

## General

This Technical Booklet has been prepared by the Department of Finance and Personnel and provides for certain methods and standards of building which, if followed, will satisfy the requirements of the Building Regulations (Northern Ireland) 2000 ("the Building Regulations").

There is no obligation to follow the methods or comply with the standards set out in this Technical Booklet.

If you prefer you may adopt another way of meeting the requirements of the Building Regulations but you will have to demonstrate that you have satisfied those requirements by other means.

## Other regulations

This Technical Booklet relates only to the requirements of regulation R2, R3, R4 and R5. The work will also have to comply with all other relevant Building Regulations.

## British Standards and European Technical Specifications

In this introduction and throughout this Technical Booklet any reference to a British Standard shall be construed as a reference to –

- (a) a British Standard or British Standard Code of Practice;
- (b) a harmonised standard or other relevant standard of a national standards body of any Member State of the European Economic Area;
- (c) an international standard recognised for use in any Member State of the European Economic Area;
- (d) any appropriate, traditional procedure of manufacture of a Member State of the European Economic Area which has a technical description sufficiently detailed to permit an assessment of the goods or materials for the use specified; or
- (e) a European Technical Approval issued in accordance with the Construction Products Directive,

provided that the proposed standard, code of practice, specification, technical description or European Technical Approval provides, in use, equivalent levels of safety, suitability and fitness for purpose as that provided by the British Standard.

## Products conforming with a European Council Directive

Any product designed and manufactured to comply with the requirements of a European Council Directive does not have to comply with any other standard or part of a standard, whether British, International or other, which relates to the same characteristic or specific purpose as the EC Directive.

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## **CE marked construction products**

Any construction product (within the meaning of the Construction Products Directive) which bears a CE marking shall be treated as if it satisfied the requirements of any appropriate British Board of Agrément Certificate, British Standard or British Standard Code of Practice relating to such a product, where the CE marking relates to the same characteristic or specific purpose as the Certificate, Standard or Code of Practice.

## **Testing of materials and construction**

Where for the purposes of this Technical Booklet testing is carried out it shall be carried out by an appropriate organisation offering suitable and satisfactory evidence of technical and professional competence and independence. This condition shall be satisfied where the testing organisation is accredited in a Member State of the European Economic Area in accordance with the relevant parts of the EN 45000 series of standards for the tests carried out.

## **Materials and workmanship**

Any work to which a requirement of the Building Regulations applies must, in accordance with Part B of the Building Regulations, be carried out with suitable materials and in a workmanlike manner. You can comply with the requirements of Part B by following an appropriate British Standard or you may demonstrate that you have complied with those requirements by other suitable means, such as an acceptable British Board of Agrément Certificate, Quality Assurance Scheme, Independent Certification Scheme or Accredited Laboratory Test Certificate.

## **Diagrams**

The diagrams in this Technical Booklet supplement the text. They do not show all the details of construction and are not intended to illustrate compliance with any other requirement of the Building Regulations. They are not necessarily to scale and should not be used as working details.

## **References**

Any references in this Technical Booklet to a publication shall, unless otherwise stated, be construed as a reference to the edition quoted, together with any amendments, supplements or addenda thereto current at date 30 June 2006.

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## Buildings other than dwellings

### Generally

- 0.1 The provisions for access to and use of a building are for the benefit of people who are customers or visitors to the building or who work in it.
- 0.2 An extension should be treated in the same manner as a new building. The extension should –
- be independently approached and entered from the boundary of the land belonging to the building and from car parking within this boundary; or
  - have suitable access provided through the building being extended.

Where sanitary accommodation is provided in a building that is being extended –

- then suitable sanitary accommodation should be provided within the extension; or
  - the existing sanitary accommodation should also be suitable and accessible by the users of the extension.
- 0.3 When a building is altered the alterations must comply with the requirements of Regulation R2. The building, including access to it from the boundary and from on site car parking, where provided, must be no less accessible after completion of the alterations than it was before the work was carried out.
- 0.4 When a building undergoes a material change of use so that it is used as a hotel or boarding house, an institution, a public building or a shop it should be treated in the same manner as a new building.

When a part of a building undergoes a material change of use so that it is used as a hotel or boarding house, an institution, a public building or a shop it should –

- be independently approached and entered or have suitable access provided through the building; and
  - have any sanitary accommodation that is provided for or in connection with that part accessible (from that part) and usable. If sanitary accommodation is not provided as part of any works in relation to the material change of use and if users of that part of the building have use of sanitary accommodation elsewhere in the building then people should be able to gain access to, and use that sanitary accommodation.
- 0.5 Part R is limited to matters of access to, into, within, and uses of a building. It does not extend to means of escape for disabled people in the event of fire, for which reference should be made to Part E (Fire safety).

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## Historic buildings

- 0.6 Special considerations shall apply where the building on which the work is to be carried out has special historic significance.

Such historic buildings include –

- listed buildings;
- buildings situated in conservation areas;
- buildings of local architectural and historic interest and which are referred to as a material consideration in the Department of the Environment, Planning Service development plans; and
- buildings within national parks, areas of outstanding natural beauty, and world heritage sites.

In such cases, the aim shall still be to improve accessibility where it is practicable to do so, provided that the work does not prejudice the character of the historic building or increase the risk of long-term deterioration to the building fabric or fittings.

In arriving at an appropriate balance between accessibility and historic building conservation, it would be appropriate to take into account the advice of the Environment and Heritage Service, Access Officers, local Access Groups, etc, in order to make the building as accessible as possible.

## Access Statements

- 0.7 Access Statements are not a requirement of the Building Regulations.

Where an applicant wishes to depart from the methods and standards of building contained in this Technical Booklet, either to achieve a better solution using new technologies (e.g. infrared activated controls) to provide a more convenient solution, or to address the constraints of an existing building, the Access Statement should set out the rationale for the design approach adopted. Examples of evidence that might be cited to support such an approach might include –

- application of the recommendations in BS 8300 where these differ from the provisions, or are not covered, in this Technical Booklet;
- results of current validated research;
- outcome of consultations with other parties (e.g. Environment and Heritage Service, Access Officers, local Access Groups, etc.); and
- convincing arguments that an alternative solution will achieve the same, a better, or a more convenient outcome.

In the case of extensions and material changes of use of buildings other than dwellings, and particularly in the case of historic buildings, such a statement will allow an applicant to identify the constraints imposed by the existing structure and its immediate environment and to propose compensatory measures where full access proves to be impracticable or unreasonable. This will allow for an explanation to be provided and assessed in situations where, for example, a less than fully accessible access route is proposed to an extension, or to a building or part of a building subject to a material change of use.

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## **The principles of inclusive design within the built environment**

- 0.8 An inclusive environment is one that can be used by everyone, regardless of age, gender or ability. Buildings designed to be inclusive will be safe, convenient, sustainable and be usable by all people.

The scope of this Technical Booklet is to give provisions for generic solutions to the more common building scenarios to enable people to –

- get access up to a building;
- get into a building;
- move around all floors of a building; and
- get access to and use the facilities (toilets, changing rooms, showers etc.) that are provided in a building.

The methods and standards within this Technical Booklet relate, in the main, but not exclusively, to the provision of design features and sufficient space, to make it possible for people with disabilities to independently access and use a building.

### **Section 2 – Access to a building**

- 0.9 The most convenient means for people to get to a building is by way of an access route that is level. It is recognised that this is not attainable in all situations and therefore, an access route containing a gradient, or a ramp, may be an appropriate solution to suit the site topography.

### **Section 3 – Access into a building**

- 0.10 People should be able to identify the building entrance and use it to enter the building easily, conveniently and without the risk of injury.

### **Section 4 – Access within a building**

- 0.11 To facilitate the movement of people within a building there should be sufficient space for manoeuvring, convenient ways of travelling from one storey to another and the inclusion of features to help people move safely and conveniently through the building.

### **Section 5 – Facilities in a building**

- 0.12 People should have access to and be able to use all the facilities provided in a building. It is also important that everyone can participate in the proceedings at lecture/conference facilities and at entertainment or leisure and social venues, not only as spectators, but also as participants and/or staff.

### **Section 6 – Sanitary accommodation**

- 0.13 Sanitary accommodation and associated sanitary facilities that are provided in a building, should be no less available for disabled people than for non-disabled people. Appropriate solutions to sanitary accommodation may vary depending on the size, scale, nature and intended use of the building.

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## Dwellings

- 0.14 The provisions for access and for facilities within dwellings are for the benefit of disabled people who may visit the dwelling.

Where Part R applies, reasonable provision should be made –

- (a) so that disabled people can reach the principal entrance to the dwelling, or to a common entrance to a block of dwellings, from the boundary of the land belonging to the dwelling or from car parking within this boundary;
- (b) for access for disabled people into and within the entrance storey or the principal storey of the dwelling and to access and use any facilities provided to comply with Part R; and
- (c) for sanitary conveniences for disabled people.

Part R does not extend to means of escape for disabled people in the event of fire, for which reference should be made to Part E (Fire safety).

Part H (Stairs, ramps, guarding and protection from impact) contains provisions for the design of stairs and ramps which are part of a building. Part R contains more specific provisions for stairs and ramps that need to be suitable for use by disabled people. Where such a stair or ramp is part of a dwelling or a block of dwellings it must satisfy the requirements of both Parts.

### Section 7 – Means of access to and into a dwelling

- 0.15 The aim is to make reasonable provision for a disabled person to approach and gain access into a dwelling from the boundary of the plot or the point of alighting from a vehicle on a driveway within the plot. In most circumstances a level or ramped approach should be provided to the entrance to a dwelling or to a common entrance to a block of dwellings e.g. flats.

External approach – The provision of an external approach which can be used by disabled people will often be a matter of practicability. Variations in topography, available plot area, and the distance of the dwelling from the point of access may influence the type of approach that can be provided.

On most plots wheelchair users should be able to have access to the principal entrance. Exceptionally, on steeply sloping plots access may be to a suitable alternative entrance by a level or ramped approach. Where there is no alternative but to provide a stepped approach, the steps should be designed to suit the needs of ambulant disabled people. The stepped approach should have as few steps as possible as someone using a wheelchair may need assistance to negotiate the steps.

The presence of a driveway may provide a better opportunity for creating a level or ramped approach, particularly if it also provides the sole means of approach for visitors who are disabled. The driveway could be designed as the approach to the dwelling or to a common entrance to a block of dwellings.

In such cases the approach should exclude the space for any parked vehicle but a vehicle door may open across it.

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The surface of an approach available to a wheelchair user should be firm enough to support the weight of the user and his or her wheelchair and smooth enough to permit easy manoeuvre. It should also take account of the needs of stick and crutch users. Loose laid materials, such as gravel or shingle, are not suitable for an approach.

Thresholds – A level threshold should be provided at the entrance, even where the approach to the entrance is stepped. However, if circumstances mean a step at the threshold is unavoidable, its rise should be as small as possible.

### **Section 8 – Circulation within a dwelling**

- 0.16 The aim is to facilitate access into habitable rooms and to a sanitary convenience in the entrance storey or the principal storey.

Circulation routes and internal doors – Circulation routes should be sufficiently wide to allow convenient circulation by disabled people. Consideration should be given to the effects of local obstructions such as radiators and other fixtures.

Internal doors need to be of a suitable width to facilitate wheelchair manoeuvre and wider doors are needed where a wheelchair cannot approach them head on.

Vertical circulation – Where the circulation within the entrance storey or the access to a principal storey includes a stair, it should be suitable for use by ambulant disabled people.

### **Section 9 – Common stairs and passenger lifts in a block of dwellings**

- 0.17 In a block of dwellings e.g. flats, the aim should be to make reasonable provision for disabled people to visit occupants who live on any storey. The most suitable means of access for disabled people from one storey to another is a passenger lift. However, a lift may not always be provided.

Common stairs – A stair in a common area should be designed to suit the needs of ambulant disabled people. However, where a passenger lift is provided to give access between storeys, the common stair need only be suitable for people with impaired sight.

Lifts – Where a lift is provided, it should be suitable for an unaccompanied wheelchair user and people with sensory impairments. Measures should also be adopted to give disabled people sufficient time to enter and leave the lift without the risk of contact with the closing doors.

### **Section 10 – Sanitary convenience in a dwelling**

- 0.18 The aim is to provide a sanitary convenience which a disabled visitor to the dwelling may use. The sanitary convenience will normally be located in the entrance storey. Where the entrance storey contains no habitable rooms, a sanitary convenience should be provided in the principal storey.

It will not always be practicable for a wheelchair to be fully accommodated within the sanitary facilities. In such circumstances a wheelchair user may need assistance.



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## **Section 11 – Heights of switches, socket outlets etc. in a dwelling**

- 0.19 The aim is to assist those people whose reach is limited, to use a dwelling more easily, by locating switches, sockets etc. at suitable heights.

## Visual contrast

- 1.1 Visual contrast is the perception of a difference visually between one element of a building and another by reference to their light reflectance values.

Light reflectance value (LRV) is the total quantity of visible light reflected by a surface at all wavelengths and directions when illuminated by a light source.

For people with adequate vision, differences in the nature or the intensity of colour provide adequate visual contrast. Unfortunately, this is not the case for all people who are visually impaired. The main feature of a surface, which appears to be strongly correlated with the ability of visually impaired people to identify differences in colour, is the LRV. Differences in LRV can be used to assess the degree of visual contrast between the surfaces of elements such as handrails, doors, door furniture, key fittings/fixtures and surrounding surfaces etc.

The LRV scale runs from 0, which is a perfectly absorbing surface that could be assumed to be totally black, up to 100, which is a perfectly reflective surface that could be considered to be perfect white. Because of practical influences in any application, black is always greater than 0 and white never equals 100.

A difference in LRV of 30 points or more allows a degree of variability that is required to provide reasonable visual contrast.

It is thought that LRV differences are less important between two large areas, e.g. between a wall and floor, than between a small object on a larger background surface, e.g. a lever handle on a door.

## Definitions

- 1.2 In this Technical Booklet the following definitions apply –

**Access** – approach or entry.

**Accessible** – suitable access to and usable by all people, regardless of their ability.

**Boundary** – the boundary of the land (excluding any abutting street, canal or river) on which the building is erected.

**Isolator** – a switch used to cut off the supply of electricity to an electrical appliance for maintenance purposes.

**Incorporated changing facility** – an accessible changing facility contained within and open to the communal changing facility.

**Incorporated shower facility** – an accessible shower facility contained within and open to the communal shower facility.

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**Level approach** (with respect to the approach to a building) – an access route that is predominately level, but may contain a gradient less steep than 1 in 20 in the direction of travel.

**Lifting device** – a passenger lift or a lifting platform.

**Plot** – the area within the boundary of the land on which the building is erected.

**Plot gradient** – the gradient measured along the route of travel between the point of entry and the floor level at –

- (a) the principal or an alternative entrance to a dwelling; or
- (b) the common entrance or an alternative entrance to a block of dwellings.

**Point of entry** – the point at which a person visiting the building either –

- (a) normally enters the plot; or
- (b) alights from a vehicle within the plot.

**Principal entrance** (in buildings other than a dwelling or a block of dwellings) – the entrance a visitor or customer (not familiar with the building) would normally expect to use to enter it.

**Principal entrance storey** – the storey or storeys where the principal entrance or entrances are located. If an alternative accessible entrance is to be provided by virtue of paragraph 3.1 the storey containing that entrance is a principal entrance storey.

**Suitable** (with respect to means of access and facilities) – designed for use by people regardless of their ability.

**Surface width** – the width of a stair or ramp, measured at the tread of a flight or the surface of a ramp, between any enclosing walls, strings, upstands, kerbs or guarding.

**Terminal fitting** – a water outlet device providing water to a sanitary appliance.

**Usable** (with respect to buildings and parts of buildings) – convenient for independent use.

**Wheelchair accessible** – suitable access to and usable by wheelchair users.



# **Buildings other than dwellings**

- 2.1 This Section deals with the external approach to a building other than a dwelling or a block of dwellings.

The external approach shall give people access to the principal entrance(s) and where provided, a staff entrance.

### **General**

- 2.2 Means of access to a building shall be provided by a level approach –
- (a) from the point of entrance at the boundary; and
  - (b) from car parking which is provided within the boundary.

Where there is a complex of buildings within the boundary, there shall be a means of access between buildings, to which Part R applies, provided by a level approach.

However, where all or any part of the means of access contains a gradient of 1 in 20 or steeper, a ramped approach shall be provided.

The approach to a building shall be separate from any vehicular route.

Where the approach requires to be guarded, that guarding shall comply with the requirements of Part H.

## **Approach to a building**

### **Level approach**

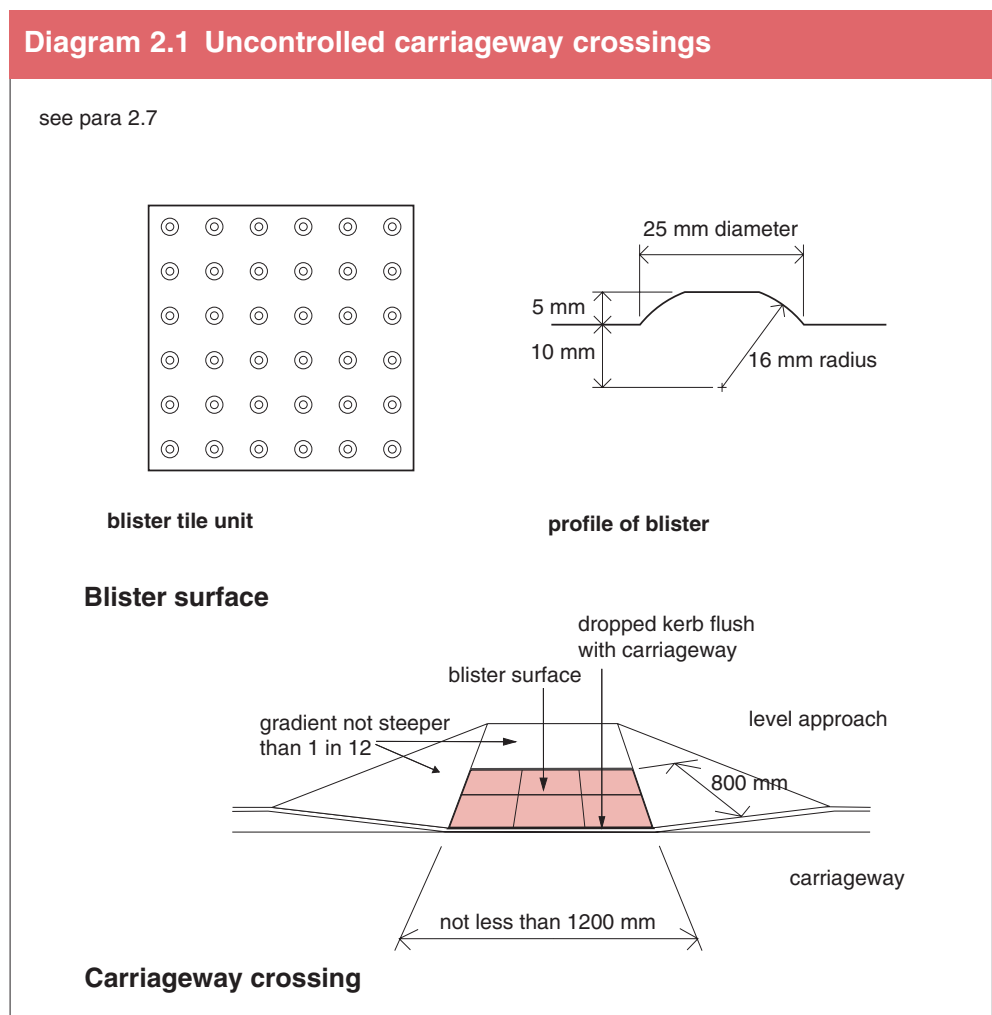
- 2.3 A level approach shall have –
- (a) an unobstructed width of not less than 1500 mm. However, at a local obstruction the width may be reduced to 1000 mm, provided that the length of the reduced width is not more than 6 m and the obstruction is protected by a suitable barrier; and
  - (b) a clear headroom of not less than 2100 mm.

Where the level approach has a gradient steeper than 1 in 60 it shall have horizontal rest areas, not less than 1200 mm long and a rise of not more than 500 mm between rest areas.

Where the level approach is more than 50 m in length it shall have passing places. These shall be spaced at a distance of not more than 50 m apart with a clear line of sight between consecutive passing places. Every passing place shall be not less than 1800 mm wide and not less than 2000 mm long. The width of the passing place may include the width of the level approach.

Where a level approach has a crossfall it shall be not steeper than 1 in 40.

- 2.4 The surface of a level approach shall –
- be firm;
  - reduce the risk of slipping;
  - have similar surface frictional characteristics along its length; and
  - have an even surface finish.
- 2.5 Notwithstanding the requirements of paragraph 2.4 (d) –
- where formless materials are used as surfacing, any undulations shall be not more than 3 mm measured from a point below a 1000 mm straight edge; and
  - where paving units are used as surfacing material, any difference in level between the units at the joints, shall be not more than 5 mm.
- 2.6 Where paving units are used as surfacing material and have –
- recessed filled joints, the joints shall be not more than 10 mm wide and 5 mm deep; and
  - unfilled joints, the joints shall be not more than 5 mm wide.
- 2.7 Where a level approach crosses a carriageway by means of an uncontrolled crossing point, there shall be provided, buff coloured blister type tactile warning paving, having a length of not less than 1200 mm and a width of 800 mm (see Diagram 2.1).



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## Ramped approach

- 2.8 A ramped approach shall consist of a ramp or ramps and landings.
- 2.9 The maximum length of a ramp is dependent upon its gradient. Table 2.1 gives the maximum length of a ramp for a given gradient.

Table 2.1 Maximum length of ramps	
Gradient of ramp	Maximum length of ramp (m)
1:20	10
1:19	9
1:18	8
1:17	7
1:16	6
1:15	5
1:14	4
1:13	3
1:12	2

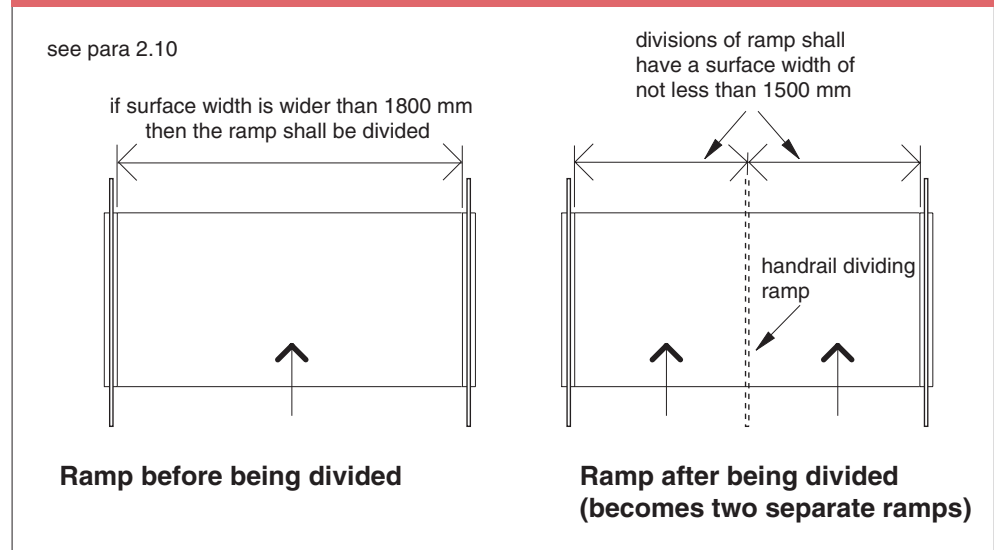
- 2.10 A ramp or ramps and landings shall have a surface width of not less than 1500 mm.

