3.4.1.1 *Lifts* of TGD Part M 2010:

- level access to the lift will be provided
- Way finding sign to locate lift shall be provided
- The lift car doors will contrast visually from the adjoining walls
- There will be a clear unobstructed space of 1800mmx1800mm directly outside the lift door.
- The lift car doors has a clear opening width of 800mm
- The lift car internal dimensions are a minimum of 1100mm wide and 1400mm deep
- The lift car controls shall be positioned between 900mm-1100mm above floor level
- The floor buttons shall visually contrast with the wall background
- The lift car floor shall have a slip resistant surface covering.
- A handrail with contrasting colour to lift wall shall be provided on at least one wall 900mm above floor level.
- An emergency communication system shall be installed.
- The illumination in the lift car will minimise glare and reflection.

The stairs to the upper floors need to be accessible and in line with the requirements of Section 1.3.4.3 *Internal stairs suitable for ambulant disabled people of TGD* Part M 2010.

The stairs details are to be in line with Section 1.3.4.3 and 1.3.4.5 of TGD Part M 2010:

- The minimum clear width (between enclosing walls, strings or upstands) should be 1200mm.
- The landings should have an unobstructed length (clear of any door swing) of at least 1200mm
- There should be no single steps
- All step nosing's should incorporate a continuous visually colour contrasting strip on the thread to aid people with a visual impairment
- All riser heights should be equal and between 150mm and 180mm in height
- All goings should be equal and not less than 300mm deep
- Handrails should be provided on both sides, be continuous around landings, located at a height between 900mm-1100mm above step level and extend 300mm past end step at top and bottom of stairs
- Total rise between landings is no more than 1800mm
- The floor surface to have a slip resistant surface.

