Introduction NSC1

This guidance sets out a summary of the council's physical access requirements for disabled people. Its aim is to promote the use of inclusive design principles and to eliminate disabling barriers in environmental design. There is a need to recognise the importance of placing the usability of buildings at the forefront of design not their aesthetic appearance or a company's corporate aims. Good design is a combination of all of these functions.

Each topic sheet provides the basic functional information required for the subject. More detailed information is contained in the references in each sheet or by visiting the council's equality design website: TheAccessOfficer which lists detailed guidance on all equality issues.

The guidance is applicable to all forms of environmental and construction work, where the public have access, whether or not it will be temporary or permanent (see design sheet "Public access" NSC2 for a definition of what is public).

In preparing the information the council has drawn on national standards, current good practice, and importantly, the views of local disabled people. The guidance uses sizes and dimensions that will result in a "useable" building or open space rather than adherence to a simple technical or manufacturing standard. They are often only the minimum requirements and therefore
there is the expectation that they will be improved upon wherever possible.

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Public Access NSC2

Definition of members of the public or public access

Members of the public are defined as those people who are not the staff (including volunteers) of a business, or those who run a facility, i.e. are there for the purpose of the occupier. Members of the public therefore are likely to be those people who have the opportunity to freely access a building, e.g. a shop or use it by invitation, e.g. an office with a public reception area.

Members of the public are likely to be able to go to or use a building where a public service is offered. This will include many activities provided by a local authority, e.g. a library or a tourist information office. On the other hand a local authority run residential home for older people would not be included because members of the public would not be expected to have free access, unless there is a specific area for general access by the community, e.g. for a luncheon club open to anyone on the day. (It however may be defined as a public function by the Equality Act 2010).

Shops, restaurants, hospitals, places of worship, schools and colleges are all public buildings. They will though have some areas which to a greater or lesser degree may have restricted access for the members of that organisation. Equally, many commercial organisations will have a reception where visitors would arrive and be met without direct access to a general office or an industrial area. The reception would be described as having public access whilst the industrial area etc would be private.

Car parking NSC3

Key principles

Disabled people rely heavily on the car whether it's in the form of a taxi or one they, or friends own. Public transport, though increasingly accessible, does not fully meet their needs in many ways. It is therefore important that parking and provision for dropping off a disabled person is always made even though space may not be provided for anyone else.

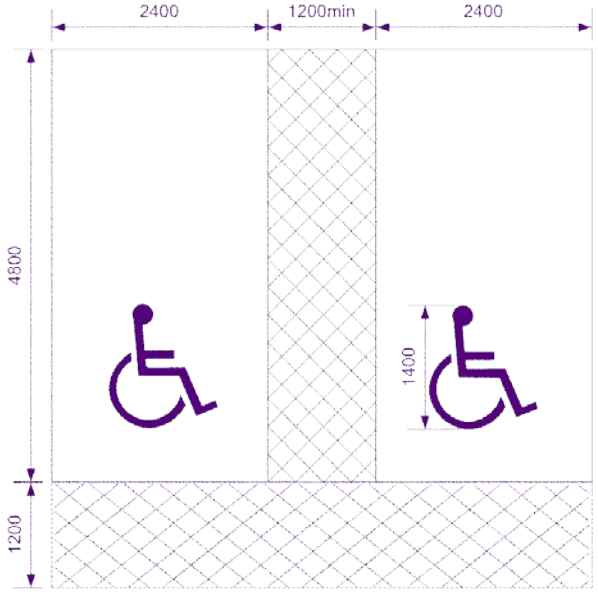
Design criteria

All areas for vehicles

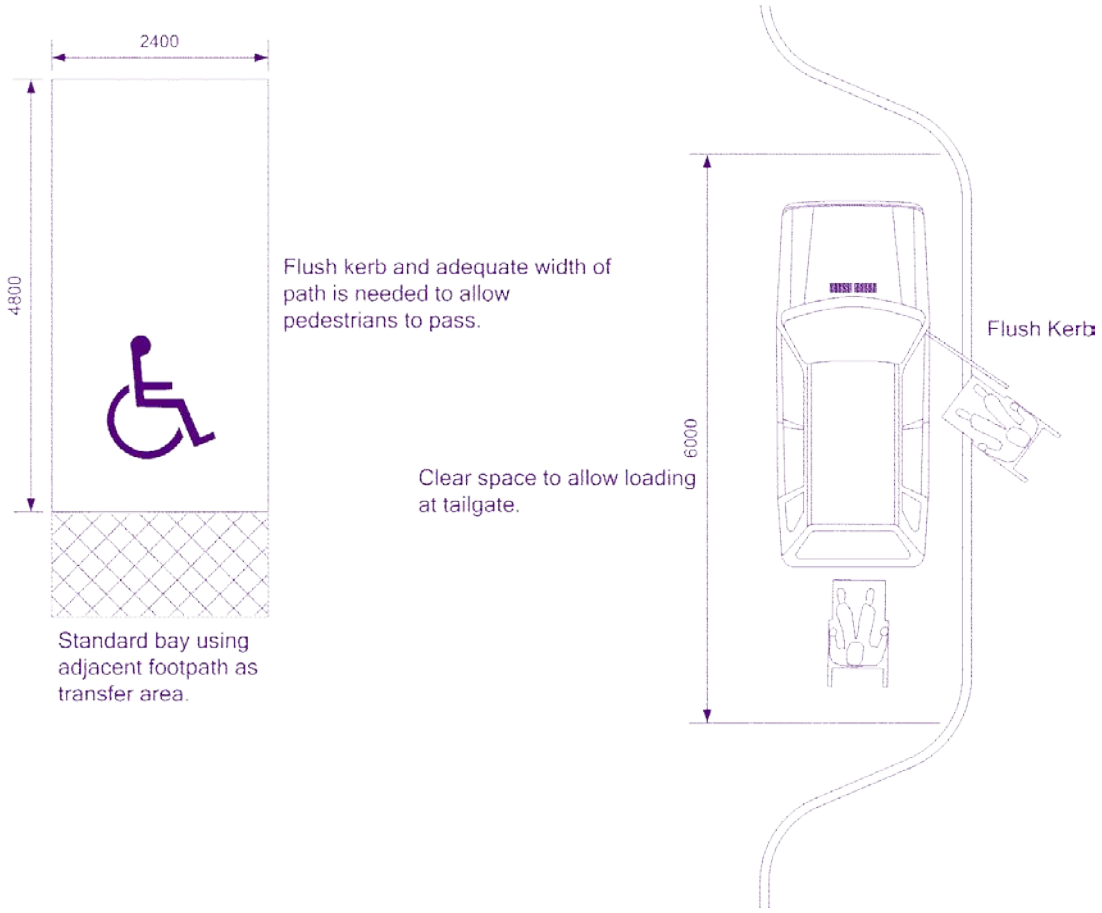
- Surfaces must have a smooth finish avoiding the use of loose granular or riven finishes. (See "Pedestrian routes NSC4" for full guidance).
- Kerbs between the vehicle areas and the pedestrian footway must be ramped or have a dropped kerb to provide access for wheelchair users.
- Entire parking bay must be on level ground.
- Access from the vehicular surface to the footway must be ramped or level and linked to accessible routes to building entrances.