Where a handrail protrudes into the surface width of a ramp by more than 100 mm the surface width shall be increased accordingly. In any case the maximum protrusion of a handrail into the surface width of a ramp shall be 110 mm.

A ramp which has a surface width wider than 1800 mm, shall be divided into ramps which are not wider than 1800 mm. The minimum surface width of 1500 mm then applies to each ramp (see Diagram 2.2).



**Diagram 2.2 Dividing wide ramps**



- 2.11 The surface of a ramped approach shall –
- (a) be firm;
  - (b) reduce the risk of slipping; and
  - (d) have similar frictional characteristics along its length.

The surface of a ramp shall be distinguishable, through suitable visual contrast from that of its landings.

- 2.12 A ramp shall have a raised kerb on any open side (except where it would obstruct normal use). The raised kerb shall –
- (a) be not less than 100 mm high; and
  - (b) be distinguishable, through suitable visual contrast, from that of the surface of the ramp.

(See Diagram 2.3).

- 2.13 A landing shall be provided at the top and bottom of a ramp (see Diagram 2.3).

A landing shall be level, however, it may have a gradient along its length not steeper than 1 in 60, and a crossfall not steeper than 1 in 40.

The unobstructed length of a landing shall be not less than 1200 mm. Where a landing is between two ramps, it shall have an unobstructed length of not less than 1500 mm.

Where the ramped approach consists of three or more ramps, the intermediate landings between each ramp shall have an unobstructed length of not less than 1800 mm and a surface width of not less than 1800 mm.

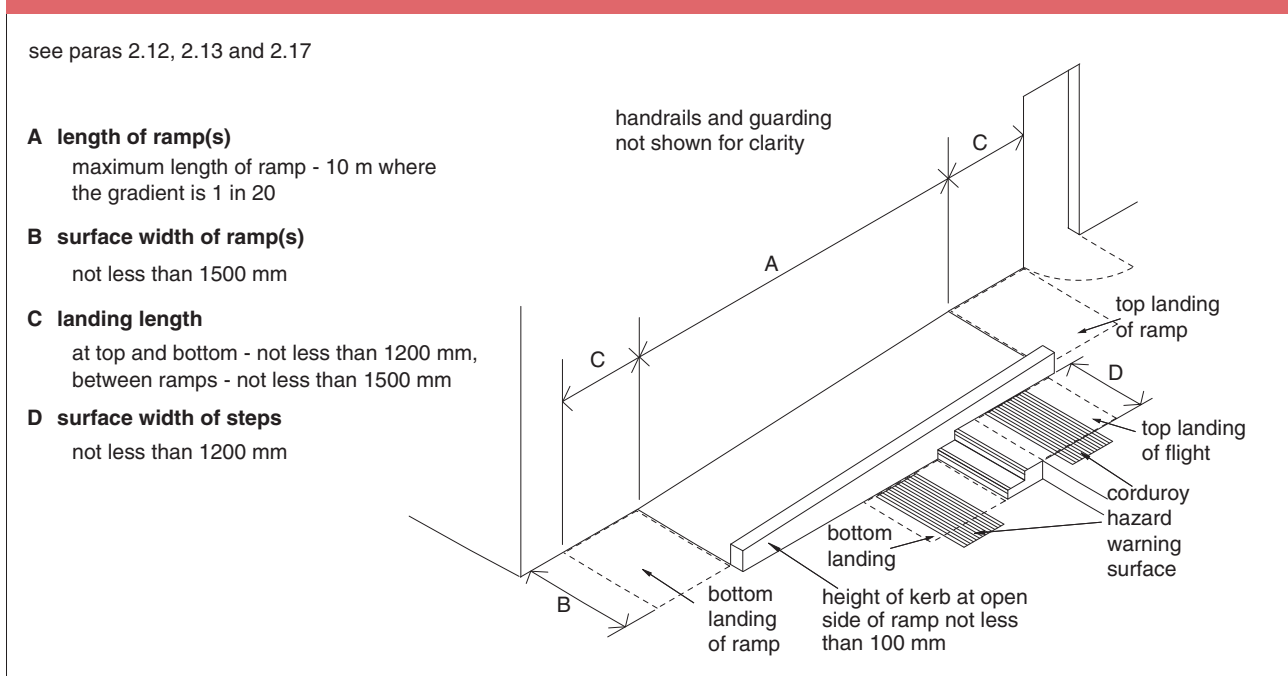
- 2.14 Where a ramp does not have a clear line of sight between its top and bottom landings, it shall be divided into two ramps such that there is a clear line of sight between the intermediate landing and the top and bottom landings. The intermediate landing shall have an unobstructed length of not less than 1800 mm, and a surface width of not less than 1800 mm.

- 2.15 Where the access route to the building is, or contains a ramped approach having a total rise of more than 2000 mm, an additional means of access suitable for all people, shall also be provided, (e.g. a suitable lifting device).
- 2.16 A ramped approach shall have a suitable continuous handrail on each side complying with the provisions of paragraphs 2.27 to 2.31.

### Ramped approach with complementary steps

- 2.17 Where a ramped approach has a rise of 300 mm or more, it shall also have complementary steps complying with the provisions of paragraph 2.18 to 2.26 (see Diagram 2.3).
- 2.18 Steps shall have a uniform –
- rise of not less than 150 mm and not more than 170 mm; and
  - going of not less than 280 mm and not more than 425 mm.

**Diagram 2.3 Ramped approach with complementary steps**



- 2.19 A flight of steps shall have not less than 2 rises or more than –
- 12 rises where the going of each step is less than 350 mm; or
  - 18 rises where the going of each step is 350 mm or more.
- 2.20 A flight shall have a surface width of not less than 1200 mm.

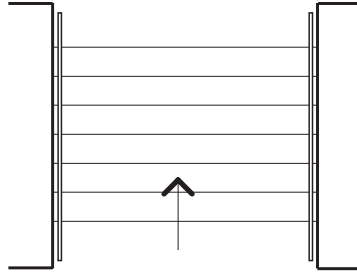
Where a handrail protrudes into the surface width of a flight by more than 100 mm, the surface width shall be increased accordingly. In any case, the maximum protrusion of a handrail into the surface width of a flight shall be 110 mm.

A flight of steps which has a surface width wider than 1800 mm, shall be divided into flights which are not wider than 1800 mm. The minimum surface width of 1200 mm then applies to each flight (see Diagram 2.4).

## Diagram 2.4 Dividing wide flights

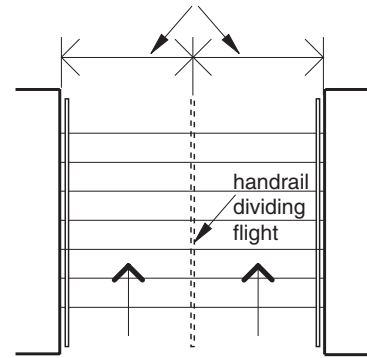
see para 2.20

if surface width is wider than 1800 mm  
then the flight shall be divided



**Flight before being divided**

divisions of flights shall  
have a surface width of  
not less than 1200 mm



**Flight after being divided**

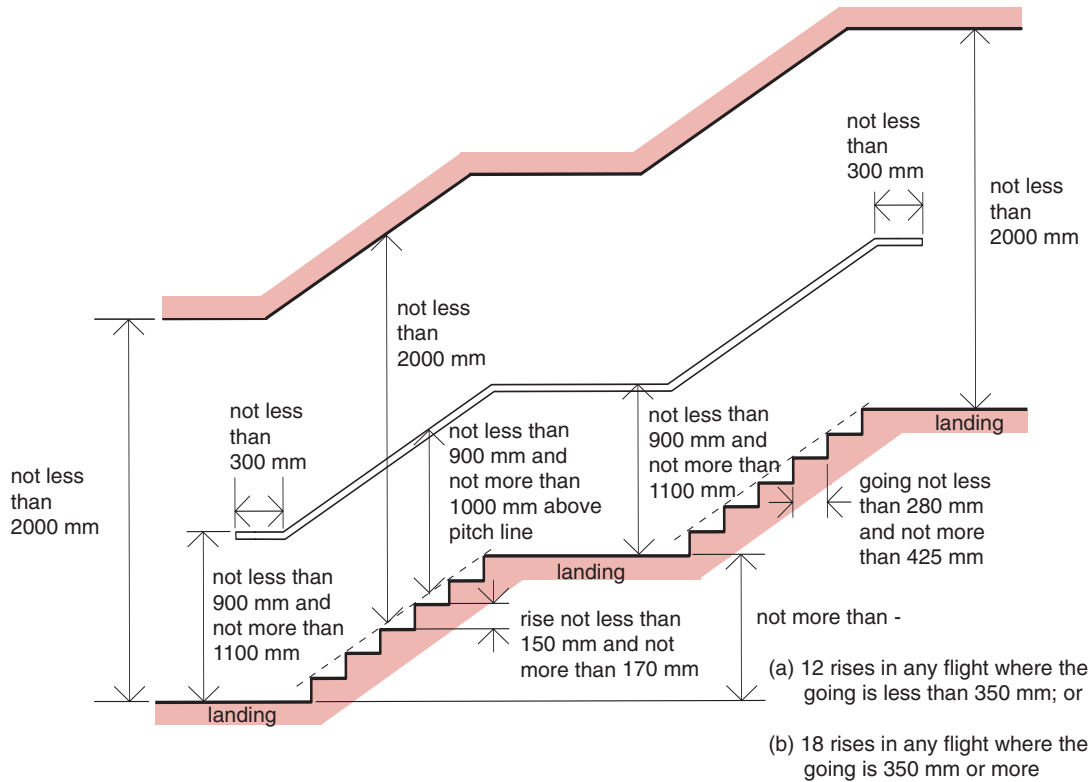
- 2.21 Steps shall have step nosings which are distinguishable, through suitable permanent visual contrast. The depth of this permanent visual contrast shall be not less than 50 mm and not more than 60 mm, to all treads and risers.
- 2.22 Anything fixed or fitted to a tread or riser shall not create a trip hazard.
- 2.23 Steps shall have rises that are not open and have a suitable profile such that the risk of tripping is reduced (see Diagram 2.5).
- 2.24 A landing shall be provided at the top and bottom of every flight (see Diagram 2.5).

The width of the landing shall be not less than the width of the steps.

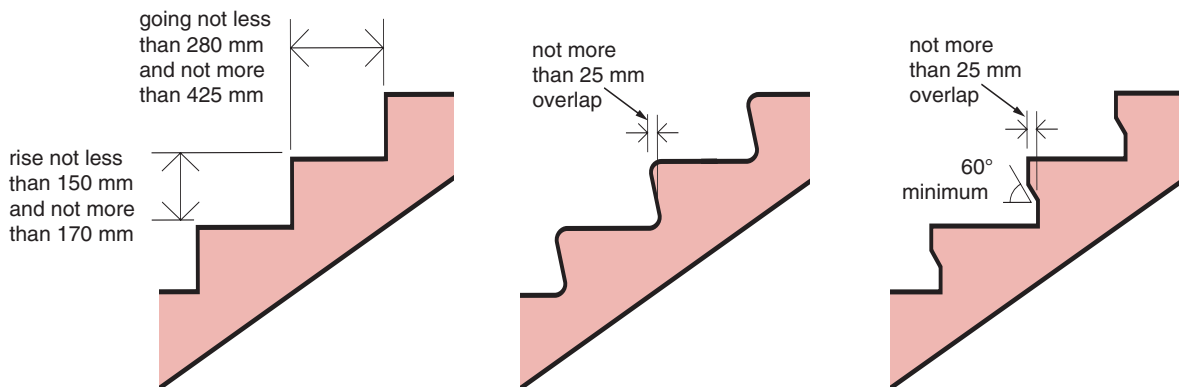
The unobstructed length of each landing shall be not less than 1200 mm clear of any door swing onto it.

## Diagram 2.5 Details of complementary steps

see paras 2.23 and 2.24



### (a) External steps and handrails



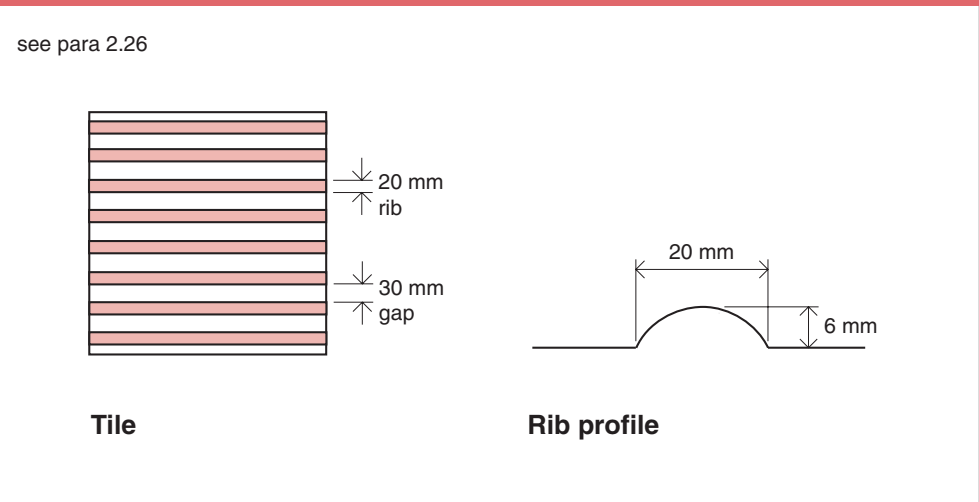
### (b) Examples of suitable tread nosing profiles

- 2.25 Steps shall have a suitable continuous handrail on each side complying with the provisions of paragraphs 2.27 to 2.31.
- 2.26 To give advance warning of the change in level, a tactile corduroy surface (see Diagram 2.6) shall be provided on the top and bottom landings of complementary steps. The size of this surface shall be –
- (a) 800 mm deep when the approach to the steps is head on; or
  - (b) 400 mm deep when the approach to the steps is not head on.

In either case, the surface shall extend not less than 400 mm beyond each side of the steps and be located not less than 400 mm from the nearest nosing (see Diagram 2.7).

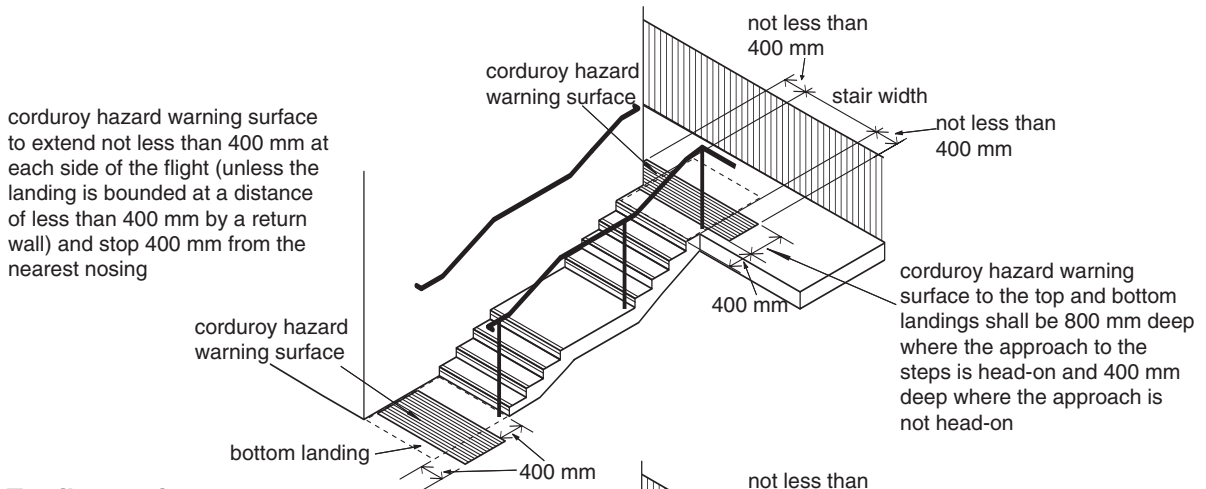
Where there is access onto any intermediate landing from other than the complementary steps, a tactile corduroy surface 400 mm deep shall be provided in accordance with Diagram 2.7 (b) or (c).

**Diagram 2.6 Corduroy tactile warning surface tiles**

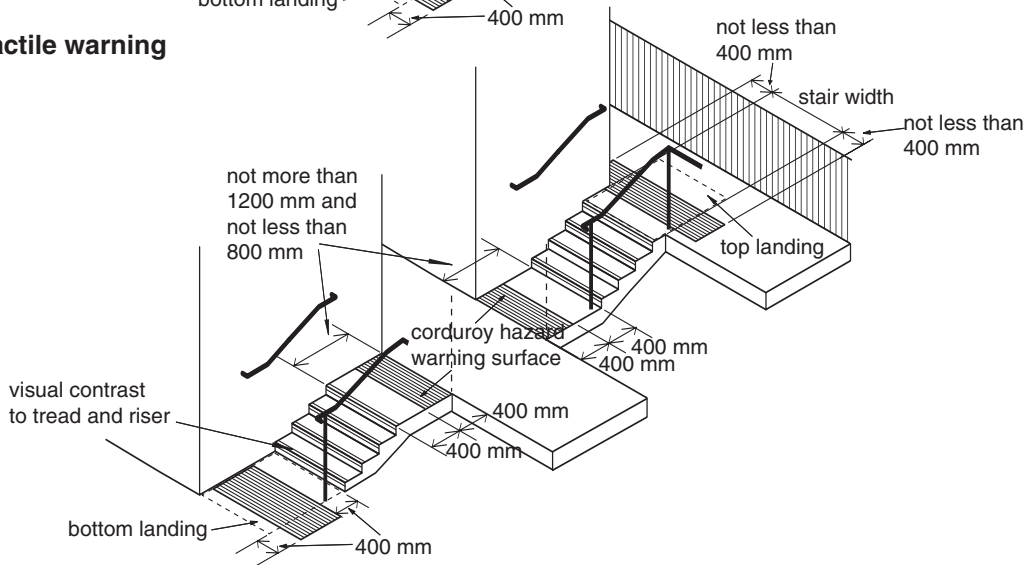


## Diagram 2.7 Complementary steps - tactile warnings

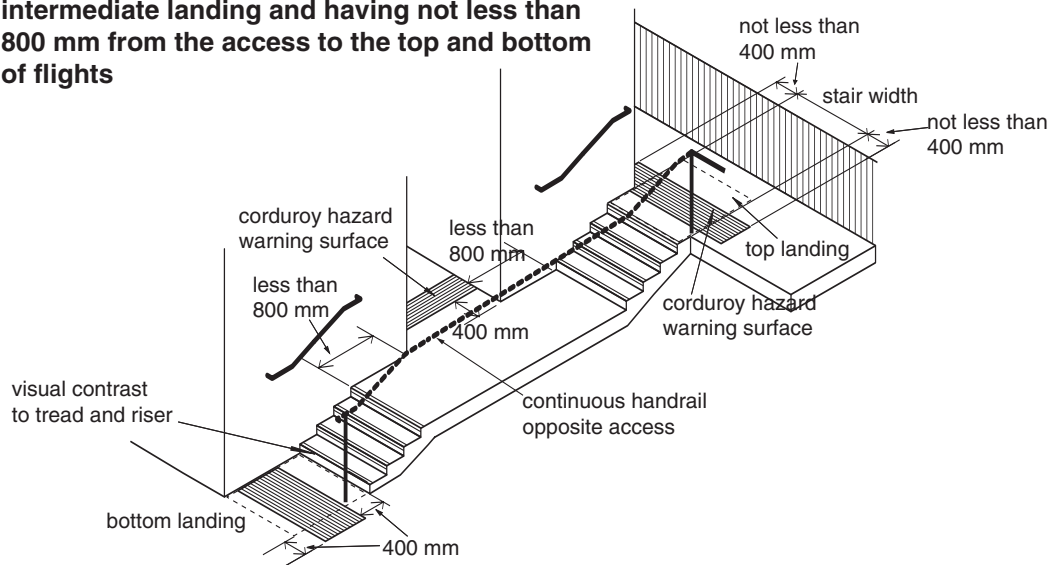
see para 2.26



**(a) Tactile warning**



**(b) External steps showing side access onto intermediate landing and having not less than 800 mm from the access to the top and bottom of flights**



**(c) External steps showing side access onto intermediate landing and having less than 800 mm from the access to the top and bottom of flights**

## Handrails

- 2.27 A handrail shall be at a height measured vertically of –
- (a) not less than 900 mm and not more than 1000 mm above the pitch line of a flight of steps, or above the surface of a ramp; and
  - (b) not less than 900 mm and not more than 1100 mm above the surface of a landing.
- 2.28 Each end of a handrail shall extend horizontally for a distance of not less than 300 mm, along the top and bottom landings of a stair or ramp, be closed and terminate in a suitable way so that –
- (a) it does not project into a route of travel; and
  - (b) it reduces the risk of clothing being caught.

Where a ramped approach has an intermediate landing that is 1800 mm or less in length, the handrail shall extend the full length of the landing.

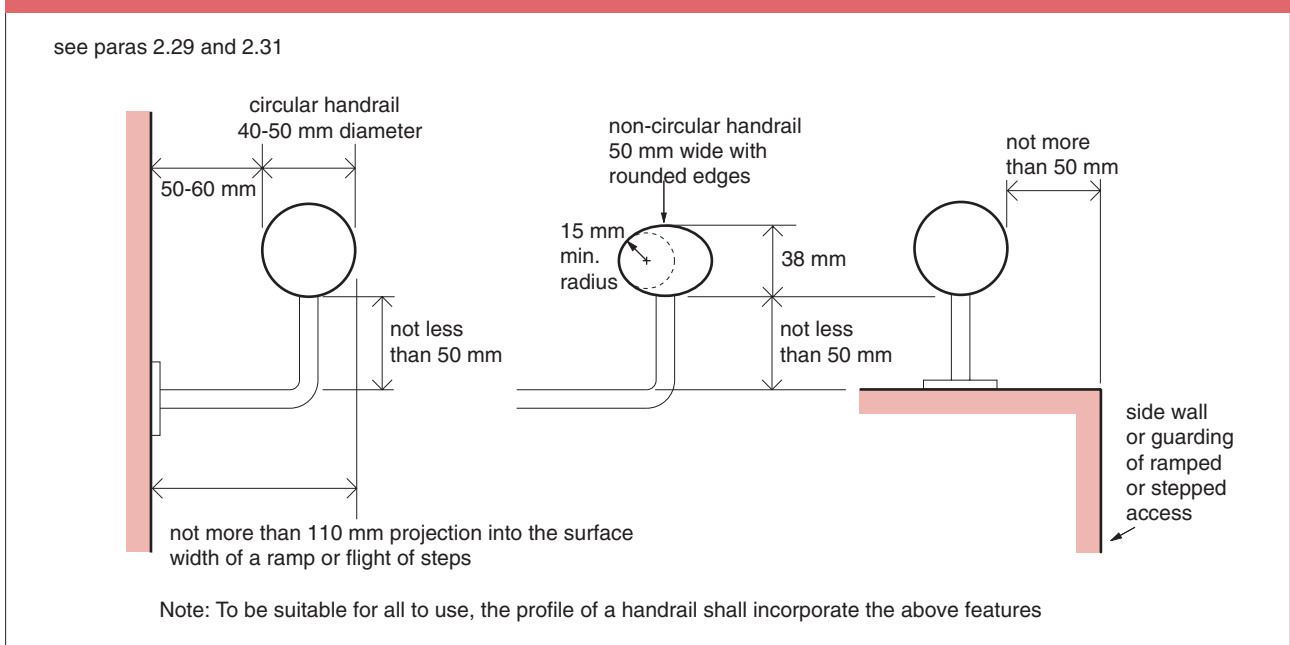
- 2.29 A handrail shall be –
- (a) not less than 50 mm and not more than 60 mm clear of any adjacent side or enclosing surface wall, or guarding etc.;
  - (b) not less than 50 mm clear from the underside of the handrail to any cranked support; and
  - (c) not more than 50 mm beyond the outer edge of a flight of steps, or ramp and landings, to the inner side of the handrail.