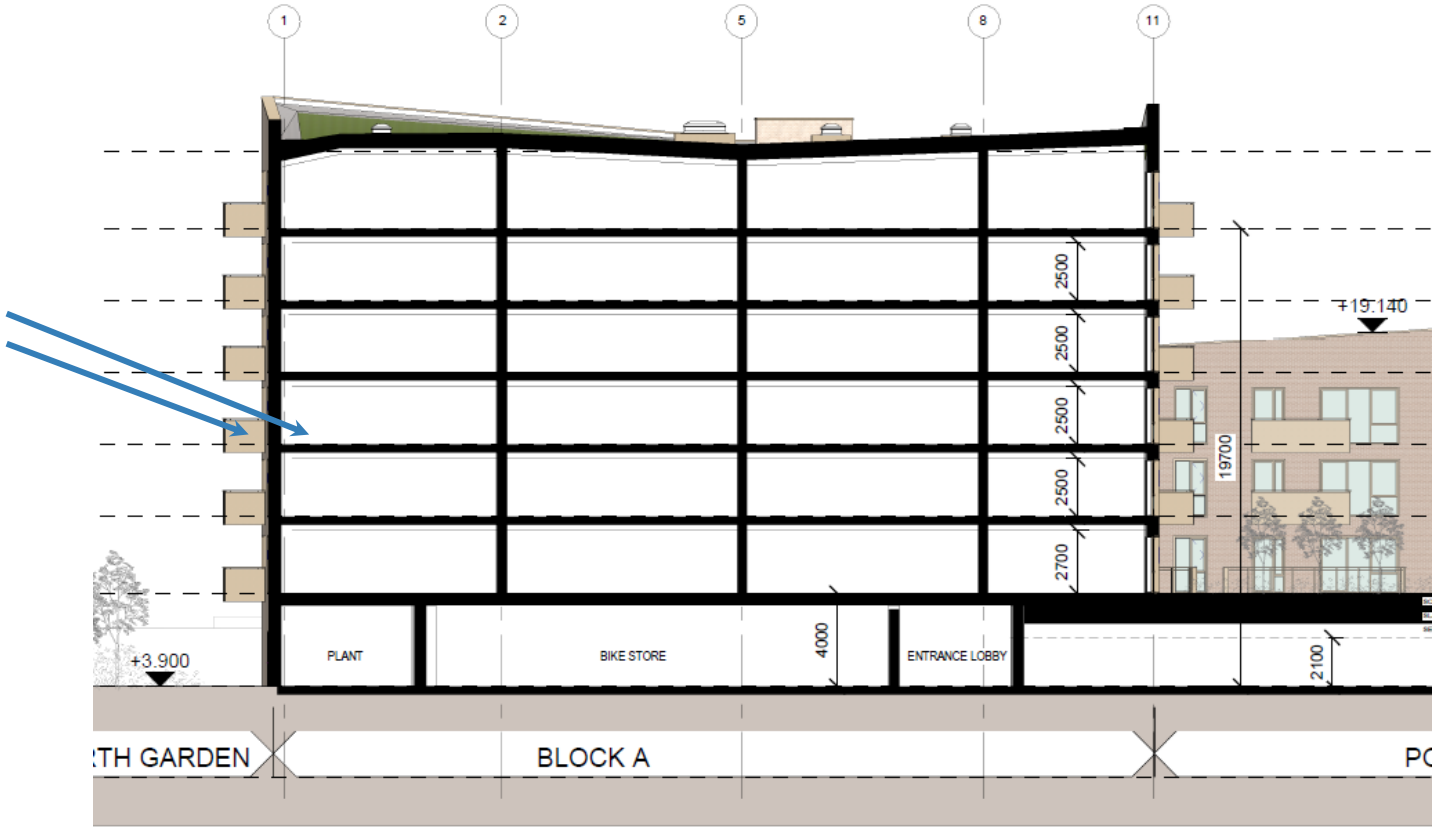
3.0 Circulation

Level Access should be provided from inside the Apartment Space out onto the balcony on all floors.

Level Access means that the door threshold is no more than 15mm high.

This is vey important for wheelchairs users and people with a mobility impairments, so that they can access their balconies and Building Control will generally Condition it if its omitted from Application

Note there is no direct reference in TGD Part M 2010 for Balconies- But Building Control Sections generally look for level access to balconies to be provided



4.0 Other Facilities- AIDS TO COMMUNICATION

In line with Section 1.6.5 Audible Aids of TGD Pat M 2010, at the counter / reception area of the commercial units a compact loop driver hearing enhancement systems should be provided. Type shall be 'Ampetronic' CLD1/CLD1AC compact loop driver or similar. This system has a hearing enhancement range of approximately 20 metres squared coverage.

Way finding and information signs are to be located between 1300mm-1600mm above floor level. Signs to be non glossy and to have good visual contrast between the lettering, the sign board and the backgrounds to the sign. Signage text should be Sans Serif font. Best practice with regard to text height for signs is shown below and should be used for all signs throughout the hotel.

National Disability Authorities -Buildings for Everyone, best practice guidelines for Signs		
location	Signage type	Characteristic height
Front access door	directional	75mm high
Internal area	Directional / way finding information	37mm for directional signs 25mm for information signs
Pictorial signs (symbol for accessible wc etc. should be a minimum 150mmx150mm)		

Best practice is to have an difference of LRV of 70 points between the letters, symbols or pictograms and the sign board.

Note: LRV is the light reflectance value- and is the total quantity of visible light reflected by a surface, white being extremely reflective and assigned a LRV value of 100 and black being the least reflective of colours on the scale with an LRV of 0. An example of a sign which provides good visual contrast is :

Wall Background Colour	Sign Board Colour	Sign Text Colour
White wall LRV=100	Black /dark LRV= 20	White/light LRV=100

i.e. black LRV=20 , white LRV = 100 therefore LRV difference = 80 points.

A sign supplier/ manufacturer shall be designing the signs for the developments requirements and is to follow recommendations given in BS8300:2009 Design of Building and their Approaches to meet the needs of Disabled People- code of practice, Irish wheelchair associations Best Practice Guidelines and National Disability Authorities publication Building for Everyone 2012, with regard to visual contrast, sign text, height etc