(See Diagram 2.8.)

- 2.30 The surface of a handrail shall be distinguishable, through suitable visual contrast from the background against which it is seen.

- 2.31 A handrail shall have a suitable profile that is gripped easily (see Diagram 2.8).

**Diagram 2.8 Examples of suitable handrails**



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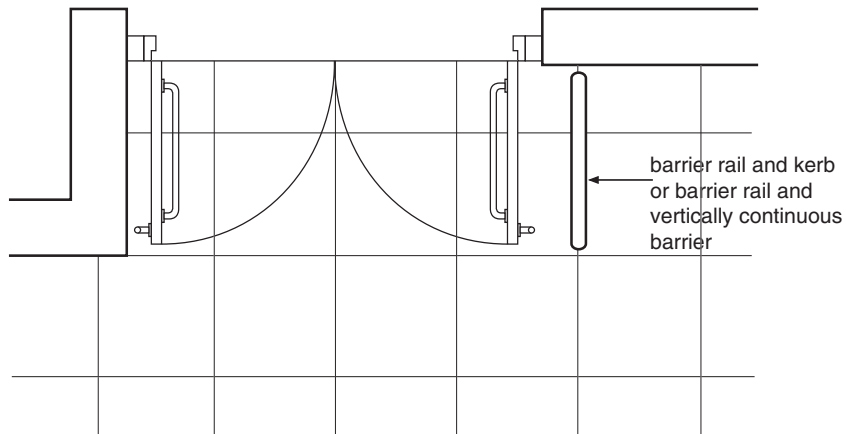
### **Hazards on access routes**

- 2.32 To reduce hazards on an access route for people with sight impairments any –
- (a) door (other than for emergency use only) which opens outwards;
  - (b) part of a window, when open in normal use, that projects more than 100 mm; and
  - (c) other feature of a building which projects,
- into an access route, shall be protected by a barrier rail which incorporates either a vertically continuous barrier or a kerb at ground level (see Diagram 2.9).
- 2.33 Any area below the soffit of a stair or a ramp and its landings that is less than 2100 mm above an access route shall be protected by a barrier rail which incorporates either a vertically continuous barrier or a kerb at ground level.

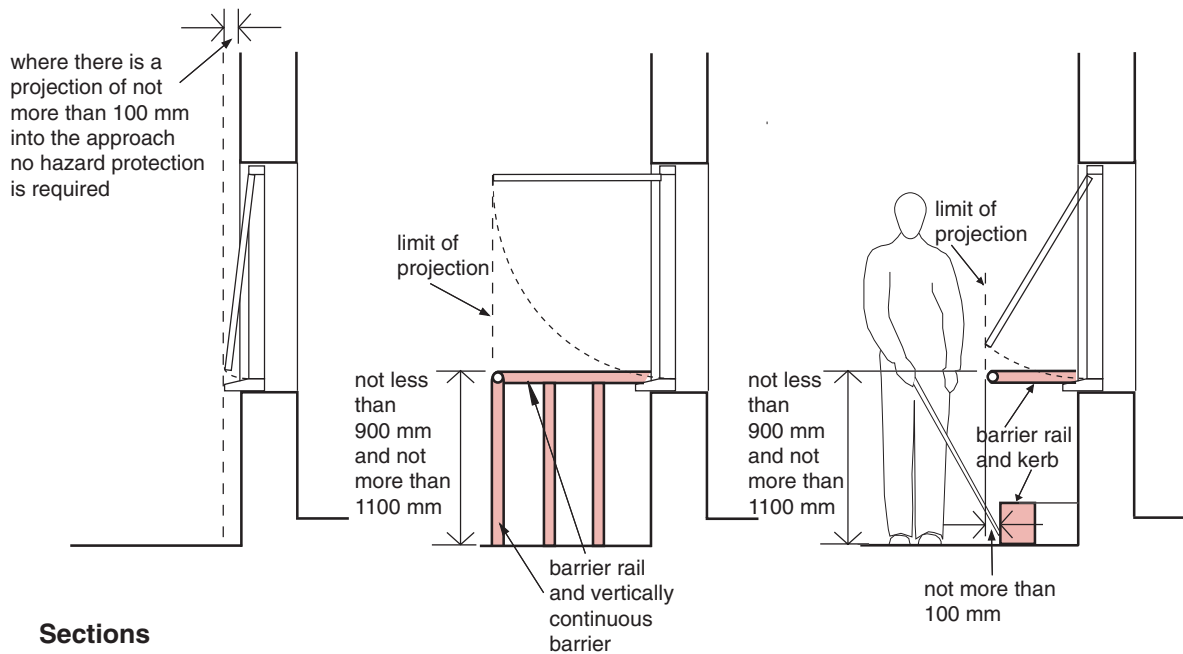


## Diagram 2.9 Hazards on access routes

see paras 2.32 and 4.17



**Plan**



**Sections**

- 3.1 A principal entrance(s) and where provided, one entrance which is specifically for members of staff, shall be an accessible entrance. However, where the space outside the principal or staff entrance is severely restricted, or the slope of the ground does not allow the means of access to the building to be provided in accordance with paragraph 2.2, an alternative accessible entrance, intended for general use, is acceptable, provided there is suitable internal access from that entrance to the principal and staff entrances.

### Accessible entrances

#### General

- 3.2 An accessible entrance shall be clearly indicated (e.g. by signs incorporating the International Symbol of Access), from –
- (a) the point of entrance at the boundary;
  - (b) suitable car parking which is provided within the boundary;
  - (c) the principal entrance, where the principal entrance is not an accessible entrance; and
  - (d) a staff entrance, where that staff entrance is not an accessible entrance.
- 3.3 An accessible entrance shall –
- (a) be readily apparent (e.g. distinguishable, through suitable visual contrast from that of the adjacent elements of the building); and
  - (b) have an access area –
    - (i) that is level. However, where the access area contains a crossfall, it shall be not steeper than 1 in 40;
    - (ii) with a surface that is firm;
    - (iii) with an unobstructed size of not less than 1500 mm by 1500 mm in front of the accessible entrance; and
    - (iv) that is at, or about, the level of the floor of the entrance.
- 3.4 When manually operated entrance doors are installed, the area immediately in front of the entrance doors, shall be protected from inclement weather. [This will shelter people who require extra time to use manually operated doors.]
- 3.5 Where an entrance communication system is installed, it shall have both video and audio communication to assist hearing impaired people or people who cannot speak.

- 3.6 A floor immediately inside any accessible entrance shall –
- (a) have a surface which is firm and even;
  - (b) where there are changes in flooring surface, be at, or about, the level of any adjacent flooring surface; and
  - (c) have a surface that will reduce the risk of tracking moisture into the building (e.g. from shoes or wheelchair wheels). However, this provision is not required where the external access area is designed and constructed to limit the tracking of moisture into the building.

### Doorways to accessible entrances

- 3.7 An accessible entrance doorway shall contain a leaf which provides an effective clear width of not less than that given in column (2) of Table 3.1.

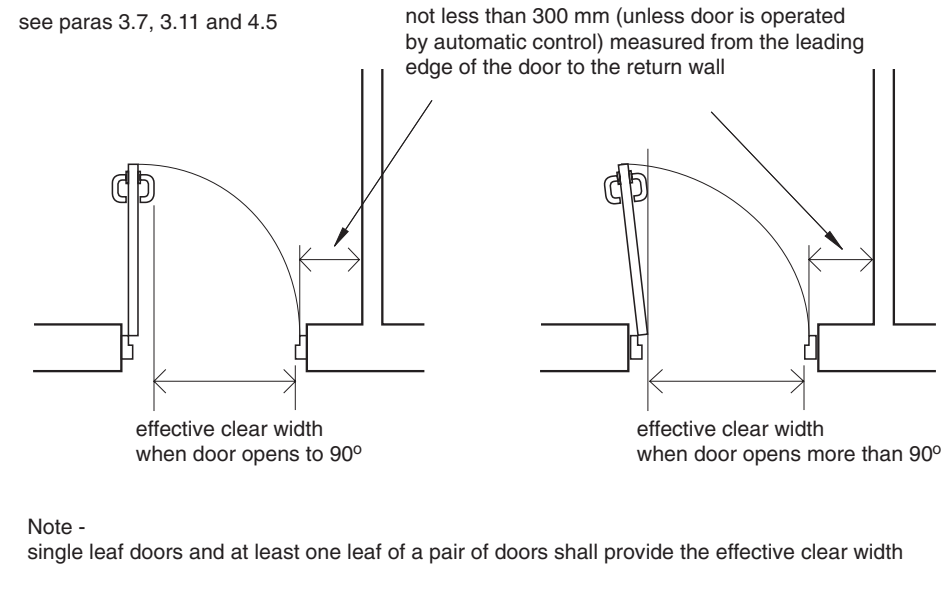
Where a building is to be altered or undergo a material change of use and the effective clear width given in column (2) of Table 3.1 cannot be achieved, an accessible entrance doorway may contain a leaf which provides an effective clear width of not less than that given in column (3) of Table 3.1.

The effective clear width of a doorway shall be measured in accordance with Diagram 3.1.

**Table 3.1 Effective clear widths of doorways to accessible entrances**

Users of entrance  (1)	Effective clear width of doorway in a new building  (mm) (2)	Effective clear width of doorway in an existing building  (mm) (3)
limited to staff and visitors	800	750
members of the public	1000	775

**Diagram 3.1 Measurement of the effective clear width of a doorway**



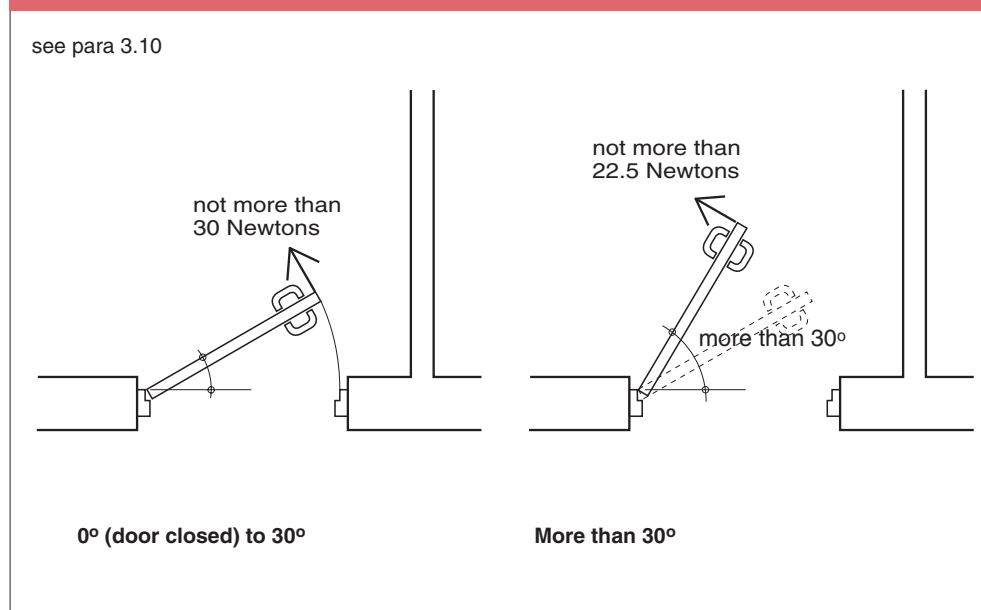
- 3.8 An accessible entrance doorway shall have a threshold which is level. However, where required due to site location (e.g. to prevent the ingress of moisture), a threshold may contain one or more upstands, provided the cumulative height of these upstands is not more than 15 mm. An upstand more than 5 mm high shall have all exposed edges chamfered or rounded.
- 3.9 A door to an accessible entrance shall not project, when open, into an adjacent access route, unless that portion of the door which projects into the access route is protected by a suitable barrier.

#### **Manually operated entrance doors to accessible entrances**

- 3.10 The force required to open a manually operated entrance door shall be not more than –
- (a) 30 Newtons between 0° (door closed) and 30° of the opening arc of the door; and
  - (b) 22.5 Newtons from a point greater than 30° of the opening arc of the door,

measured at the leading edge of the door leaf during the opening action (see Diagram 3.2).

**Diagram 3.2 Measurement of the opening forces of a doorleaf**



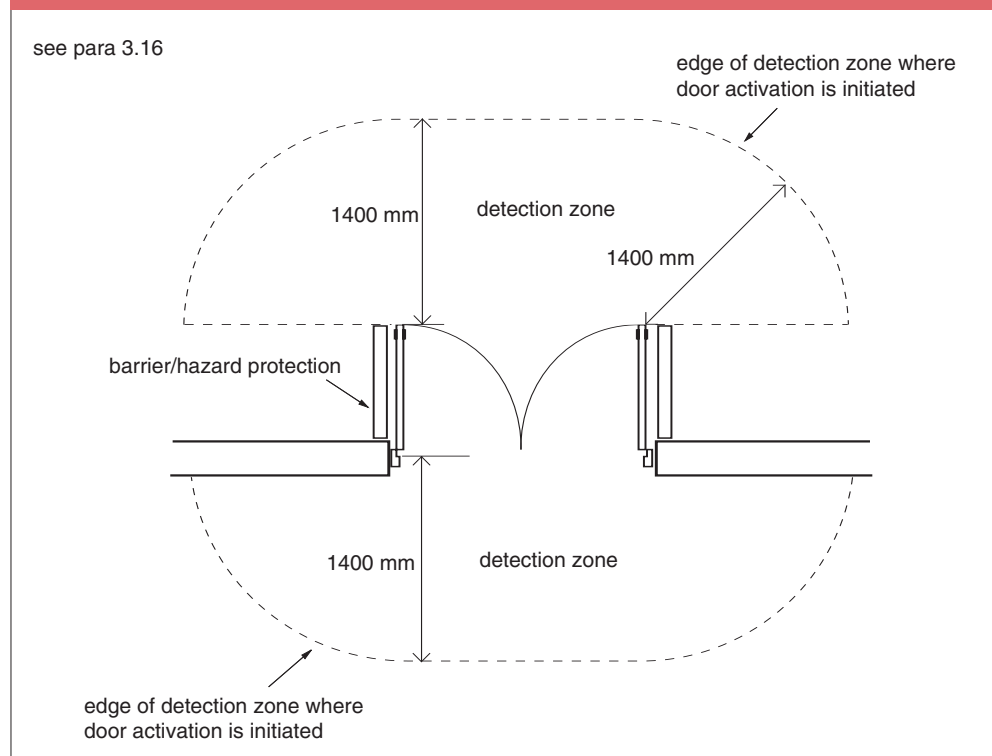
- 3.11 A manually operated entrance door shall have an unobstructed space of not less than 300 mm, at the leading edge of the door leaf (see Diagram 3.1).
- 3.12 Door opening furniture shall –
- be distinguishable, through suitable visual contrast, from that of the face of the door leaf; and
  - where the door leaf is fitted with a latch, be operable by a person with limited manual dexterity (e.g. a lever handle).

### **Power operated entrance doors to accessible entrances**

- 3.13 A power operated entrance door shall have a sliding, swinging or folding action that is activated –
- manually by a push pad, electronic card, coded entry, or by remote activation; or
  - automatically (e.g. by a motion detector).
- 3.14 Any manual controls to operate a powered entrance door shall comply with the requirements of paragraph 5.35 (g) and 5.36 (see Diagram 5.8(b)).
- 3.15 Where a power operated entrance door has a swing action, a visual and an audible indication that the door is operating, shall be provided to the side that the door opens towards.
- 3.16 Where a power operated entrance door has an automatic activation device, it shall be positioned so that the edge of the detection zone, where activation is initiated, is 1400 mm from –
- the door, measured perpendicular to the plane of the closed door, when the door opens away from the user; and
  - the leading edge of the door in the fully open position, when the door opens towards the user.

(See Diagram 3.3.)

**Diagram 3.3 Detection zones for automatic activation of powered doors**



### **Glazed entrance doors and glazed screens to accessible entrances**

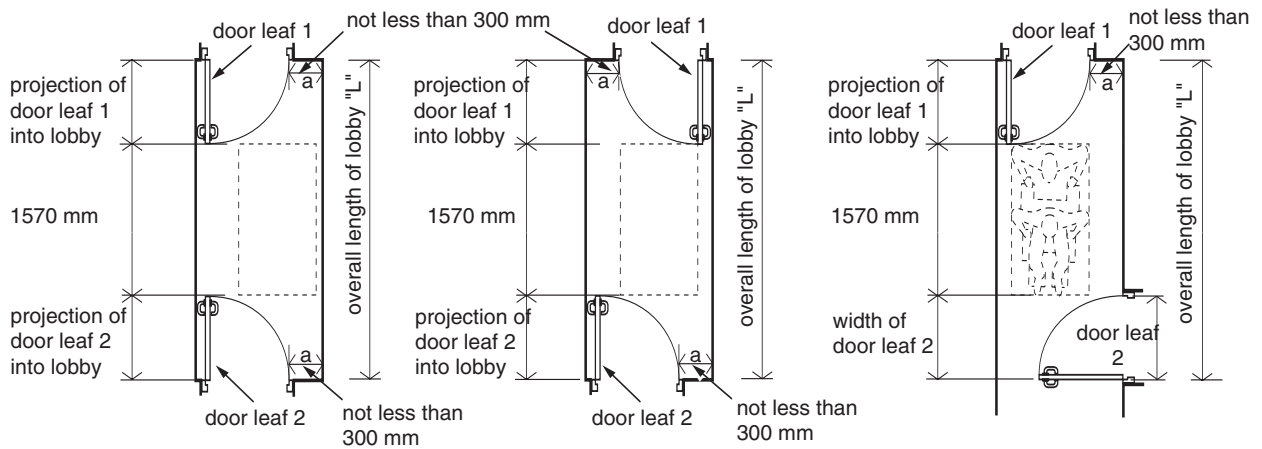
- 3.17 Where an entrance door is manufactured from transparent or translucent materials and –
- (a) forms part of, or is adjacent to, a glazed screen, it shall have its top and side face edges distinguishable, through suitable visual contrast, from that of the glazed screen; and
  - (b) is designed and installed to be capable of being held open, the leading edge of the door shall be protected by a suitable barrier when in the held open position.

### **Entrance lobbies to accessible entrances**

- 3.18 An entrance lobby shall –
- (a) have the minimum dimensions shown in Diagram 3.4, clear of any projections (including any handrail), into the lobby; and
  - (b) have a floor that complies with the provisions of paragraph 3.6.
- 3.19 Any door to and within any entrance lobby shall comply with the provisions of paragraphs 3.7 to 3.17.

## Diagram 3.4 Lobbies

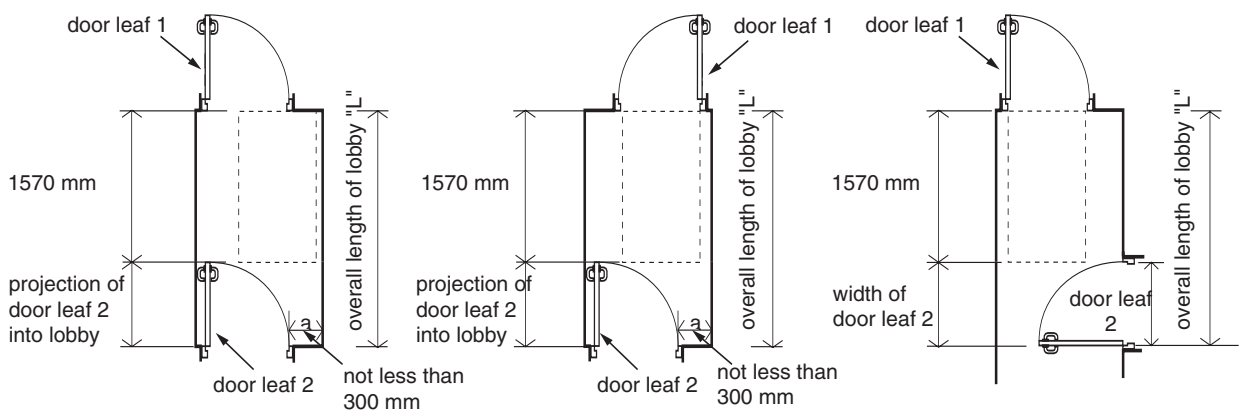
see paras 3.18 and 4.18(a)



**Example 1**

**Example 2**

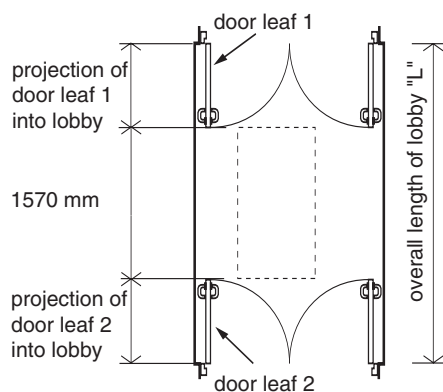
**Example 3**



**Example 4**

**Example 5**

**Example 6**



**Example 7**

### Lobby widths

The unobstructed clear lobby width shall be -

- for lobbies served by single leaf doors - not less than the width of the widest door leaf plus 300 mm or not less than 1200 mm whichever is the greater; and
- for lobbies served by double leaf doors - not less than 1800 mm

### Clear space to leading edge of door

For lobbies served by single leaf doors - the dimension "a" shall be not less than 300 mm but for every 100 mm increase in this dimension (resulting in an increased lobby width) the overall length of the lobby "L" may be reduced by 100 mm but shall not be less than L minus 600 mm

### Note -

The required effective clear width of a door opening is dependent upon the width and direction of the approach

## Section 4 Access within a building

- 4.1 This Section deals firstly with access within a storey (horizontal circulation), and then with access between storeys (vertical circulation), in a building other than a dwelling or a block of dwellings.

### Horizontal circulation

#### General

- 4.2 Horizontal circulation within a storey shall be level or contain a gradient in the direction of travel less steep than 1 in 20, or by means of a ramp or ramps and landings.

Where it is impracticable to provide a ramp to move between levels within a storey, a lifting platform, complying with the provisions of paragraphs 4.21 to 4.28 and 4.33 to 4.38 shall be provided to transfer wheelchair users or people with impaired mobility, vertically between levels. A stair shall always be provided, in addition to a lifting platform.

#### Internal doors

- 4.3 The effective clear width of a doorway is interrelated to the width of the circulation route and the direction of approach to the doorway.

An internal door shall contain a leaf, which provides an effective clear width of not less than that given in column (3) of Table 4.1.

- 4.4 Where a building is to be altered or undergo a material change of use and the provisions of paragraph 4.3 cannot be achieved, an internal door may contain a leaf which provides an effective clear width of not less than that given in column (4) of Table 4.1.

**Table 4.1 Effective clear width of internal doors**

Width of corridor or passageway (mm) (1)	Direction of approach (2)	Effective clear width of door in a new building (mm) (3)	Effective clear width of door in an existing building (mm) (4)
not less than 1500	head on	800	750
not less than 1500	not head on	800	750
less than 1500	head on	800	750
less than 1500	not head on	825	775



- 
- 4.5 When an internal door is designed and constructed to be manually operated it shall –
- (a) comply with the provisions of paragraph 3.10 in relation to opening forces;
  - (b) where the door is fitted with a latch, have door opening furniture that is suitable for use by a person with limited dexterity (e.g. a lever handle); and
  - (c) have an unobstructed space of not less than 300 mm at the leading edge of the door (see Diagram 3.1). This provision does not apply to a door that gives access to a guest bedroom, which is not designed as a wheelchair accessible bedroom.
- 4.6 Door opening furniture shall be distinguishable, through suitable visual contrast, from the face of the door leaf.
- 4.7 Any door surround shall be distinguishable, through suitable visual contrast, from the adjacent wall surface in which it is set.
- 4.8 An internal door that is designed and installed as to be capable of being held open, or where a door leaf is not self-closing, shall have the leading edge of the door leaf distinguishable, through suitable visual contrast, from the other surfaces of the door leaf.
- 4.9 Where a doorway contains door leaves of unequal width, and is across a main route of travel, or an escape route provided to comply with Part E, the wider door leaf shall be located consistently on the same side throughout the length of the route.
- 4.10 Where a manually operated internal door is fitted with a self-closing device and –
- (a) is across a corridor shall –
    - (i) comply with the provisions of paragraph 3.10 in relation to opening forces; or
    - (ii) be held open by a suitable device; and
  - (b) gives access to any part of a storey (e.g. rooms or similar spaces, other than those parts excluded by Regulation R1) and is not across a corridor shall –
    - (i) comply with the provisions of paragraph 3.10 in relation to opening forces; or
    - (ii) be fitted with a suitable closing device that will allow the door to swing free during normal operation.
- 4.11 Where a door is fitted with a low effort powered swing door opening system, the door shall –
- (a) not be across a main route of travel; and
  - (b) be capable of being opened in manual mode, power mode and power assisted mode.

[Low effort powered door systems have an opening and closing action that is relatively slow.]

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## Corridors and passageways

- 4.12 A corridor or passageway shall have an unobstructed width of not less than 1200 mm. Minor projections (e.g. skirtings, architraves etc.) may be ignored. However, where a projection into the corridor or passageway is unavoidable (e.g. at an archway in an existing building) and is more than 100 mm, that projection shall have a suitable means of directing people around it.
- 4.13 Where a corridor or passageway is more than 50 m in length and has an unobstructed width of less than 1800 mm, it shall have passing places spaced at not more than 50 m. Every passing place shall be not less than 1800 mm wide and not less than 1800 mm long. The width of the passing place may include the width of the corridor or passageway and may be incorporated into corridor junctions.
- 4.14 The floor of a corridor or passageway shall –
- (a) have a surface that has a suitable slip resistance; and
  - (b) be level, or contain a gradient in the direction of travel less steep than 1 in 20. However, where the floor has a gradient of 1 in 20 or steeper, a ramp or ramps and landings shall be provided.
- 4.15 Where a corridor or passageway has a gradient –
- (a) that is steeper than 1:60 but less steep than 1 in 20, it shall have –
    - (i) horizontal rest areas not less than 1500 mm long; and
    - (ii) a rise of not more than 500 mm between rest areas;
  - (b) the gradient shall extend the full width of the corridor or passageway or –
    - (i) have any exposed edge of the gradient distinguishable, through suitable visual contrast; and
    - (ii) be adequately guarded where there is a risk of falling.
- 4.16 A door shall not open into a corridor or passageway, other than –
- (a) a door to a cupboard or duct; or
  - (b) a door giving access to a unisex wheelchair accessible toilet, provided that the corridor or passageway is not less than 1800 mm wide at that point, and is not a main route of travel or a means of escape provided to comply with Part E.
- 4.17 Any area below the soffit of a stair or a ramp and its landings that is less than 2100 mm above a circulation route, shall be protected by a barrier rail which incorporates either a vertically continuous barrier or a kerb at floor level (see Diagram 2.9). The provisions of this paragraph shall not apply to the headroom above a flight or ramp and landings.

## Internal lobbies

- 4.18 An internal lobby shall have –
- (a) the minimum dimensions shown in Diagram 3.4, clear of any projections e.g. handrails, columns, ducts, etc.; and
  - (b) a floor surface that is at, or about, the same level as the floor surface at any entrance to the lobby.

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## Vertical circulation

### Lifting devices

- 4.19 Vertical circulation to any storey above or below the principal entrance storey shall be provided by means of a passenger lift complying with the provisions of paragraphs 4.21 to 4.32. However where –
- (a) the space within a building is severely restricted by site constraints; or
  - (b) the installation of a passenger lift would severely affect –
    - (i) the existing accommodation; or
    - (ii) an existing accessible feature of the building,
- a lifting platform, complying with the provisions of paragraphs 4.21 to 4.28 and 4.33 to 4.38, may be provided to transfer, either independently or with their companions, wheelchair users or people with impaired mobility vertically between storeys.
- 4.20 Whatever lifting device is chosen, internal stairs shall also be provided as an alternative means of vertical access.

### General

- 4.21 A manoeuvring space in front of the door to the lifting device shall be provided on each storey. This space shall have an unobstructed width and depth of not less than 1500 mm.
- 4.22 Landing call buttons shall –
- (a) be not less than 900 mm or not more than 1100 mm above the floor level of the landing, and not less than 500 mm from any return wall;
  - (b) have suitable raised tactile indication of their function on, or adjacent to, the buttons to identify the storey and direction of travel; and
  - (c) be distinguishable, through suitable visual contrast, from any surrounding face plate. The face plate shall be distinguishable, through suitable visual contrast, from the surface on which it is mounted.
- 4.23 Lifting device control buttons shall –
- (a) have suitable raised tactile indication of their function, on, or adjacent to, the buttons within the lifting device; and
  - (b) be distinguishable, through suitable visual contrast, from any surrounding face plate. The face plate shall be distinguishable, through suitable visual contrast, from the surface on which it is mounted.
- 4.24 A handrail shall be provided to at least one side of the car or platform of the lifting device.
- The top surface of the handrail shall be not less than 875 mm or not more than 925 mm, above the floor of the lifting device.
- 4.25 A lifting device shall have a suitable emergency communication system, giving audible and visual indication that the alarm has been given and received.

- 
- 4.26 Any glazing to walls of the lifting device shall be made readily apparent.
  - 4.27 The surface of the floor of the lifting device and any associated manoeuvring space shall have similar surface frictional characteristics.
  - 4.28 The floor of the lifting device shall not be of a dark colour.

### **Passenger lifts**

- 4.29 The car of a passenger lift shall have a width of not less than 1100 mm and a depth of not less than 1400 mm, measured internally (see Diagram 4.1).

Where the lift car is less than 1500 mm wide by 1500 mm deep, a suitably sized and positioned mirror shall be fitted to the car wall opposite the door. [This will assist a wheelchair user to exit the lift when it is of a size that will not allow a wheelchair user to turn around within the lift car.]

- 4.30 A passenger lift shall have a power operated horizontal sliding door or doors which provide a clear width of not less than 800 mm (see Diagram 4.1).

The door or doors to a passenger lift shall be fitted with –

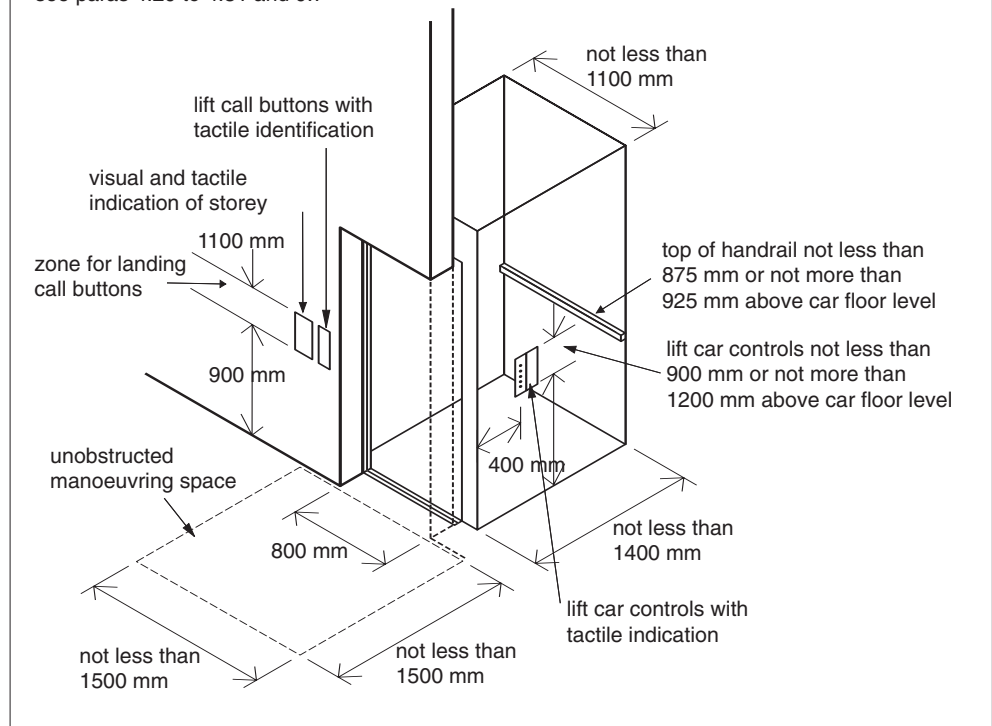
- (a) an adjustable door timing device; and
- (b) a door re-activating device, which prevents physical contact between the user and the leading edge of the closing door or doors.

Lift door or doors shall be distinguishable, through suitable visual contrast, from the adjacent landing, and internal car, wall surfaces.

- 4.31 The controls within the lift car shall be located not less than 900 mm, and not more than 1200 mm above the floor of the car, and not less than 400 mm horizontally from any return wall of the lift car (see Diagram 4.1).
- 4.32 Visual indication and voice indication of the lift arrival and its location, shall be provided in the lift lobby and within the lift car.

## Diagram 4.1 Passenger lifts

see paras 4.29 to 4.31 and 9.7



### Lifting platforms

- 4.33 A lifting platform shall be contained within a liftway enclosure where –
- the vertical travel distance is more than 2000 mm; or
  - the lifting platform travels through a floor penetration.
- 4.34 A lifting platform shall have a platform size of –
- not less than 800 mm wide and not less than 1250 mm deep, where the lifting platform is not contained within a liftway enclosure;
  - not less than 900 mm wide and not less than 1400 mm deep, where the lifting platform is contained within a liftway enclosure;
  - not less than 1100 mm wide and not less than 1400 mm deep, where there are two lift doors located at 90° relative to each other; or
  - not less than 1100 mm wide and not less than 1400 mm deep, where the lifting platform is designed and constructed to accommodate an accompanied wheelchair user.
- 4.35 A lifting platform shall have a door or doors which provide an effective clear width of not less than –
- 900 mm, where the size of the lifting platform is not less than 1100 mm wide and not less than 1400 mm deep; or
  - 800 mm in any other case.

A door or doors to a lifting platform shall be distinguishable, through suitable visual contrast, from that of the adjacent wall surfaces.

- 
- 4.36 The platform controls for a lifting platform shall be –
- (a) of the continuous pressure type; and
  - (b) positioned not less than 800 mm and not more than 1100 mm above the floor of the lifting platform and not less than 400 mm horizontally from the front face of the lifting platform.
- 4.37 Visual indication and audible indication of the lifting platform arrival and the floor reached, shall be provided within the lifting platform.
- 4.38 Clear permanent operating instructions shall be provided either in, or adjacent to, the lifting platform.

- 5.1 This Section contains provisions which will assist people to make use of facilities, where they are provided, in a building other than a dwelling or a block of dwellings.

Provisions for sanitary accommodation and associated facilities are given in Section 6.

## Reception

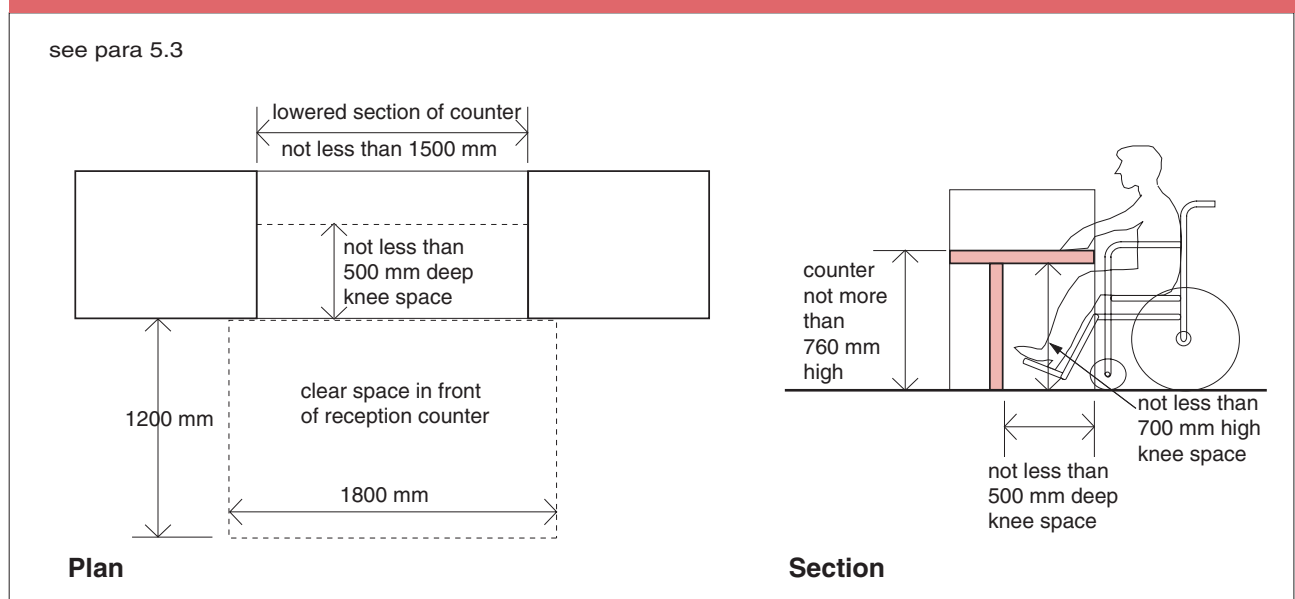
### Fixed reception counter

- 5.2 Where a fixed reception counter is provided in a space immediately inside the principal entrance, accessible entrance or associated lobby, it shall –
- be readily apparent from the entrance doors or entrance lobby;
  - be located so as not to be subject to the risk of extraneous external noise; and
  - have a means of access that complies with paragraphs 4.12 to 4.17.
- 5.3 Not less than one section of a reception counter shall have –
- its working surface not more than 760 mm above floor level for a length of not less than 1500 mm;
  - a knee space of not less than 500 mm deep by not less than 700 mm above floor level; and
  - a clear space 1200 mm deep by 1800 mm wide in front of the lower section of the reception counter.

This section of the reception counter shall be located in an obvious position.

(See Diagram 5.1.)

**Diagram 5.1 Reception counter**



## Audience seating

### Provision of wheelchair spaces

- 5.4 Where there is fixed audience seating, wheelchair spaces shall be provided in accordance with Table 5.1.

**Table 5.1 Provision of wheelchair spaces in audience seating**

Seating capacity	Minimum provision of wheelchair spaces
up to 600	1% of total seating capacity (or part thereof) to be permanent wheelchair spaces augmented by the provision of removable seating to create, in total, 6 wheelchair spaces
601 to 10,000	1% of total seating capacity (or part thereof) to be permanent wheelchair spaces
10,001 to 20,000	100, plus 5 per 1000 (or part thereof) above 10,000 (all to be permanent wheelchair spaces)
20,001 to 40,000	150, plus 3 per 1000 (or part thereof) above 20,000 (all to be permanent wheelchair spaces)
more than 40,000	210, plus 2 per 1000 (or part thereof) above 40,000 (all to be permanent wheelchair spaces)
Example 1: A facility has an audience seating capacity of 2,350 therefore 1% of 2350 = 23.5 rounded up to 24 wheelchair spaces.	
Example 2: A facility has an audience seating capacity of 28,500 therefore 150 spaces are required for the first 20,000, the remaining 8,500 is rounded up to 9,000 which requires 27 spaces (3 per 1000). Therefore 177 wheelchair spaces must be provided.	

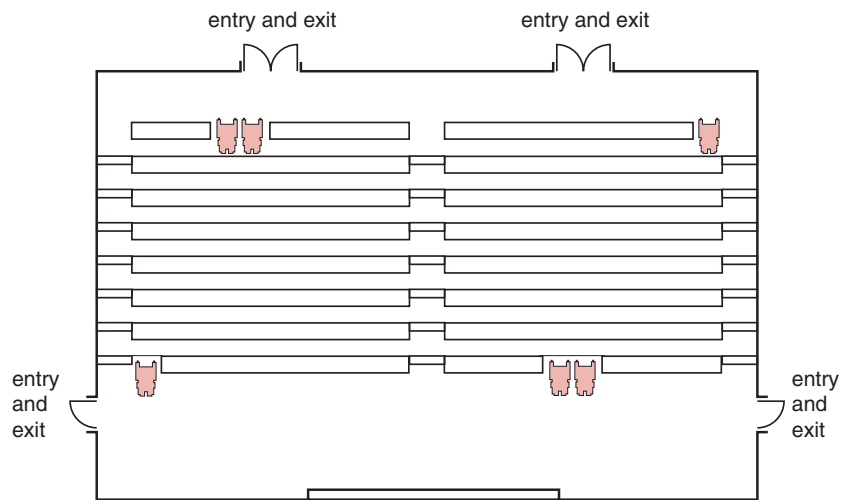
### Wheelchair spaces

- 5.5 A wheelchair space shall –
- have a horizontal floor area; and
  - be not less than 900 mm wide by 1400 mm deep.
- 5.6 Wheelchair spaces shall be located –
- in a range of single and double wheelchair spaces, with a standard seat to at least one side of each space or group of spaces; and
  - in such a way as to give a range of views.
- (See Diagrams 5.2, 5.3 and 5.4.)
- 5.7 Any stepped gangway, to stepped terrace audience seating, shall have a suitable means of providing support to people who have physical difficulty in negotiating changes of level.
- 5.8 Standard fixed seating at the ends of rows and those adjacent to wheelchair spaces shall, where they have arm rests, have detachable or lift-up arm rests (see Diagrams 5.3 and 5.4).



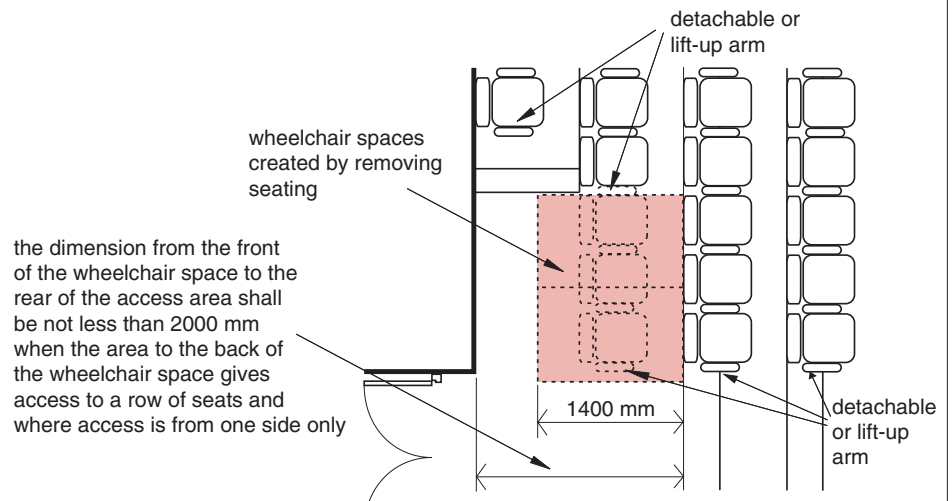
## Diagram 5.2 Typical arrangement of wheelchair spaces

see para 5.6



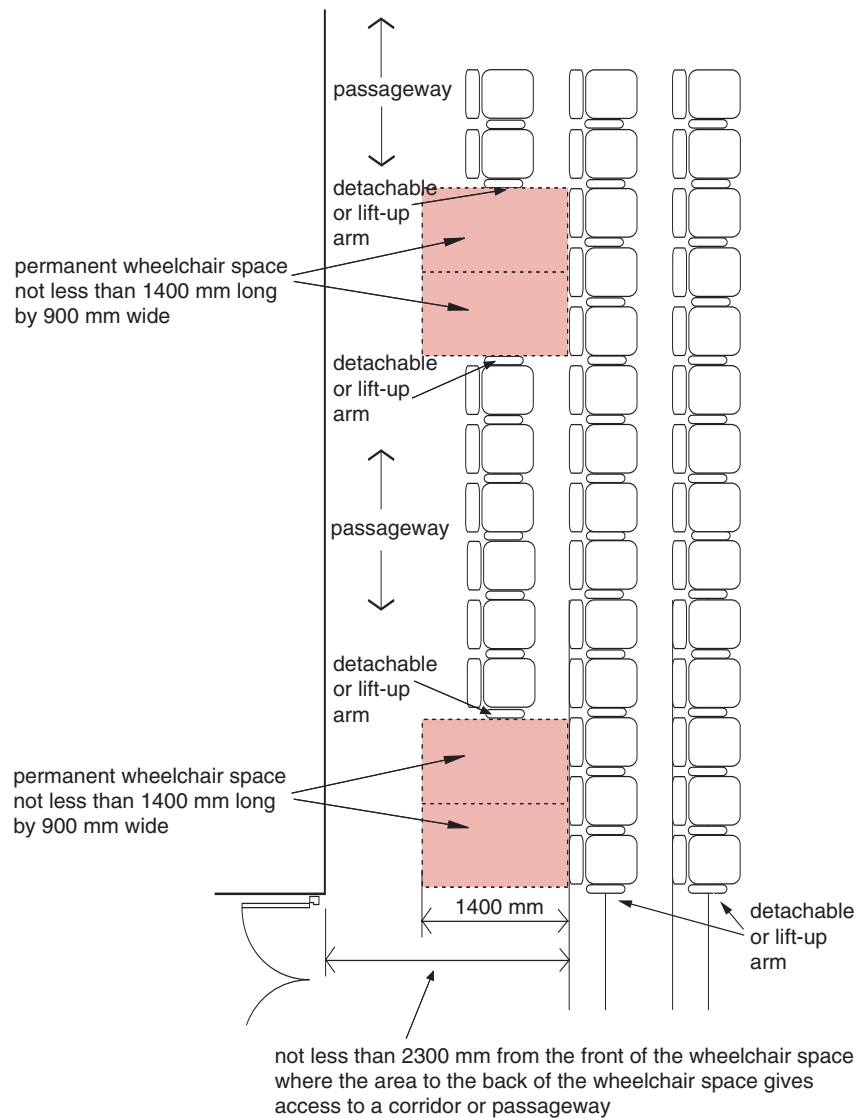
## Diagram 5.3 Examples of wheelchair spaces created by removable seating

see paras 5.6 and 5.8



## Diagram 5.4 Examples of permanent wheelchair spaces

see paras 5.6 and 5.8



## Refreshment facilities

### General

- 5.9 In a refreshment facility e.g. a restaurant or a bar, people shall have access to and use of –
- the full range of services offered; and
  - bar and self-service counters.
- 5.10 A serving counter or bar counter shall have not less than one section of its working surface at a height of 850 mm above floor level for a length of not less than 1500 mm.