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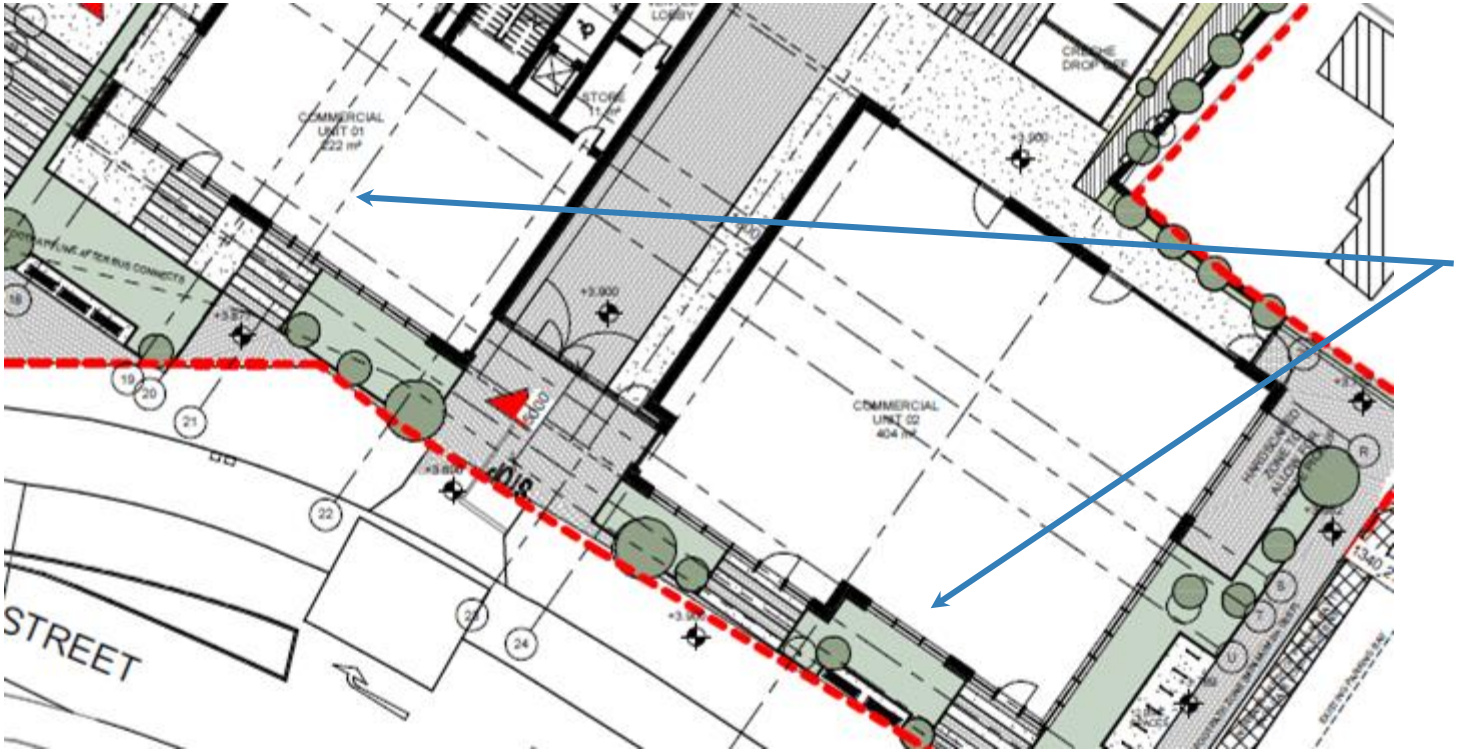
New artificial light shall be provided as part of the proposed development. Section 9.4 of BS8300 deals with the mix of artificial light and natural light, i.e., light should be designed so as not to create large variation of light levels in the same room, i.e. very bright spots (glare should be avoided) and very dark spots. Light shall be designed with high frequency electronic ballast to avoid the perception of flicker. These guidelines shall be taken into account when the lighting is designed.

BS8300 Best Practice Guidelines for LRV's- the minimum LRV difference to provide adequate visual contrast for blind people and partially sighted people of two adjacent surfaces is 30 LRV points

- The LRV of a wall should be 30 points different from that of the ceiling and floor
- Skirting boards should have the same LRV as the wall
- Door handles should differ with door colour by a minimum of 15 LRV points
- If the architrave has the same LRV as the door but a different LRV from the surrounding wall, it can outline the opening for some partially sighted users when the door is open.

5.0 SANITARY FACILITIES FOR BUILDING

Accessible toilet to comply with the details given in Section 1.4 and diagrams 15a, 15b,16 17 of TGD Part 98`yhu7uy76\



If providing toilets for staff they must also provide accessible toilets in line with diagram 15a,15b, 16 and 17 of TGD Part M 2010

If multiple WC cubicles are provided at a location (Male WC or Female WC) at least one must be accessible in line with diagram 19 TGD Part M 2010.

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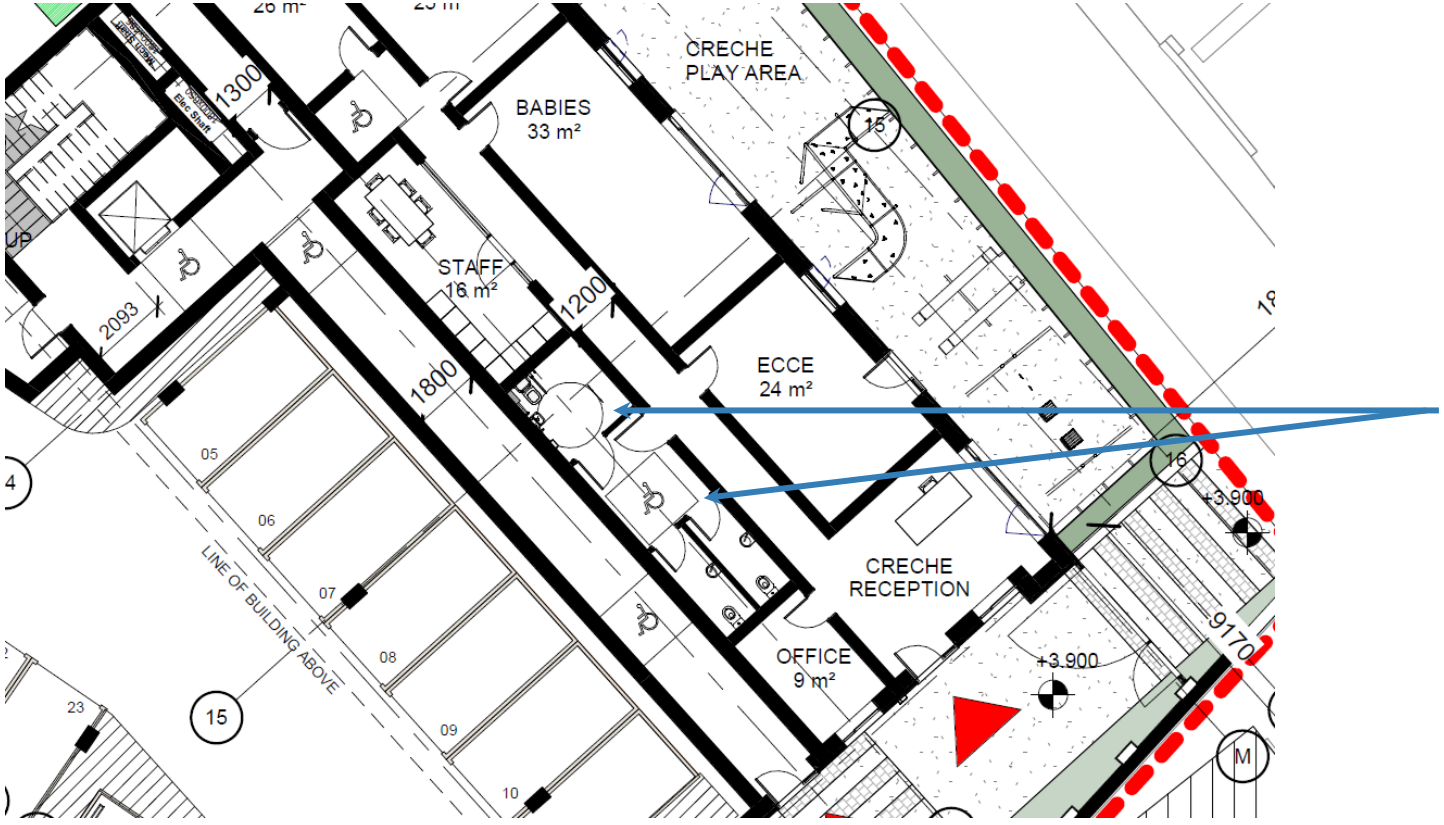

For Part M Compliance- If providing toilets for staff or visitors they must also provide accessible toilets in line with diagram 15a,15b, 16 and 17 of TGD Part M 2010

If multiple WC cubicles are provided at a location (Male WC or Female WC) at least one must be accessible in line with diagram 19 TGD Part M 2010.