- 5.11 A level threshold complying with the provisions of paragraph 3.8, shall be provided to any doorway between the refreshment facility in a building and any associated external seating area.

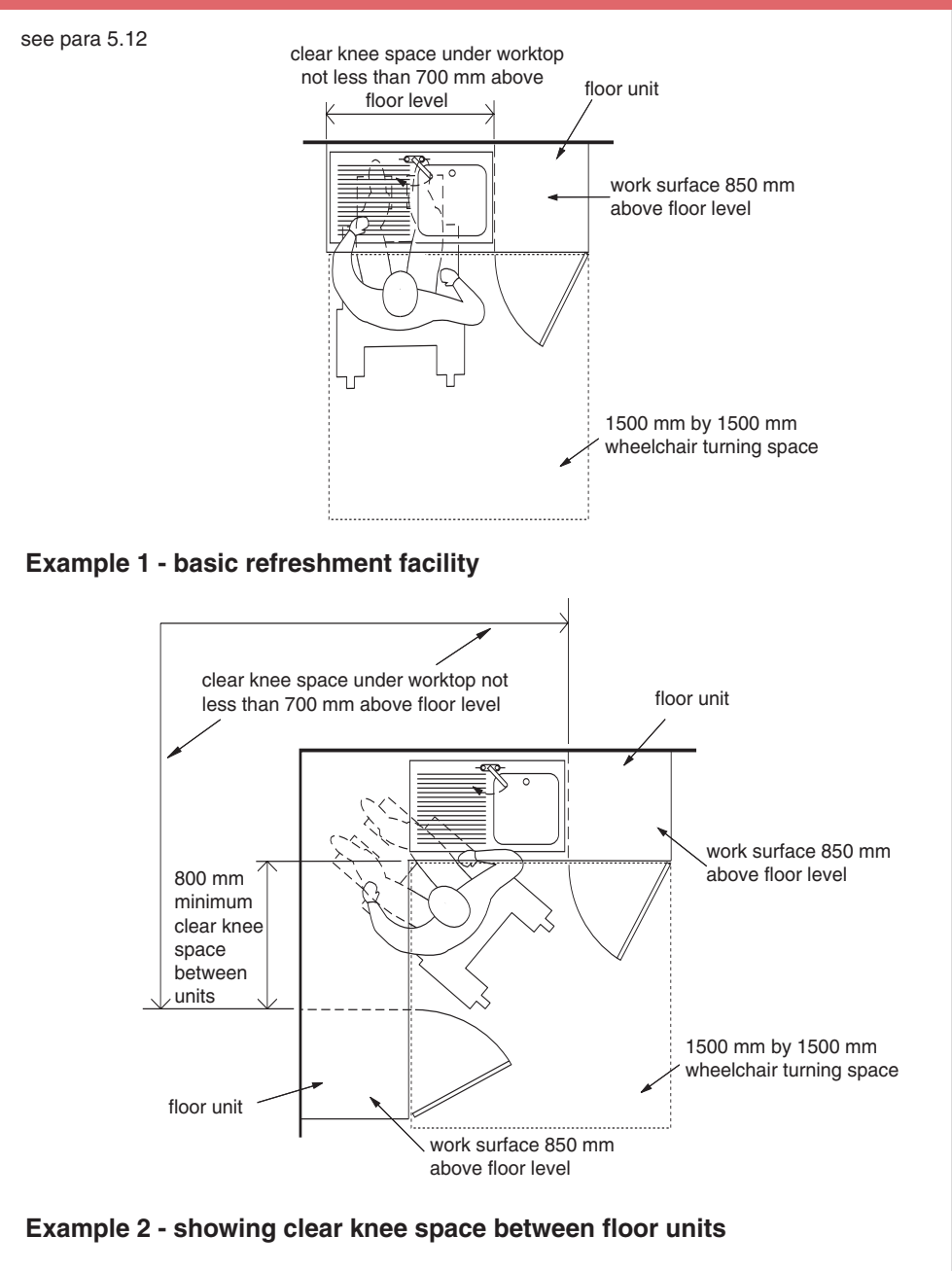
### Shared refreshment facilities

- 5.12 A shared self-catering refreshment facility (e.g. a facility for tea making) shall have –

- (a) a work surface at 850 mm above floor level; and
- (b) a clear knee space below the work surface –
  - (i) of not less than 700 mm above floor level; and
  - (ii) where appropriate, not less than 800 mm between floor units.

(See Diagram 5.5.)

**Diagram 5.5 Examples of a shared refreshment facility**



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## Guest bedrooms

### General

- 5.13 Where door signage is provided to a guest bedroom, it shall have suitable tactile indication of the room name or number.
- 5.14 Where an opening window is provided to a guest bedroom –
- (a) the opening portion shall be not less than 800 mm above floor level; and
  - (b) a control used for opening or closing a window shall be –
    - (i) located not less than 800 mm and not more than 1000 mm above floor level; and
    - (ii) designed and constructed for single hand use.
- 5.15 Where a fixed storage system has swing doors, these doors shall be capable of opening through 180°.
- 5.16 Door furniture to fixed storage systems, within guest bedrooms, shall be –
- (a) easy to grip and operate; and
  - (b) distinguishable, through suitable visual contrast, from the face of the door leaf.
- 5.17 All guest bedrooms shall have a visual fire alarm signal in addition to the requirements of Part E.

### Wheelchair accessible guest bedrooms

- 5.18 At least one guest bedroom out of every 20 (or part thereof) guest bedrooms shall be wheelchair accessible. A typical wheelchair accessible guest bedroom is shown in Diagram 5.6.

Where there is more than one wheelchair accessible bedroom provided, they shall be positioned within the building to give a range of locations.

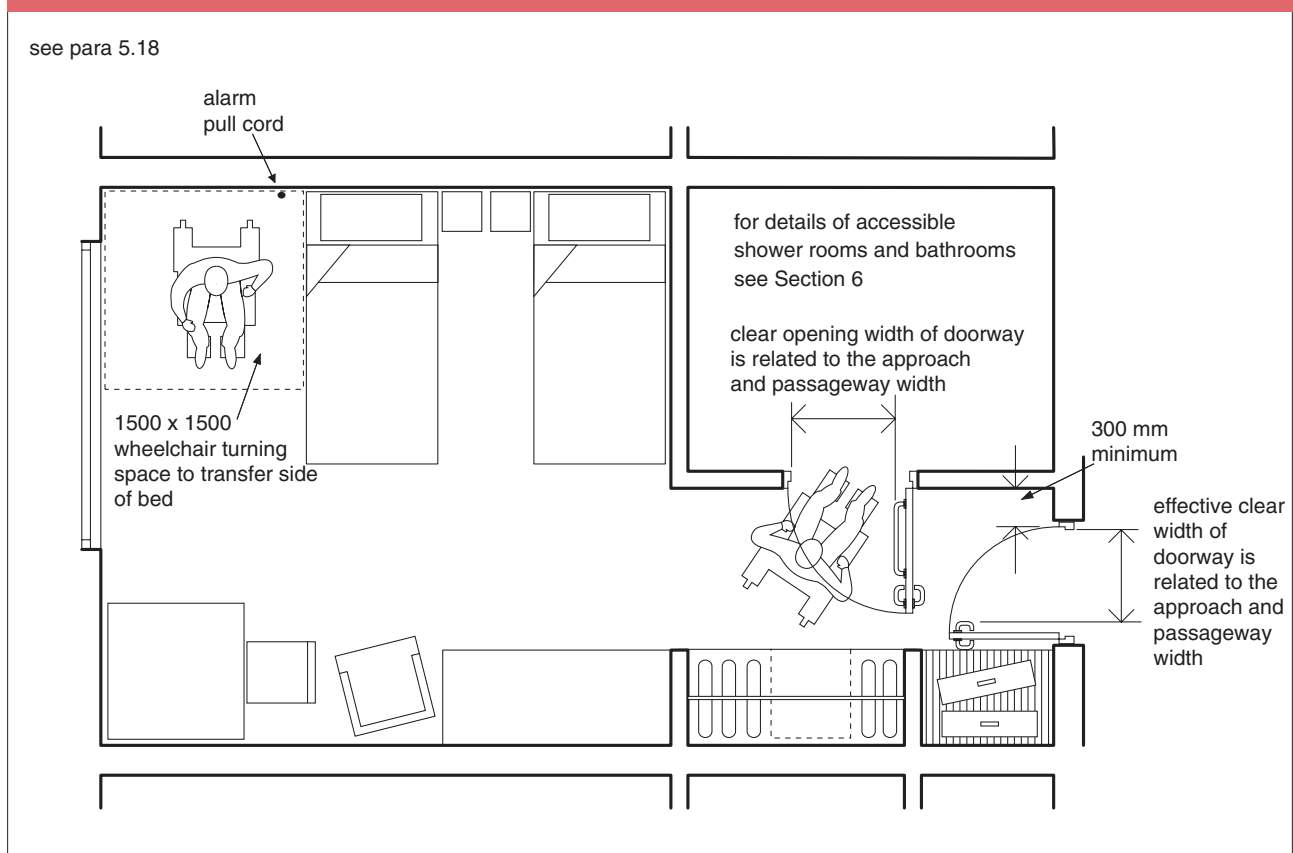
- 5.19 Where a wheelchair accessible guest bedroom has a balcony, there shall be access to it by a doorway –
- (a) that has a clear opening width that complies with Table 4.1;
  - (b) with a level threshold that complies with the provisions of paragraph 3.8; and
  - (c) with a clear space to the bedroom side of not less than 1500 mm deep.

Where a door to a balcony contains glazing, it shall have a zone of visibility from a height above floor level of not more than 900 mm to not less than 1200 mm.

- 5.20 Where a door viewer is provided to the entrance door to a wheelchair accessible guest bedroom a second door viewer shall also be provided. These door viewers shall be positioned at 1050 mm and 1500 mm above floor level.

- 5.21 A wheelchair accessible guest bedroom shall have an emergency assistance alarm –
- that is activated by a pull cord, complying with the provisions of paragraph 5.38, that can be operated from the bed and from the adjacent floor area at the transfer side of the bed;
  - with a reset button, that can be operated from the bed and from the adjacent area at the transfer side of the bed;
  - having a visual and an audible indication that the emergency alarm has been activated; and
  - having a visual and an audible call signal positioned immediately outside the wheelchair accessible bedroom and at a central monitoring point.

**Diagram 5.6 Typical wheelchair accessible guest bedroom**



## Wheelchair accessible changing facilities

### Provision of wheelchair accessible changing facilities

- 5.22 A communal changing facility shall have not less than one wheelchair accessible incorporated changing facility. An incorporated changing facility shall have the minimum dimensions and arrangement of fittings as shown in Diagram 5.7. A wheelchair accessible incorporated changing facility is not required to be separated by a door from the communal changing facility.
- 5.23 A building for sports facilities shall have an individual wheelchair accessible changing room. This is in addition to the provisions of paragraph 5.22.

- 
- 5.24 Where changing facilities are provided for general use and are not associated with showering facilities (e.g. in a clothes shop), not less than one individual wheelchair accessible changing room shall be provided (see Diagram 5.7).

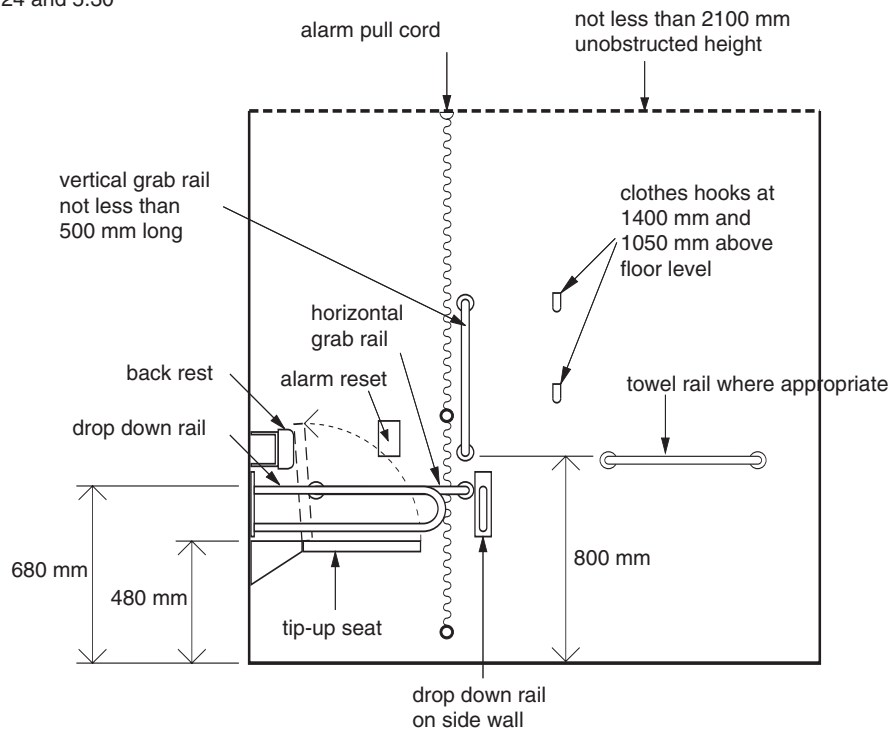
### **General**

- 5.25 Where there is more than one individual wheelchair accessible changing facility, a mixture of left and right hand transfer layouts shall be provided.
- 5.26 Every individual and incorporated wheelchair accessible changing facility shall have –
- (a) an emergency assistance alarm complying with the provisions of paragraph 6.5; and
  - (b) an emergency assistance alarm pull cord complying with the provisions of paragraph 5.38, that can be reached from the tip-up seat and the area adjacent to the seat.
- 5.27 A wheelchair accessible changing facility shall have a clear space not less than 1500 mm deep in front of any fixed clothing storage system.
- 5.28 Where a door is provided to a wheelchair accessible changing facility, it shall be capable of being opened outwards, from the outside, in the case of an emergency.
- 5.29 Where a fire alarm is provided within a wheelchair accessible changing facility, it shall emit both an audible and visual alarm signal.
- 5.30 A wheelchair accessible changing facility shall, where it is associated with a shower facility, have –
- (a) a floor with a surface that reduces the risk of slipping; and
  - (b) a fixed storage system for limb storage, for the benefit of amputees.

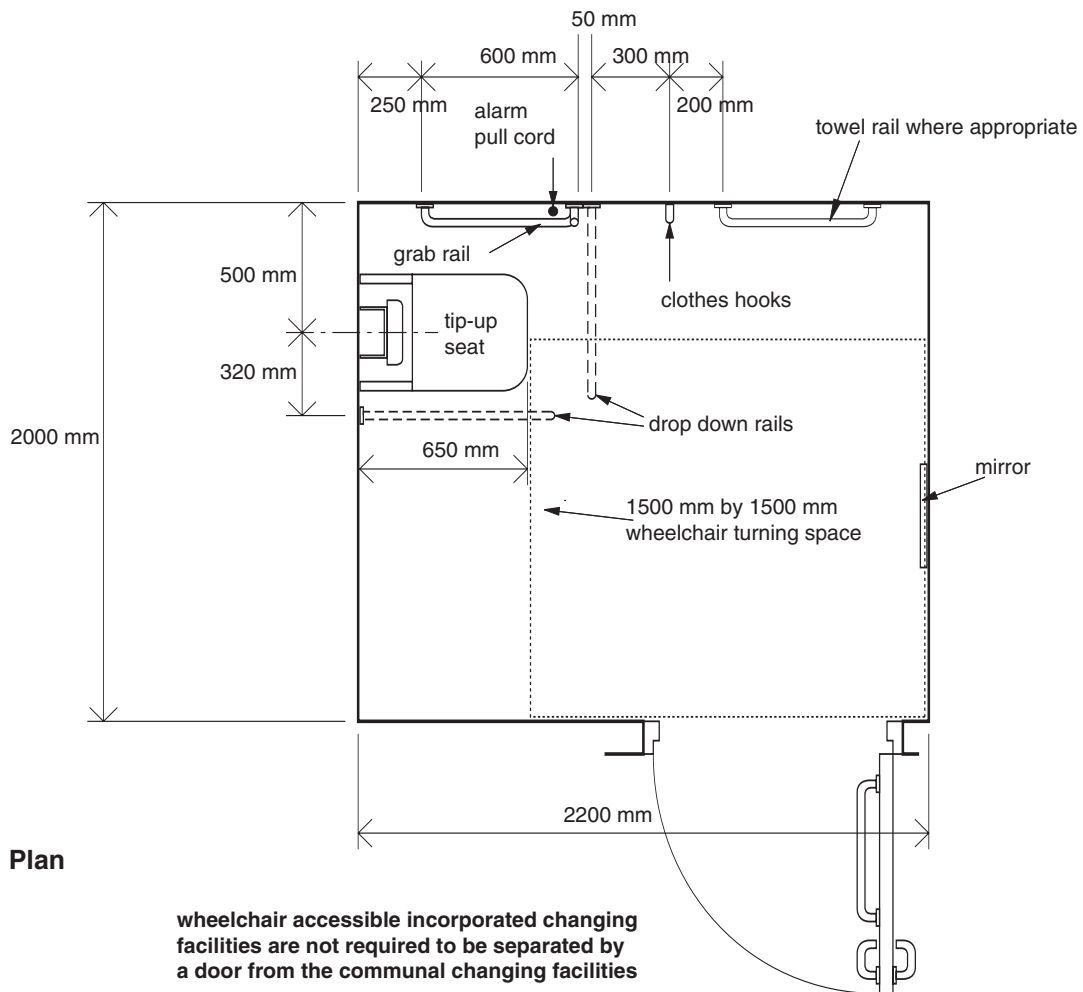
An individual wheelchair accessible changing facility is shown in Diagram 5.7.

## Diagram 5.7 Individual wheelchair accessible changing facility

see paras 5.22, 5.24 and 5.30



**Section**



**Plan**

**wheelchair accessible incorporated changing facilities are not required to be separated by a door from the communal changing facilities**

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## Outlets, switches and controls

- 5.31 Paragraphs 5.32 to 5.36 shall not apply where the outlet, switch or control is required only for maintenance purposes or not intended for operation by the users of the building.

An outlet, switch or control shall not require the simultaneous use of two hands unless this mode of operation is required for reasons of safety.

### Outlets

- 5.32 An outlet for a non-permanently wired appliance e.g. socket outlet, telephone outlet etc., shall be located within horizontal reach and not less than 400 mm and not more than 1000 mm above the floor level (see Diagram 5.8 (a)(1)). However, the provisions of this paragraph shall not apply to any outlet that is set into a flush mounted floor box located within areas that are designed to be open plan.
- 5.33 Socket outlets shall be located not less than 350 mm from any return wall.

The location of socket outlets in relation to doorways and return walls shall, where practicable, be consistent throughout the building.

### Switches and controls

- 5.34 A switched outlet shall clearly indicate when in the “on” position (e.g. by a neon indicator, or the top of the rocker is coloured red and exposed when in the “on” position etc.).
- 5.35 A switch or control –
- (a) shall be located within horizontal reach;
  - (b) for a permanently wired appliance, shall be located not less than 400 mm and not more than 1200 mm above floor level (see Diagram 5.8 (a)(2)). However, where the design of the appliance requires the switch to be placed at a higher level then it shall be not more than 1400 mm above floor level;
  - (c) for artificial lighting, shall be located not less than 900 mm and not more than 1100 mm above floor level (see Diagram 5.8 (a)(3)). Where the switch is installed for the use of visitors or customers it shall be of the large push pad type;
  - (d) that requires precise hand movement (e.g. a ventilation controller), shall be located not less than 750 mm and not more than 1200 mm above floor level (see Diagram 5.8 (a)(4));
  - (e) that is operated using push buttons that require limited dexterity (e.g. door bell, entry phone etc.), shall be located not more than 1200 mm above floor level (see Diagram 5.8 (a)(5));
  - (f) that requires the user to read a display or setting (e.g. a thermostat), shall be located not less than 1200 mm and not more than 1400 mm above floor level (see Diagram 5.8 (a)(6)); and
  - (g) for a power operated door, shall be located not less than 750 mm and not more than 1000 mm above floor level (see Diagram 5.8 (b)).