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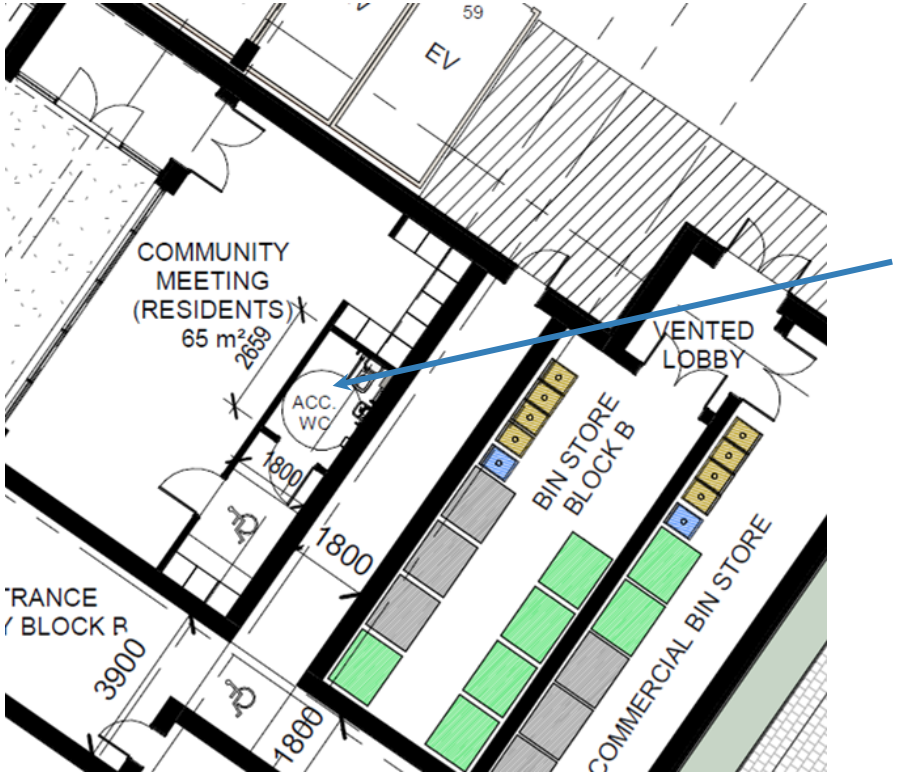
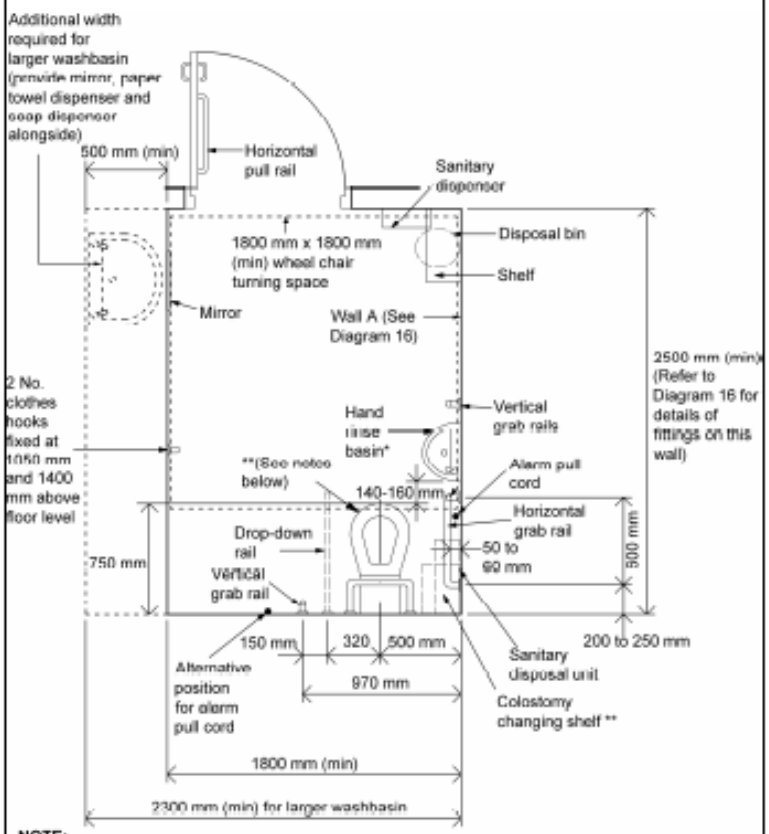


For Part M Compliance- If providing toilets for staff or visitors they must also provide accessible toilets in line with diagram 15a,15b, 16 and 17 of TGD Part M 2010

Toilet room provided has door on long wall and not short ‘end’ wall as detailed in TGD Part M 2010 diagrams 15a,15b, 16 and 17. This may be accessible if room dimensions are over sized to allow a wheelchair user manoeuvre into the transfer position. Room dimensions to

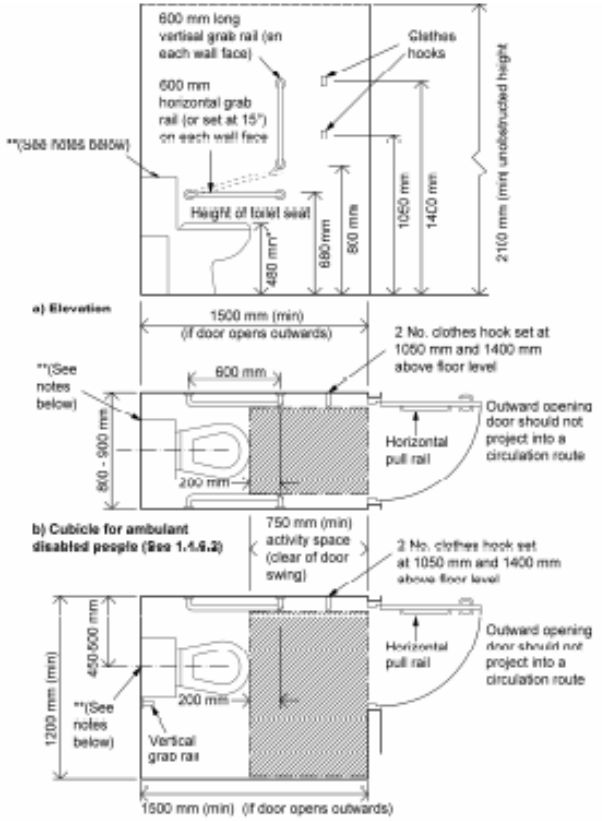
Diagram 15a Wheelchair accessible unisex WC (1800 mm x 1800 mm turning space)



NOTE:
Example layout shown is for right-hand transfer to WC
The overall dimensions should exclude such items as heat emitters, skirting boards, tiles and boxing in of pipework. Adjustments in room sizes will be needed to accommodate these items.
* The tap on the hand rinse basin should be positioned on the side closest to the WC
** Where high or low level cisterns are used, a rail with a padded back rest and a separate colostomy changing shelf 125 mm to 150 mm deep x 400 mm (min) wide with its surface 950 mm above floor level should be provided. Where a flat topped close-coupled cistern is used, the cistern should be adequate to also act as a back rest. If the top of the cistern is flat it should be adequate to facilitate a colostomy changing surface for standing users without the extra requirement for a separate shelf.