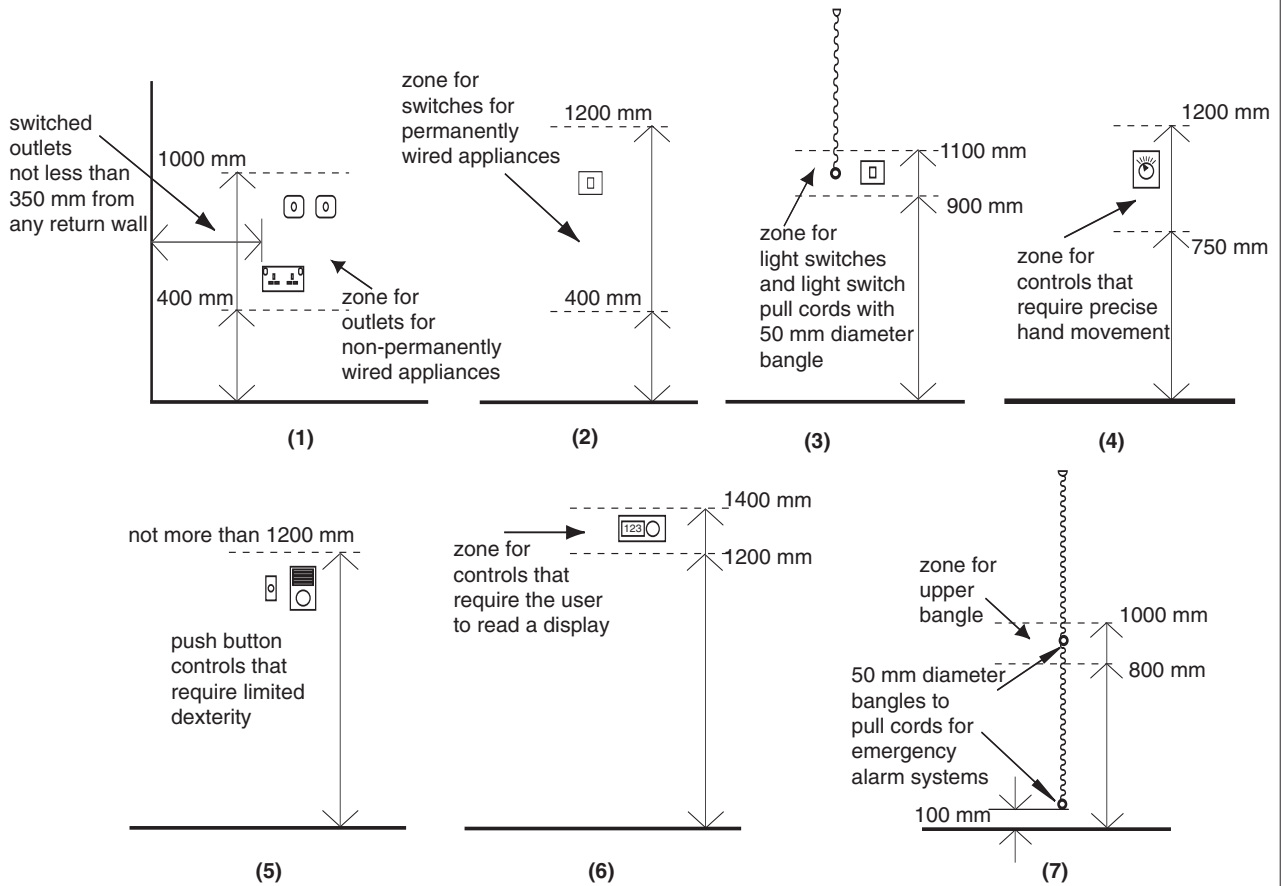
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- 5.36 A switch or control face plate shall be distinguishable, through suitable visual contrast, from the background against which it is seen.
- 5.37 A light cord pull switch shall have a 50 mm diameter bangle attached at a height of not less than 900 mm and not more than 1100 mm above floor level (see Diagram 5.8 (a)(3)). The bangle shall be distinguishable through suitable visual contrast, from the background against which it is seen.
- Where a pull cord light switch is installed in a room or space that also contains an emergency assistance alarm both the pull cord and the bangle shall be distinguishable visually from any emergency assistance alarm pull cord.
- 5.38 An emergency assistance alarm shall have a red coloured pull cord with two red coloured 50 mm diameter bangles. The lower bangle shall be set at a height of 100 mm above floor level and the upper bangle shall be located not less than 800 mm and not more than 1000 mm above floor level (see Diagram 5.8 (a)(7)).

### **Aids to communication**

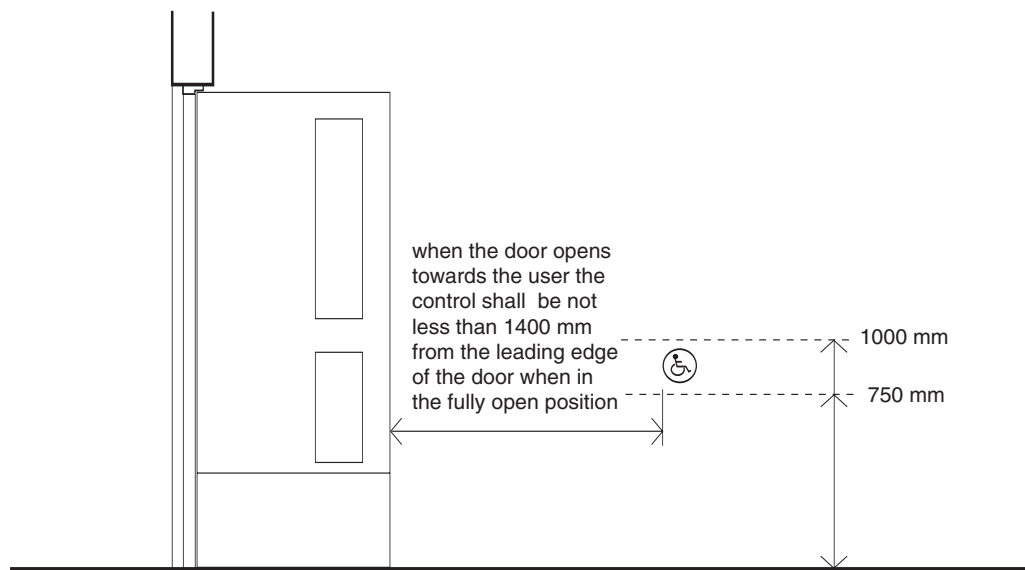
- 5.39 A suitable hearing enhancement system (e.g. loop induction, infra-red or radio system) shall be provided in –
- (a) auditoria and rooms or spaces for performance or spectating;
  - (b) meeting rooms and lecture rooms which are more than 60 m<sup>2</sup> in area; and
  - (c) any service or reception area –
    - (i) where the visitor or customer is separated from the vendor by a glazed screen; or
    - (ii) that is subject to the risk of excessive extraneous noise.
- 5.40 A hearing enhancement system, provided to comply with the provisions of paragraph 5.39, shall be readily apparent to those who require to use it (e.g. indicated by the standard symbol).
- 5.41 A hearing enhancement system shall not be subject to extraneous electrical interference from any artificial lighting installation.

## Diagram 5.8 Outlets, switches and controls

see paras 3.14, 5.32 to 5.35, 5.37 and 5.38



(a) Heights zones for various outlets, controls and switches



(b) Heights zones for automatic door opening controls

- 6.1 This Section contains provisions which ensure that, where sanitary accommodation is provided in a building other than a dwelling or a block of dwellings, there is suitable sanitary accommodation and associated sanitary facilities for the inclusive use of all people.

### Sanitary accommodation and associated sanitary facilities

#### General

- 6.2 A bath, basin or shower terminal fitting in an educational building, or within a facility provided for the use of the public, shall –
- (a) be supplied with water, through a device or other suitable means, so that the temperature of the water discharged at the outlet does not exceed 43°C; and
  - (b) have the flow of water controlled, either automatically or by a device, that is capable of being operated with a closed fist (e.g. by a lever action).
- 6.3 A door to a water closet compartment or unisex accessible sanitary accommodation shall –
- (a) comply with the provisions of paragraph 3.10 and 3.12;
  - (b) where a privacy bolt is installed, be fitted with a privacy bolt that can be operated by people with limited dexterity; and
  - (c) be capable of being opened outwards from the outside in the case of an emergency.
- 6.4 An emergency assistance alarm shall be provided in –
- (a) wheelchair accessible sanitary accommodation;
  - (b) a wheelchair accessible shower room; and
  - (c) a wheelchair accessible bathroom.
- 6.5 An emergency assistance alarm provided to comply with paragraph 6.4 shall have –
- (a) a signal distinguishable from that of any installed fire alarm;
  - (b) a visual and an audible indication to confirm to the user that the emergency alarm has been activated; and
  - (c) a visual and an audible call signal outside the wheelchair accessible facility. This shall be located in an area where it will be easily seen and heard by those who may be able to give assistance.
- 6.6 An emergency assistance alarm activating pull cord shall –
- (a) comply with the provisions of paragraph 5.38;
  - (b) where it is within unisex accessible sanitary accommodation, be reachable from the water closet and the floor of the transfer space adjacent to the water closet;

- 
- (c) where it is within a wheelchair accessible shower facility, be reachable from the shower seat and the transfer space adjacent to the shower seat; and
  - (d) where it is within a wheelchair accessible bath facility, be reachable from the bath and the transfer space adjacent to the bath.
- 6.7 An emergency assistance alarm reset button(s) shall be capable of being operated from the –
- (a) water closet, within wheelchair accessible sanitary accommodation;
  - (b) shower seat, within a wheelchair accessible shower room; and
  - (c) bath, within a wheelchair accessible bathroom.
- 6.8 A heat emitter within sanitary accommodation, with which a person is likely to come into contact, that has any exposed surface capable of being heated to a temperature of 43°C or more, shall be adequately guarded.
- 6.9 Sanitary fittings, grab bars and support rails within a water closet compartment or unisex wheelchair accessible sanitary accommodation, shall be distinguishable, through suitable visual contrast, from the background against which they are seen.
- 6.10 Where a fire alarm is provided within sanitary accommodation, it shall emit both an audible and visual alarm signal.

### **Sanitary accommodation**

- 6.11 At each location where there is sanitary accommodation for visitors, customers or staff, at least one unit of unisex wheelchair accessible sanitary accommodation shall be provided (see Diagram 6.1). However, where the space within a building is severely restricted and only one unit of sanitary accommodation is provided for use by all persons, that sanitary accommodation shall be as shown in Diagram 6.2.
- 6.12 Within traditional separate sex sanitary accommodation, not less than one compartment suitable for ambulant disabled people shall be provided (see Diagram 6.3(a)).
- 6.13 Where the separate sex sanitary accommodation contains 4 or more water closet compartments, not less than one compartment shall be enlarged as shown in Diagram 6.3(b).
- 6.14 The sanitary accommodation for a guest bedroom which is designed as a wheelchair accessible bedroom, shall be provided either –
- (a) en-suite, where that is the arrangement for the rest of the bedrooms; or
  - (b) nearby and on the same storey as the wheelchair accessible bedrooms, with at least one unit for every 6 such bedrooms or part thereof.

This provision is in addition to that required by paragraph 6.11.

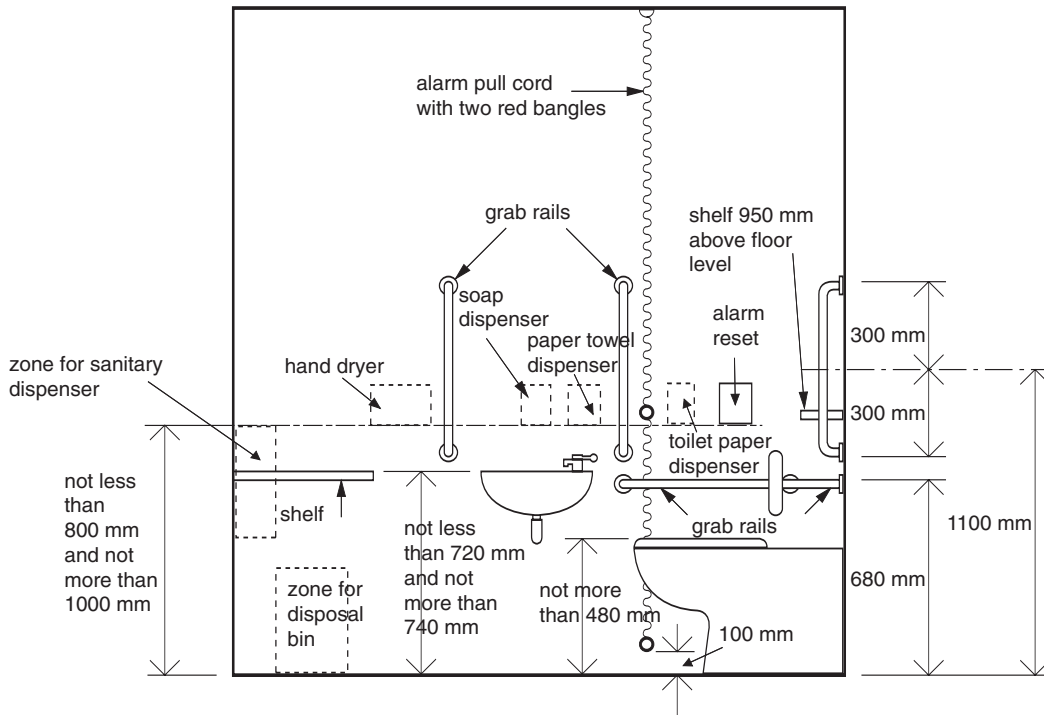
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### **Wheelchair accessible unisex sanitary accommodation**

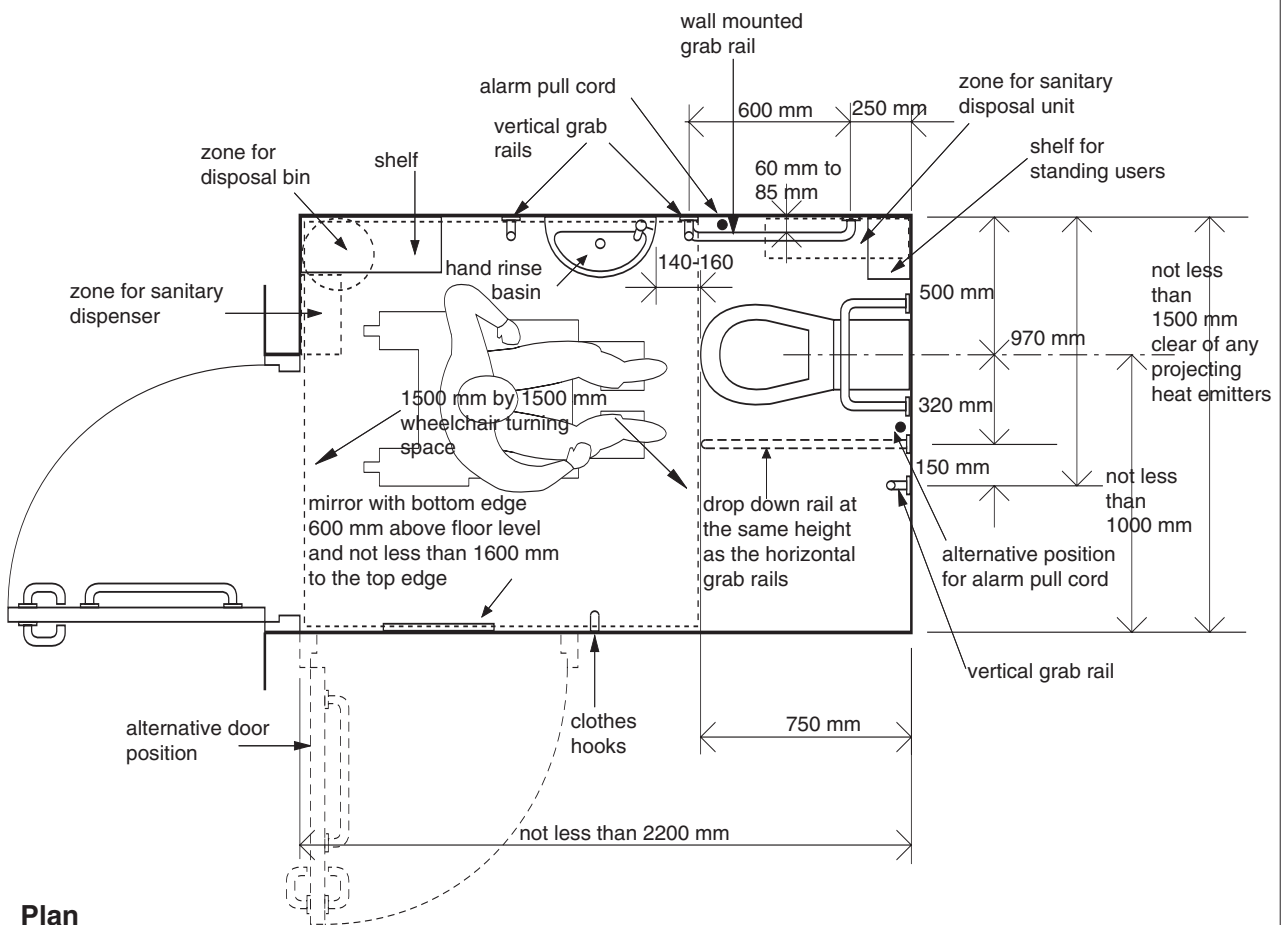
- 6.15 Where there is more than one unit of unisex wheelchair accessible sanitary accommodation –
- (a) within a building of two or more storeys, the unisex accommodation shall be located in a similar position on each floor, where the sanitary accommodation is provided, and shall allow for right and left hand transfers on alternate floors; or
  - (b) within a single storey building, there shall be a mixture of left and right hand transfer layouts.
- 6.16 Unisex wheelchair accessible sanitary accommodation shall have –
- (a) a horizontal closing bar, fixed to the inside face of the door;
  - (b) a water closet, complying with the key dimensions shown in Diagram 6.4; and
  - (c) the cistern flushing lever, located on the transfer space side of the water closet.
- 6.17 Where a heat emitter is provided within unisex wheelchair accessible sanitary accommodation, it shall be located so as not to cause an obstruction within the wheelchair manoeuvring space or the transfer space adjacent to the water closet.

## Diagram 6.1 Wheelchair accessible unisex sanitary accommodation

see paras 6.11 and 6.20



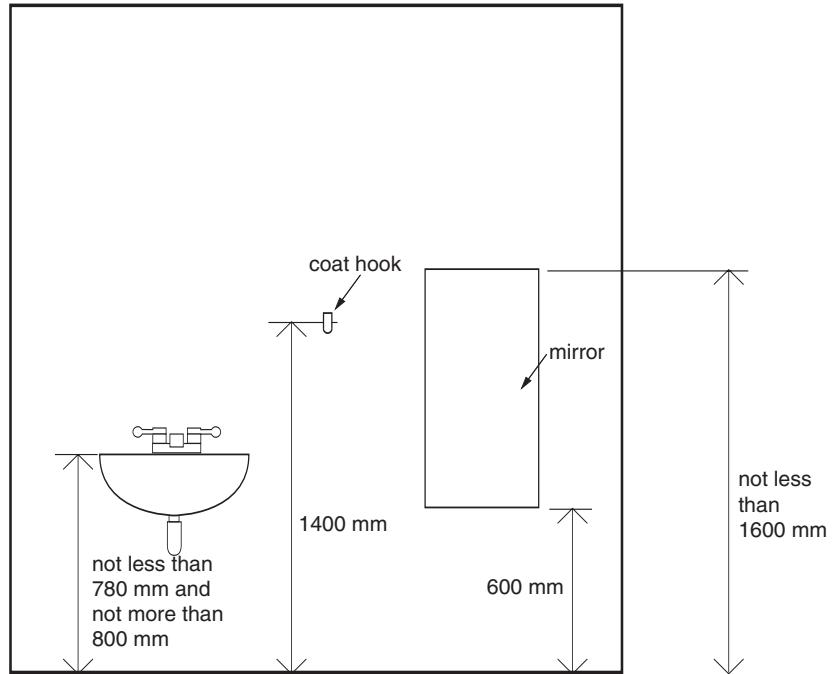
### Section



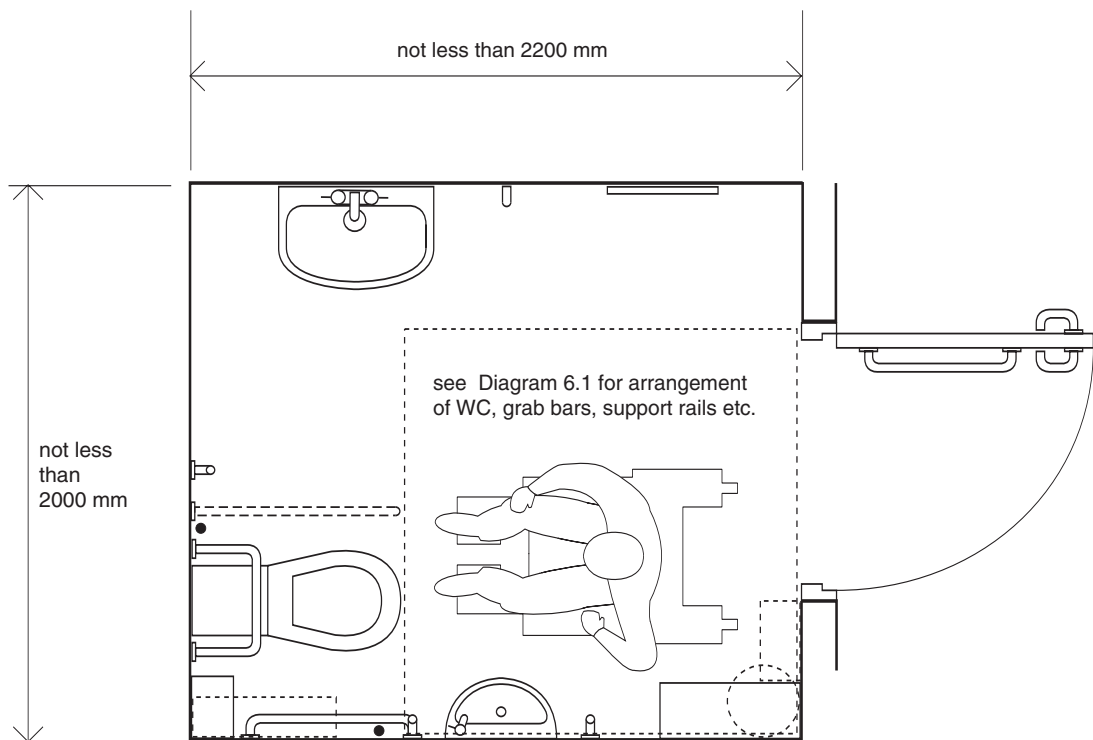
### Plan

**Diagram 6.2 Wheelchair accessible unisex sanitary accommodation incorporating a standing height wash hand basin**

see para 6.11



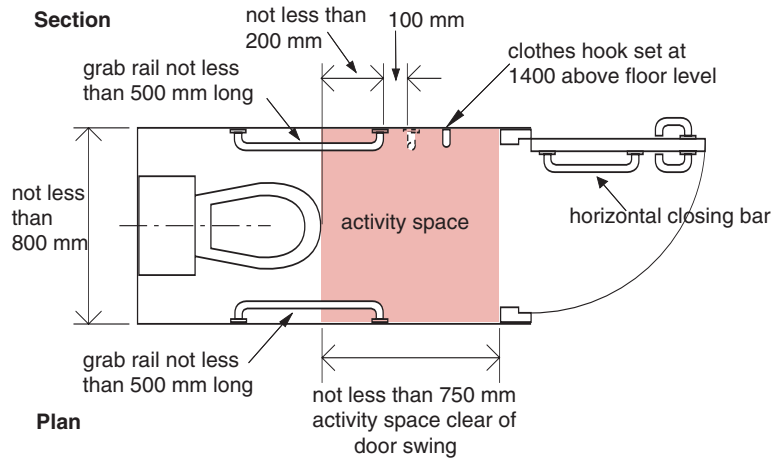
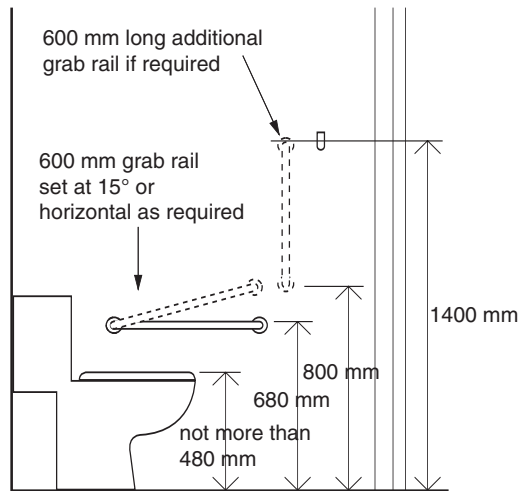
**Section**



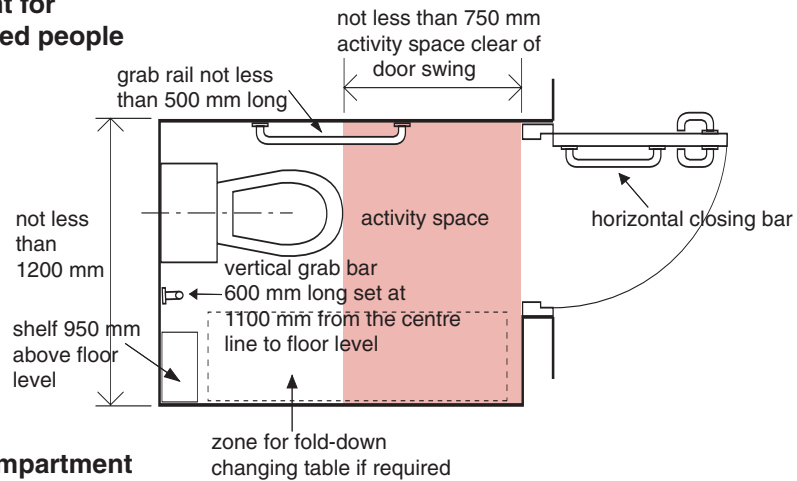
**Plan**

## Diagram 6.3 WC compartments

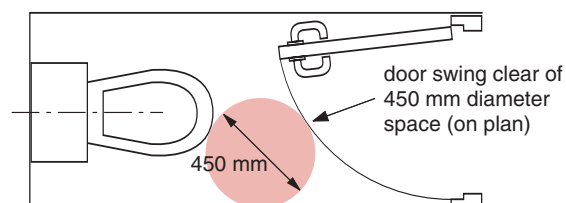
see paras 6.12, 6.13 and 6.19



**(a) WC compartment for ambulant disabled people**



**(b) Enlarged WC compartment**

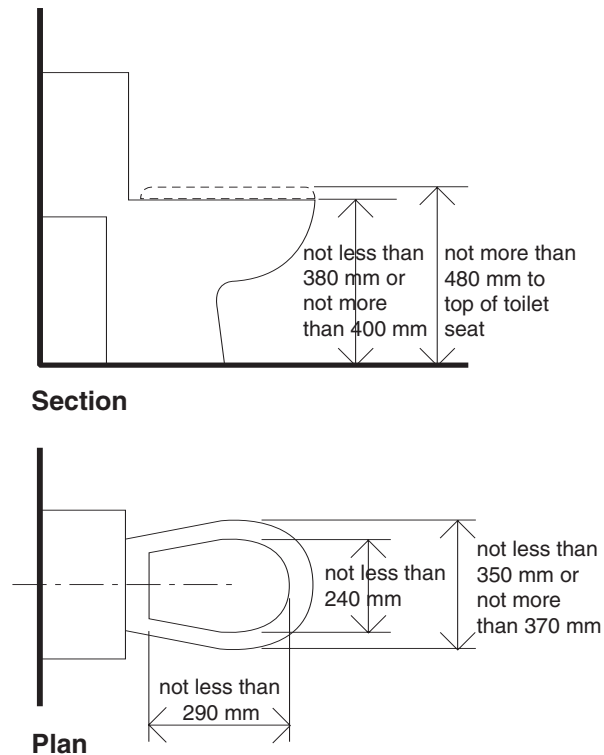


**(c) Standard WC compartment with an inward opening door**



## Diagram 6.4 Key dimensions of a WC pan

see paras 6.16 and 6.21



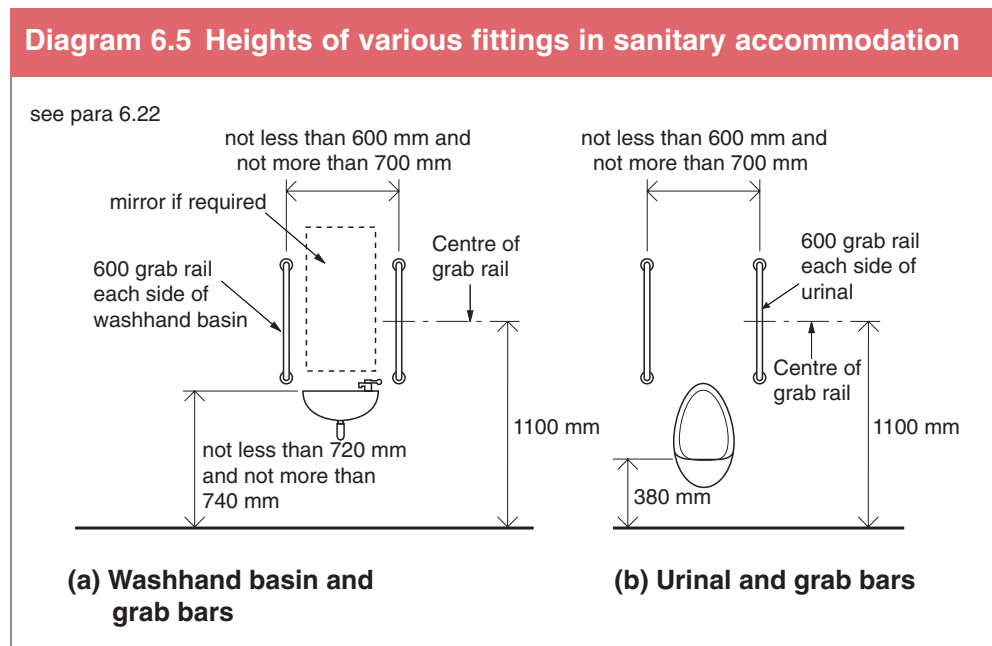
- 6.18 The horizontal travel distance from any area, to which a wheelchair user has access, to unisex wheelchair accessible sanitary accommodation shall –
- be not more than 40 m on the same storey; and
  - be not more than 40 m cumulative horizontal travel distance, where the unisex wheelchair accessible sanitary accommodation is on any other storey, and is accessed by a passenger lift. However, where the unisex sanitary accommodation is on a storey accessed by a lifting platform, the vertical travel shall be not more than one storey.

### Sanitary facilities

- 6.19 Within traditional separate sex sanitary accommodation, a water closet compartment not designed as suitable for ambulant disabled people or wheelchair users shall, where the door opens into the compartment, have an unobstructed manoeuvring space of not less than 450 mm diameter clear of any door swing (see Diagram 6.3(c)).
- 6.20 Where a wheelchair accessible water closet compartment is provided within traditional separate sex sanitary accommodation, it shall have the minimum dimensions and arrangement of fittings as shown in Diagram 6.1.
- 6.21 A compartment suitable for ambulant disabled people shall have a water closet complying with the key dimensions shown in Diagram 6.4.

6.22 Within traditional separate sex sanitary accommodation –

- (a) at least one wash hand basin shall have –
  - (i) its rim not less than 720 mm and not more than 740 mm above floor level; and
  - (ii) two vertical grab bars located as shown in Diagram 6.5(a), and
- (b) where urinals are installed, at least one urinal shall have –
  - (i) its rim at 380 mm above floor level; and
  - (ii) two vertical grab bars located as shown in Diagram 6.5(b).



### Shower and bath facilities

- 6.23 Where a communal shower facility is provided, it shall include a wheelchair accessible incorporated shower facility within the communal facility. Incorporated shower facilities shall have the minimum dimensions and arrangement of fittings as shown in Diagram 6.6.
- 6.24 In addition to the requirements of paragraph 6.23, where there is a shower facility in a building for sports activities, an individual wheelchair accessible shower room shall also be provided (see Diagram 6.6).
- 6.25 Where there is a shower facility for staff, not less than one individual wheelchair accessible shower room shall also be provided. However, where it is impracticable to provide an individual wheelchair accessible shower room, an incorporated individual wheelchair accessible shower facility shall be provided.
- 6.26 A wheelchair accessible bedroom shall have a shower or bath facility complying with the provisions of paragraphs 6.29 and 6.30 provided either –
- (a) en-suite, where that is the arrangement for the rest of the bedrooms; or
  - (b) nearby, and on the same storey as the wheelchair accessible bedrooms and with at least one shower or bath facility for every 6 such bedrooms or part thereof.

- 
- 6.27 Where there is more than one wheelchair accessible shower or bath facility, a mixture of left and right hand transfer layouts shall be provided.
- 6.28 An individual wheelchair accessible shower or bath facility shall have a fixed storage system for limb storage for the benefit of amputees.

### **Shower facilities**

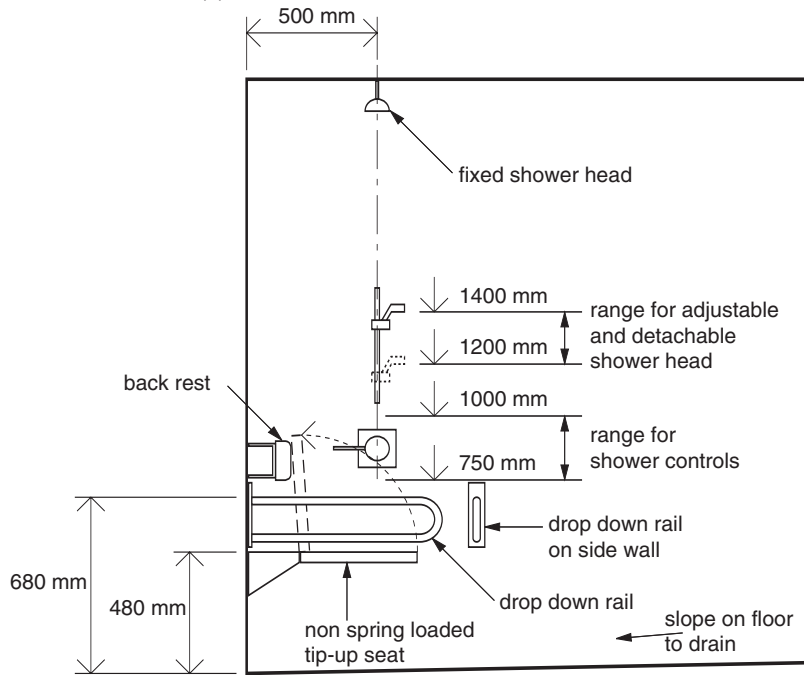
- 6.29 An individual wheelchair accessible shower room shall have –
- (a) the minimum dimensions and arrangement of fittings as shown in Diagram 6.6;
  - (b) a storage shelf that is reachable from the shower seat or from the wheelchair transfer space;
  - (c) a floor –
    - (i) with a surface that reduces the risk of slipping; and
    - (ii) with a fall not steeper than 1 in 50 towards the floor drain; and
  - (d) where it incorporates a water closet, the minimum dimensions and arrangement of fittings as shown in Diagram 6.7.

### **Bath facilities**

- 6.30 An individual wheelchair accessible bathroom shall have –
- (a) the minimum dimensions and arrangement of fittings as shown in Diagram 6.8;
  - (b) a floor with a surface that reduces the risk of slipping;
  - (c) a fixed bath transfer seat, not less than 400 mm deep, having the same width as the bath; and
  - (d) where it incorporates a water closet, the minimum dimensions and arrangement of fittings as shown in Diagram 6.8.

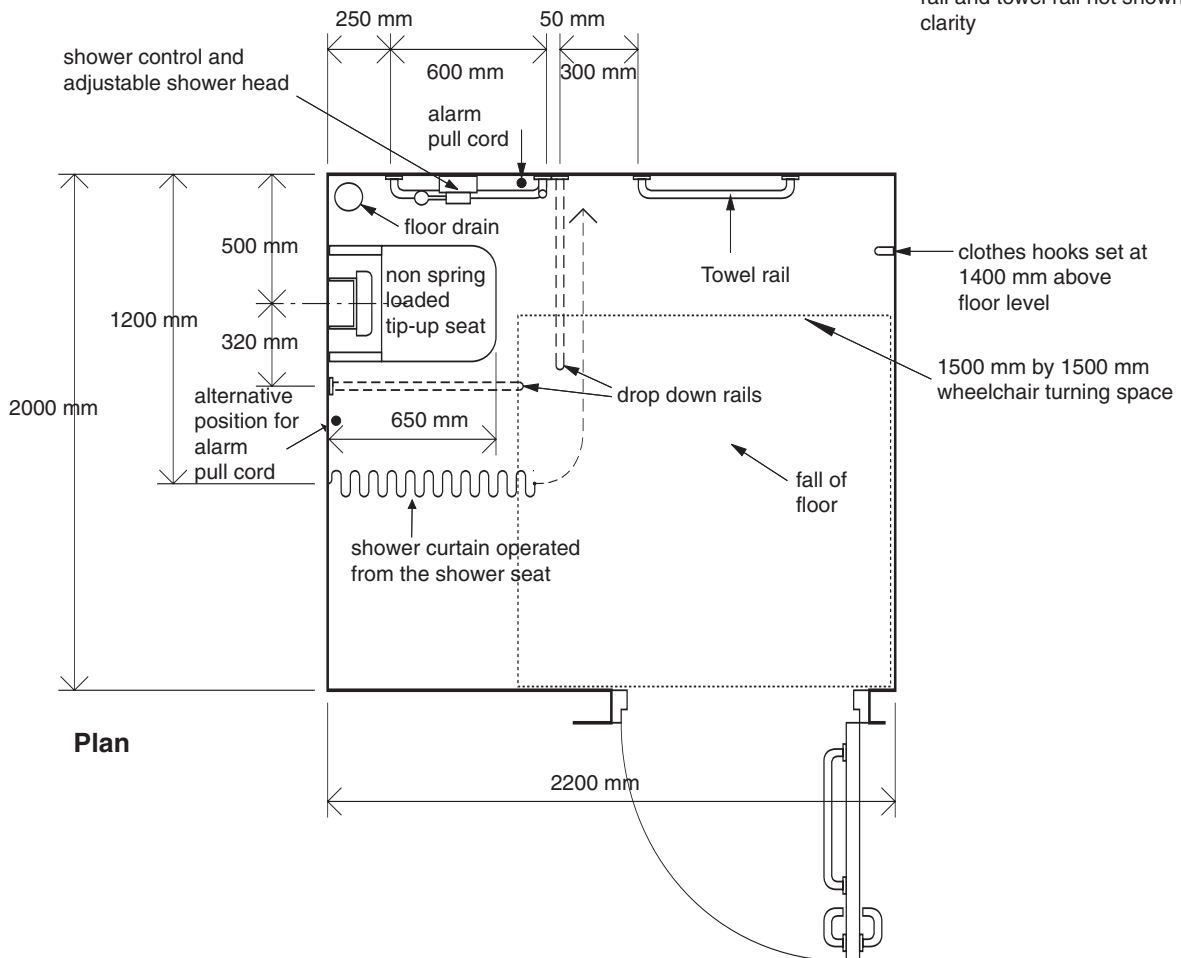
## Diagram 6.6 Suitable individual wheelchair accessible shower room

see paras 6.23, 6.24 and 6.29(a)



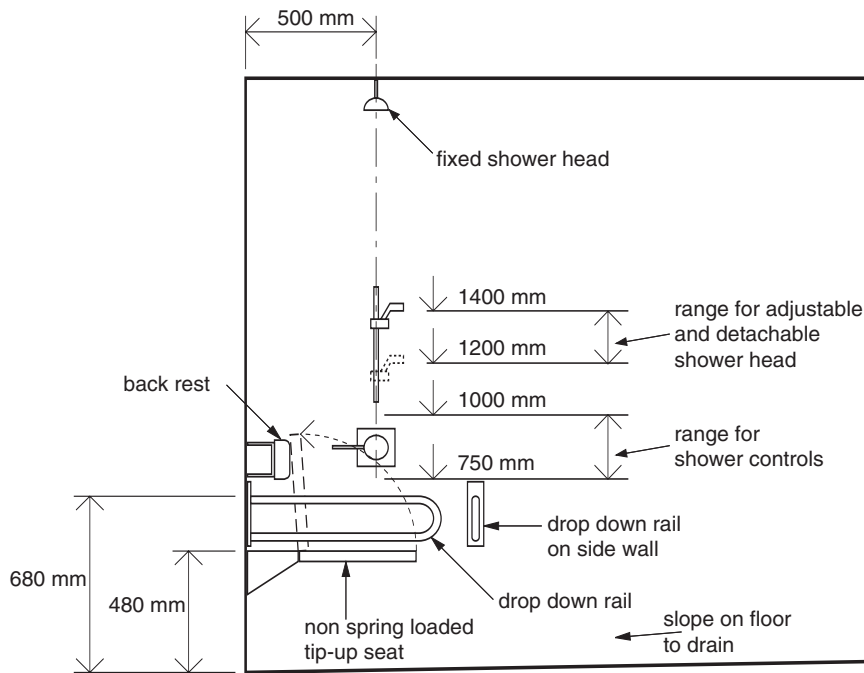
### Elevation

Note:  
alarm pull cord, horizontal and vertical grab rails, shower curtain rail and towel rail not shown for clarity



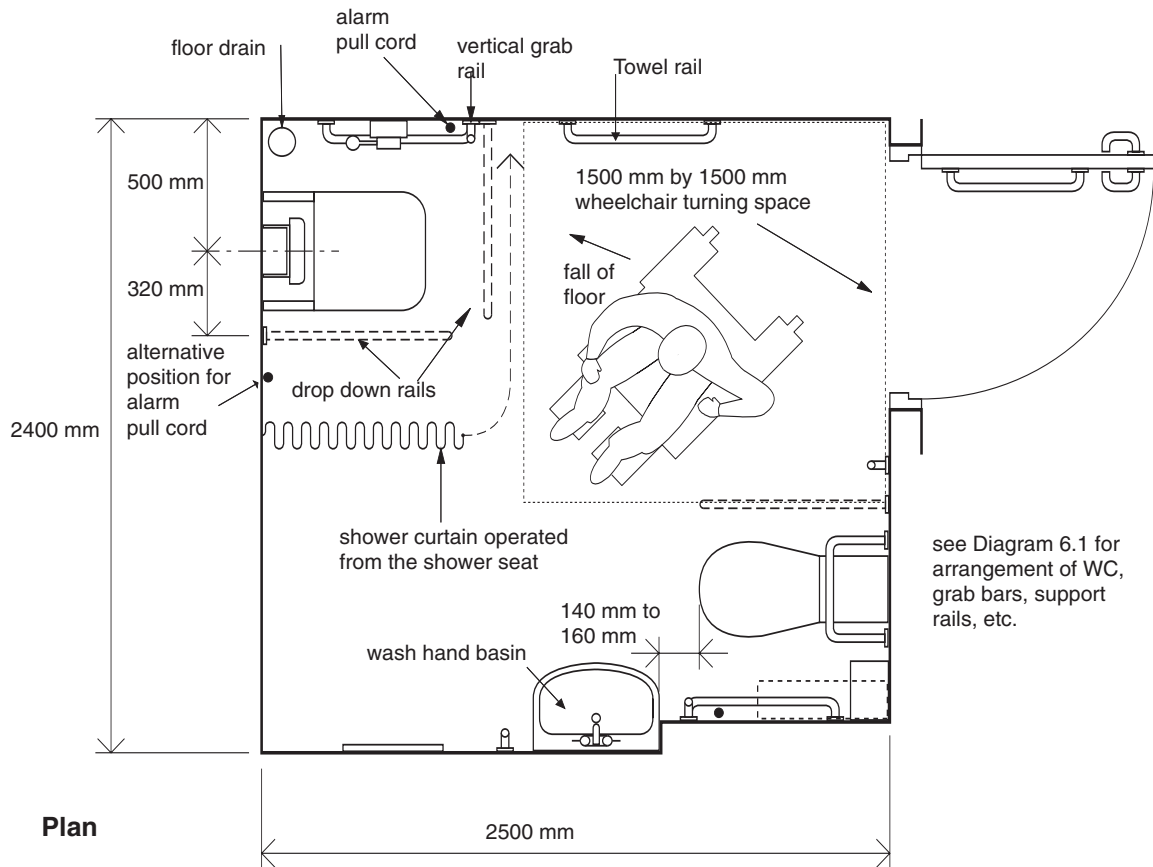
**Diagram 6.7 Suitable individual wheelchair accessible shower room incorporating a WC and a standing height wash hand basin**

see para 6.29(d)



Note:  
alarm pull cord, horizontal and vertical grab rails, shower curtain rail and towel rail not shown for clarity

**Elevation**

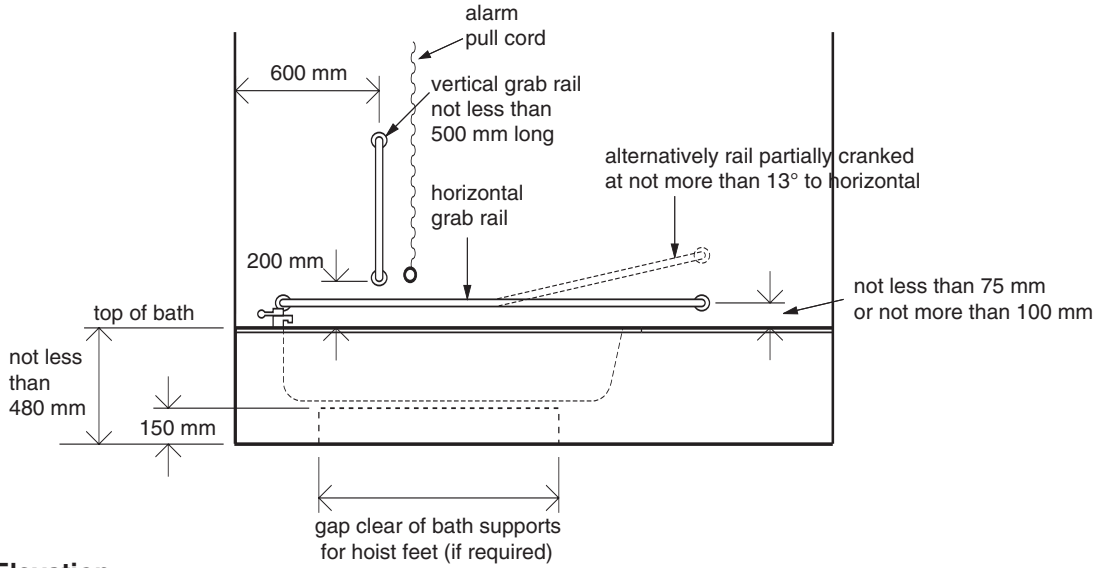


see Diagram 6.1 for arrangement of WC, grab bars, support rails, etc.