Section 1.4
Sanitary facilities for buildings other than dwellings

Diagram 19 WC cubicle for ambulant disabled people and enlarged cubicle



NOTE:
*Height subject to manufacturing tolerance of WC pan
**Where high or low level cisterns are used, a rail with a padded back rest and a separate colostomy changing shelf 125 mm to 150 mm deep x 400 mm (min) wide with its surface 950 mm above floor level should be provided. Where a flat topped close-coupled cistern is used, the cistern should be adequate to also act as a back rest. If the top of the cistern is flat it should be adequate to facilitate a colostomy changing surface for standing users without the extra requirement for a separate shelf.
The overall dimensions should exclude such items as heat emitters, skirting boards, tiles and boxing in of pipework. Adjustments in room sizes will be needed to accommodate these items.

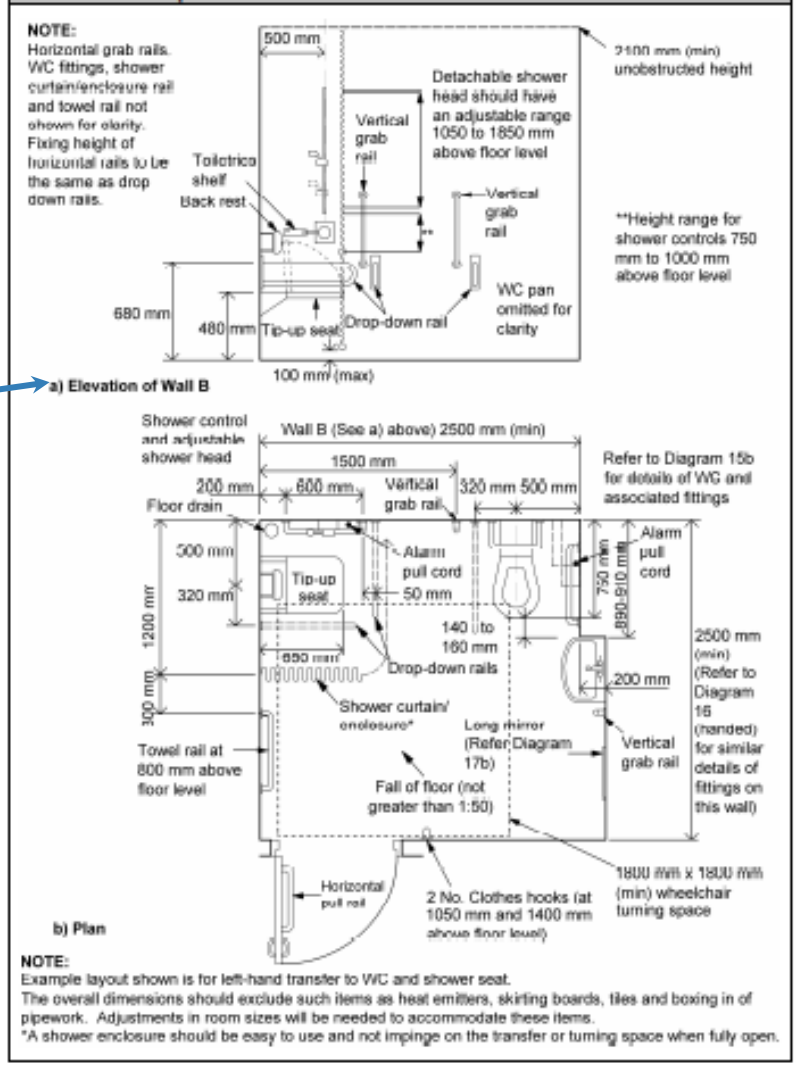
4.0 Other Facilities / Sleeping Accommodation Ensuite

If showering facilities are being provided in the creche or commercial unit / creche etc, they must also be accessible. it may be convenient to combine an accessible shower with an accessible toilet in one room.

Diagram 21 of TGD Part M 2010 shows Accessible Shower Room Incorporating Accessible Toilet. Note the overall room dimensions are 2700mm wide and 2500mm deep

Sanitary facilities for buildings other than dwellings

Diagram 21 An example of a shower room incorporating a corner WC for independent use



5.0 Sanitary Facilities-

In each private Apartment dwelling a WC Cubicles for visit able housing must be provided. a clear activity and maneuvering space of 1200mmx750mm as shown in diagram 34 is required. Review of the drawing- this appears to have already been catered for in the proposed plans

The reason for this is to provide a Sanitary Facility that is universally accessible to all including visitors to the dwelling