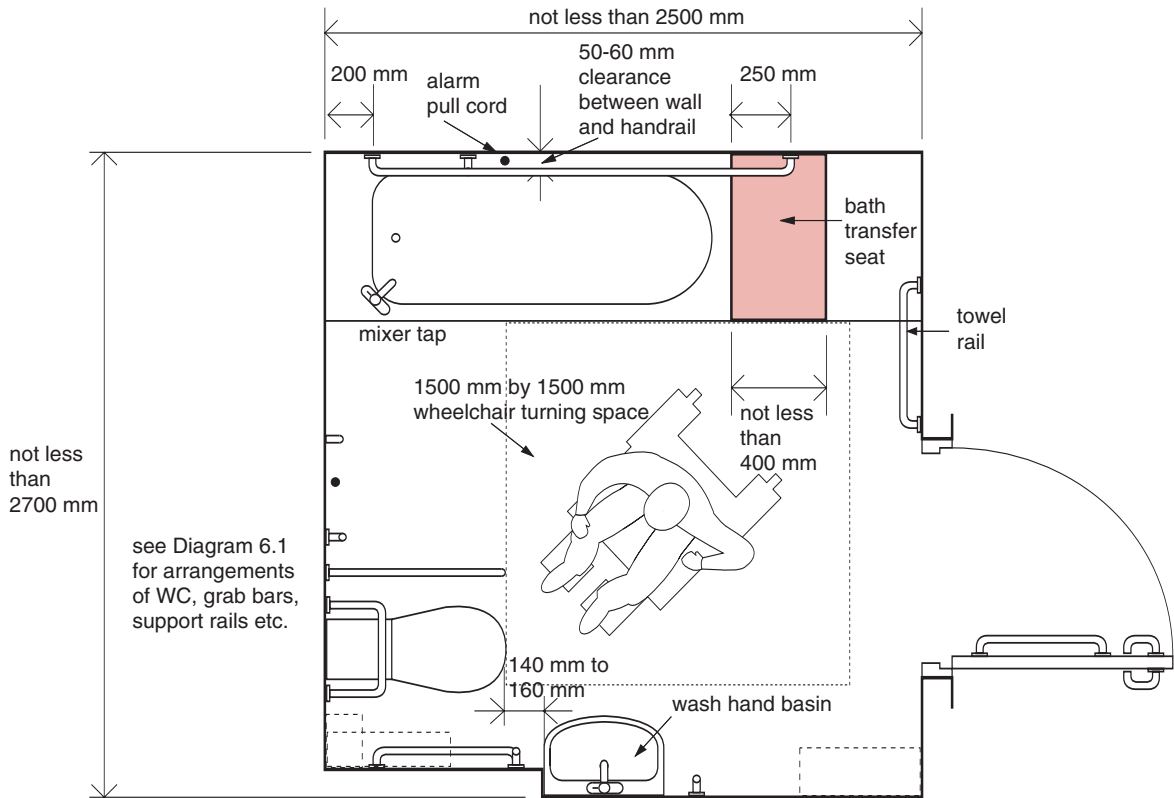
**Plan**

**Diagram 6.8 Suitable bathroom layout incorporating a WC and a standing height wash hand basin**

see para 6.30



**Elevation**



**Plan**

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# Dwellings and blocks of dwellings

- 7.1 This Section deals with the external approach to a dwelling and to a common entrance to a block of dwellings.

### **General provisions**

- 7.2 Disabled people shall have access from the point of entry to the principal entrance of a dwelling or the common entrance to a block of dwellings by –
- (a) a level approach complying with the provisions of paragraph 7.6; or
  - (b) a ramped approach complying with the provisions of paragraph 7.7.

A combination of (a) and (b) may be used.

- 7.3 Where the plot gradient to the principal entrance of a dwelling or the common entrance to a block of dwellings is greater than –

- (a) 1 in 15; or
- (b) 1 in 12 where the travel distance is less than 5m,

access may be provided to an alternative entrance complying with the provisions of paragraph 7.2.

Where the plot gradient to an alternative entrance is greater than (a) or (b), a stepped approach complying with the provisions of paragraph 7.8 shall be provided.

- 7.4 Where the point of entry is at the boundary of the plot it shall have an unobstructed width of not less than 900 mm.
- 7.5 Where a driveway provides the whole or part of the approach, it shall comply with the provisions of paragraphs 7.6 or 7.7. The approach shall be clear of any parking space.

Where there is a need to guard the approach, guarding shall be provided complying with the provisions of Technical Booklet H: Section 4 (where category 1 (b) or (d) in Table 4.1 shall be used).

### **Level approach**

- 7.6 A level approach shall have –
- (a) a surface which is firm and even;
  - (b) an unobstructed width not less than 900 mm; and
  - (c) a slope not exceeding 1 in 20.

Where a level approach has a crossfall it shall not exceed 1 in 40.

### **Ramped approach**

- 7.7 A ramped approach shall have –
- (a) a surface which is firm and even;
  - (b) an unobstructed width not less than 900 mm;



- (c) a ramp or ramps not exceeding –
  - (i) 10 m in length where the slope of the ramp does not exceed 1 in 15; or
  - (ii) 5 m in length where the slope of the ramp does not exceed 1 in 12; and
- (d) landings with an unobstructed length of not less than 1200 mm.

### Stepped approach

7.8 A stepped approach shall have –

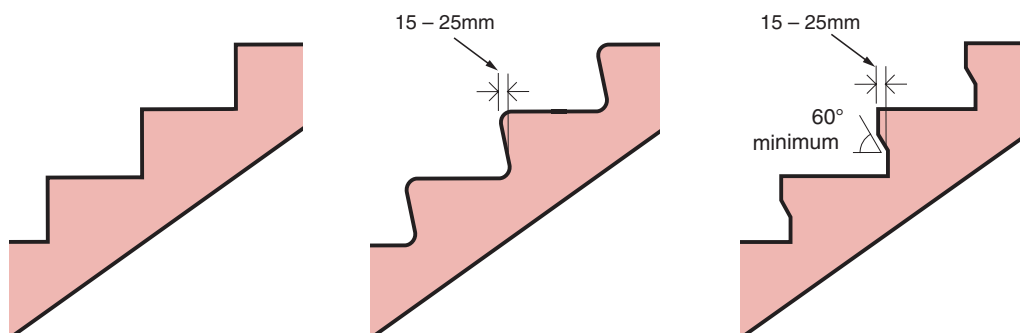
- (a) a flight or flights with an unobstructed width of not less than 900 mm;
- (b) a rise of not more than 1800 mm in each flight of steps;
- (c) steps with a uniform rise of not less than 75 mm and not more than 150 mm;
- (d) steps with a uniform going of not less than 280 mm (which in the case of tapered treads shall be measured at a point 270 mm from the narrow end);
- (e) steps that are not open and have a suitable profile such that the risk of tripping is reduced (see Diagram 7.1);
- (f) a maximum of 16 steps in a flight;
- (g) landings with an unobstructed length of not less than 900 mm; and
- (h) a suitable continuous handrail (see paragraph 7.9) on one side of the flight and at an intermediate landing where the flight comprises three or more steps.

7.9 A stepped approach shall have a suitable handrail which –

- (a) is at a height measured vertically of –
  - (i) 900 mm above the pitch line of a flight of steps; and
  - (ii) 1000 mm above the surface of a landing; and
- (b) extends not less than 300 mm horizontally beyond the top and bottom nosings of a flight of steps.

**Diagram 7.1 External step profiles**

see para 7.8



## Principal entrance

- 7.10 The principal entrance to a dwelling or the common entrance to a block of dwellings shall have a door with a minimum clear opening width of not less than 775 mm and a level threshold (see Diagram 7.2).

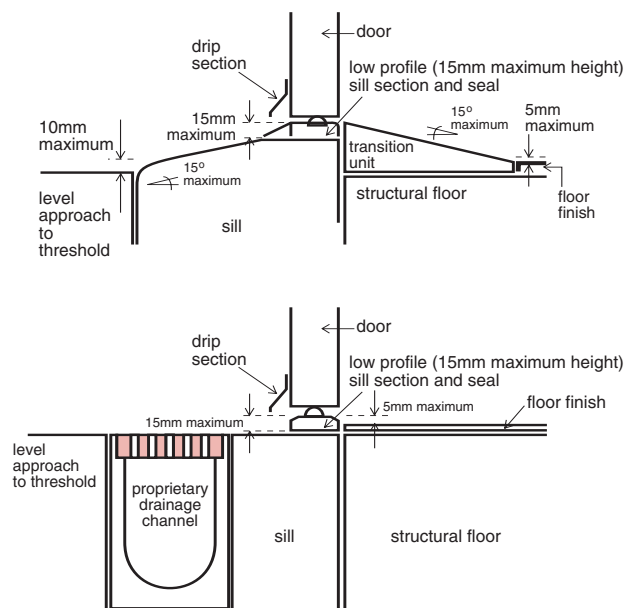
The access to the principal entrance to a dwelling or the common entrance to a block of dwellings shall be –

- (a) level for a distance of not less than 900 mm; and
- (b) at or about the level of the floor of the dwelling.

Where access is by an alternative entrance the above provisions shall apply to that entrance and not to the principal entrance or the common entrance to a block of dwellings.

**Diagram 7.2 Level thresholds**

see para 7.10



- 8.1 In a dwelling, disabled people shall have access from the principal entrance (or an alternative entrance) to all habitable rooms and to a sanitary convenience in the entrance storey. However, where there are no habitable rooms in the entrance storey, disabled people shall have access to all habitable rooms and to a sanitary convenience in the principal storey.

### Horizontal circulation

#### Widths of circulation routes and doorways

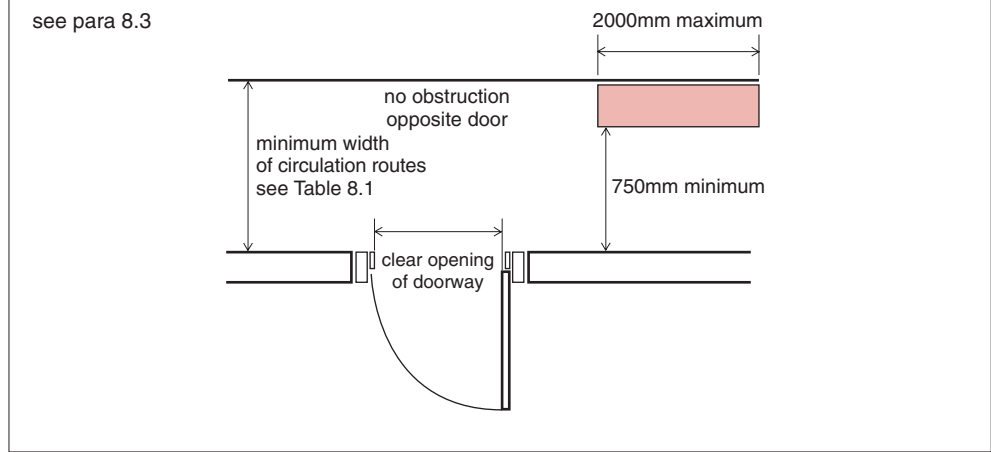
- 8.2 The widths of circulation routes and doorways are interrelated and depend on the direction of approach of a wheelchair. Table 8.1 gives the minimum widths of circulation routes for a range of doorway widths and directions of approach.

<b>Clear opening of doorway (mm)</b>	<b>Direction of approach</b>	<b>Minimum width of circulation route (mm)</b>
750	head on	900
750	not head on	1200
775	not head on	1050
800	not head on	900

- 8.3 The width of a circulation route may be reduced to 750 mm at a local permanent obstruction or projection provided that the obstruction or projection is not greater than 2000 mm in length and is not located –
- (a) opposite a door to a room; or
  - (b) where it would prevent a wheelchair user turning into or out of a room.

See Diagram 8.1.

**Diagram 8.1 Obstructions in circulation routes**



## Vertical circulation

### Stairs

- 8.4 Where the circulation route within the entrance storey or the access to the circulation route within the principal storey includes a stair, the stair shall –
- (a) have an unobstructed width of not less than 900 mm;
  - (b) have a suitable continuous handrail on each side of the flight and any intermediate landing; and
  - (c) comply with the relevant provisions of Technical Booklet H.

- 9.1 This Section deals with access within the common areas of a block of dwellings e.g. flats, and contains provisions for horizontal and vertical circulation.

Common areas are the circulation routes used by the occupants of the dwellings and include the entrance halls, corridors, lobbies, stairs and lifts.

- 9.2 Access for disabled people shall be provided from the common entrance of the block of dwellings to the principal entrance of each dwelling.

### Horizontal circulation

- 9.3 A horizontal circulation route within a common area shall be level or ramped and have an unobstructed width of not less than 1200 mm.

Where a handrail is provided, the width at handrail level may be reduced to not less than 1000 mm.

Where the circulation route contains a ramp, the ramp shall –

- (a) not exceed –
  - (i) 10 m in length where the slope of the ramp does not exceed 1 in 15; or
  - (ii) 5 m in length where the slope of the ramp does not exceed 1 in 12;
- (b) have landings with an unobstructed length of not less than 1200 mm; and
- (c) have a suitable continuous handrail on each side if the horizontal length of the ramp is more than 2000 mm.

### Vertical circulation

- 9.4 A vertical circulation route to any storey shall be provided by a common stair and where a lift is provided, by a suitable passenger lift.

#### Common stairs

- 9.5 A common stair shall have –
- (a) step nosings which are distinguishable, through permanent contrasting brightness;
  - (b) an unobstructed width of not less than 1000 mm;
  - (c) steps with a uniform rise of not more than 170 mm;
  - (d) steps with a uniform going of not less than 250 mm (which, in the case of tapered treads shall be measured at a point 270 mm from the narrow end);
  - (e) rises which are not open and have a suitable profile such that the risk of tripping is reduced, (see Diagram 9.1(b));

- 
- (f) landings with an unobstructed length of not less than 1200 mm clear of any door swing onto them; and
  - (g) a suitable continuous handrail on each side and the handrail shall extend not less than 300 mm horizontally beyond the top and bottom nosings.

See Diagram 9.1.

- 9.6 Where a passenger lift is provided a common stair need only comply with (a) and (g) of paragraph 9.5.

### **Passenger lifts**

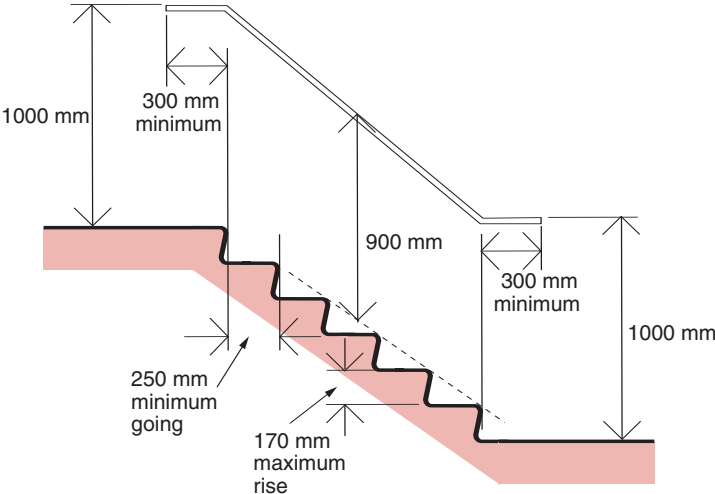
- 9.7 A passenger lift shall –

- (a) have a door or doors which provide a clear opening width of not less than 800 mm;
- (b) have a car with a width of not less than 900 mm and a depth not less than 1250 mm measured internally;
- (c) have controls which are not less than 900 mm or more than 1200 mm above the floor of the car and are not less than 400 mm horizontally from the front wall of the car;
- (d) where it serves more than three storeys have visual and audible indications of the floor reached;
- (e) incorporate a signalling system which gives 5 seconds notification that the lift is answering a landing call, and a dwell time of 5 seconds before its doors begin to close after they are fully open. The dwell time may be reduced to 3 seconds where the door closing system is overridden by a door re-activating device which relies on photo-electric or infra-red methods, but not a door edge pressure system;
- (f) have a landing on each storey with –
  - (i) an unobstructed length and width of not less than 1500 mm in front of the door to the lift; and
  - (ii) lift call buttons which are not less than 900 mm or more than 1200 mm above the floor level of the landing and are accompanied by suitable tactile indications (on or adjacent to the buttons) to identify the storey and direction of travel; and
- (g) have a minimum load capacity of 400 kg.

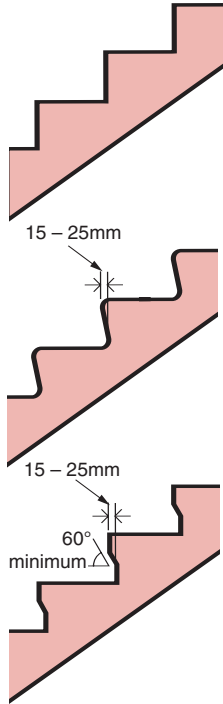
Many of the above features are shown in Diagram 4.1.

**Diagram 9.1 A common stair in a block of dwellings**

see para 9.5



**(a) Common stair and handrails**



**(b) Examples of suitable tread nosing profiles**

## Section 10 Sanitary convenience in a dwelling

- 10.1 A water closet shall be located so as to have a clear space of not less than 900 mm by 750 mm for a disabled person to access it (see Diagrams 10.1 and 10.2). The wash-hand basin may project into this clear space provided that it does not impede access to the water closet.
- 10.2 For frontal access to the water closet the clear space shall be centred on the water closet as shown in Diagram 10.1.  
For oblique access to the water closet the clear space shall be offset towards the access as shown in Diagram 10.2.
- 10.3 A doorway providing access to the sanitary convenience shall –
- be positioned to enable a wheelchair user to access the clear space in front of the water closet;
  - have a clear opening width of not less than that given in Table 10.1; and
  - where there is oblique access, be located so that its edge is not in front of, or 250 mm behind, the water closet, unless there is adequate space within the room to manoeuvre a wheelchair.
- 10.4 The door shall –
- open outwards; or
  - not impinge at any point of its swing upon the clear space.

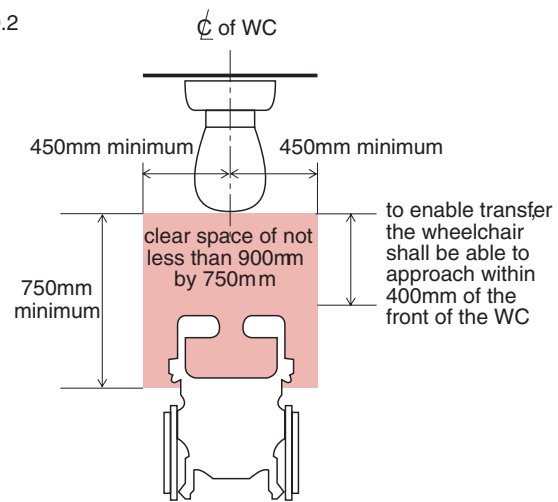
**Table 10.1 Clear opening widths of doorways**

Minimum width of circulation routes (mm)	Direction of approach	Clear opening of doorway (mm)
900	head on	750
1200	not head on	750
1050	not head on	775
900	not head on	800



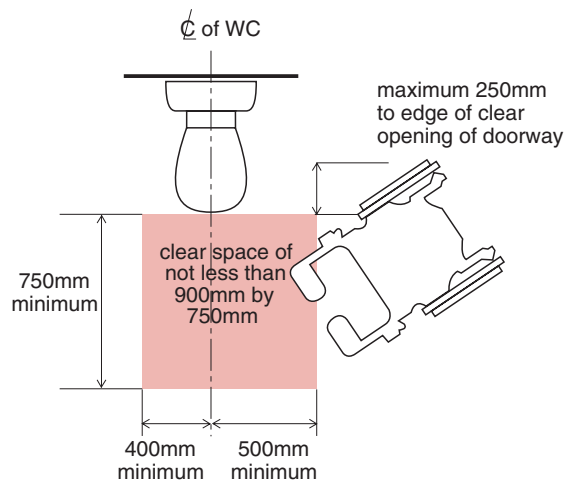
### Diagram 10.1 Clear space for frontal access to the water closet

see paras 10.1 and 10.2



### Diagram 10.2 Clear space for oblique access to the water closet

see paras 10.1 and 10.2



## Section 11 Heights of switches, socket outlets etc. in a dwelling

### General

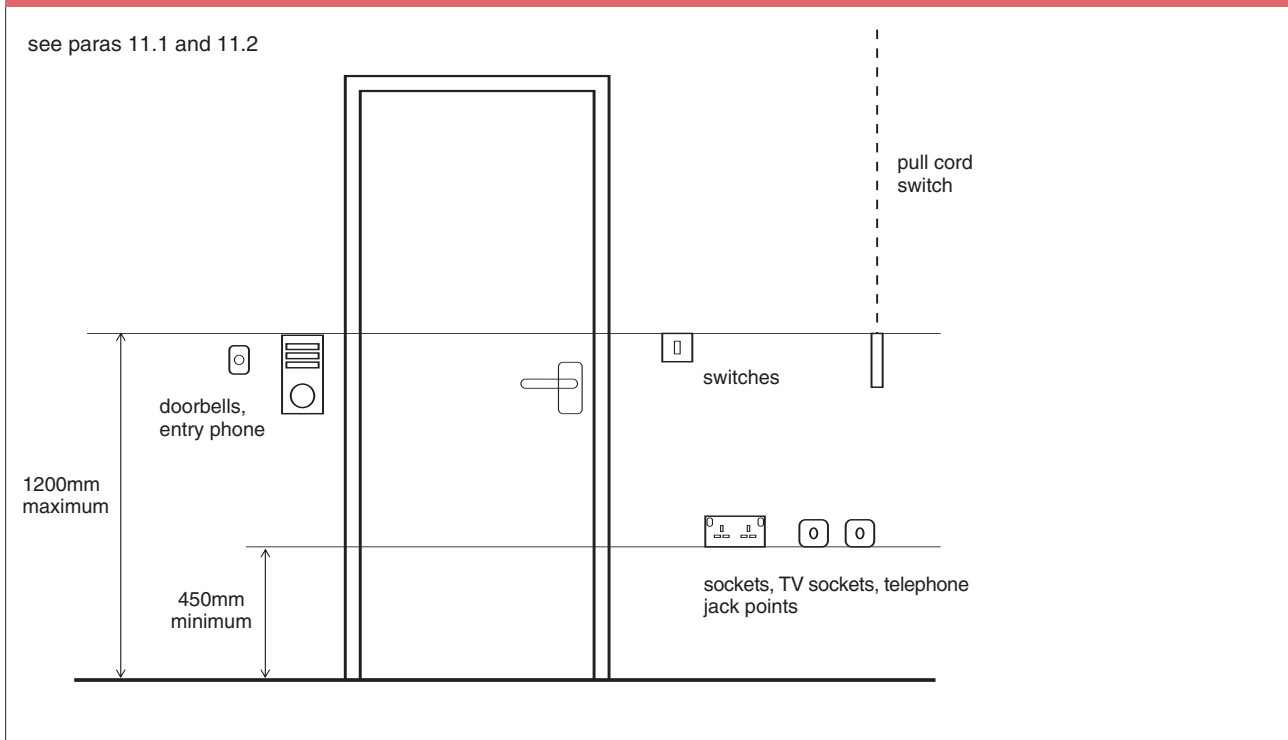
- 11.1 Wall mounted socket outlets and switches (other than isolators) in the entrance storey, and where appropriate the principal storey, shall be located not more than 1200 mm or not less than 450 mm above the floor level.

See Diagram 11.1.

- 11.2 The cord of a pull cord switch shall terminate not more than 1200 mm above the floor level.

See Diagram 11.1.

Diagram 11.1 Heights of switches and socket outlets



## Appendix Publications referred to

DFP Technical Booklet H: 2006 – Stairs, ramps, guarding and protection from impact.