Parking bays

- Be close to the entrance to the building ie within 20m.
- At least 3.6m by 6.0m long, laid out as shown in the diagram.



Where space is more limited, hatched transfer area is shared between two bays.



- A hatched transference space 1.2m deep should be provided at the rear and down the side of the space. (This should be out of vehicle manoeuvring areas).
- Be clearly signed on the ground and on a post in front of the bay with the international disability symbol.
- In car parks the location of bays must be signposted from the entrance.
- Their use must be properly policed and enforced.

Lay-bys

- Must be able to accommodate vehicles clear of any moving traffic with space around the vehicle to unload.
- Must be located adjacent to entrances.
- Where combined with other uses eg goods deliveries, additional adequate space must be available to cater for all users.
- A dropped kerb must be provided with preferably the whole bay laid flush with the footway.

Other issues

In larger car parks vehicular areas should be segregated from pedestrian areas to create a safe environment for everyone. Attention should be paid to the routes to and from any buildings, with bays located in a manner that does not necessitate disabled people crossing vehicular traffic.

The use of bollards to protect areas around bays from vehicles over-running onto pedestrian areas or building entrances from ram-raiding should be avoided. They can easily become an obstruction. Alternatives are commercially available and should be investigated where practical.

Cross references

Pedestrian routes NSC4

Street furniture NSC5

Steps NSC6

Ramps NSC7

For more equality guidance please see the council's website TheAccessOfficer

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Pedestrian routes NSC4

Key principles

Pedestrian routes need to be designed in a cohesive manner that provides clarity for the sensory impaired person and allows everyone space to move around without encountering clutter or surfaces that are in effect a barrier. Routes should follow natural, clear desire lines.

The Fieldfare Trust "Countryside For All Guidance" must be used for all rural and semi rural urban fringe situations. It can be found at: **www.fieldfare.org.uk**

Design criteria

General

- All pedestrian routes must be well lit and of a suitable width:

  1 public routes at least 2m wide

  2 where route provides access to a building with low footfall, a minimum width of 1500mm is acceptable, increasing to 1800mm where there are greater pedestrian flows.

- Vegetation must not encroach onto footways or fall below 2.4m in height.
- All work on footways etc. must maintain access at all times for everyone. Kerbs must be ramped and solid, fixed guardrails maintained around all areas subject to any work.
- Any changes in level must be provided with handrails.
- Single steps must be avoided.
- All footway crossfalls should be constructed at gradients of at least 1:50 with 1:70 being preferable.
- Street furniture must compliment pedestrian routes e.g. provision of seating and not give rise to obstructions, (see Street Furniture NSC5).

Surfaces

- Paved surfaces must be even, level and have joints that do not exceed 5mm wide. Individual paving units must avoid the use of chamfered edges. The use of loose, granular or heavily riven materials must be avoided. Setts or cobble-style units are unacceptable on pedestrian routes, or on parking areas where people alight.

- Maximum gaps in tree grills, gratings etc to be no more than 18mm wide and laid perpendicular to the direction of travel.
- A compacted material may be used if the elements are bound together and the finished surface will be well drained and maintained to avoid ruts developing. (See North Somerset Council highway design specification).
- The demarcation between pedestrian and vehicular areas, where vehicles and pedestrians might mix, must be denoted by way of a safe pedestrian route, e.g. footways around shops, on access routes or in car parking areas. It must take the form of:

  1. A footway with a kerb that is at least 25mm high with a bull nose design to denote boundary of safe pedestrian areas and a "step down to danger" to the vehicular areas.
  2. An unambiguous clear tonal contrast between the surface of the vehicular area and the footway, or for the kerb to have an unambiguous clear tonal contrast.
  3. Alternatively, in lightly trafficked areas an unambiguous change in surface texture may be considered such as formal Dept. of Transport tactile paving.

Gates and barriers

Gates and any form of barrier must only be installed where there is a clear proven need. Examples include: to protect an area, such as a gate to a playground; or where it is required to prevent access such as motorcycle barriers or to act as a safety barrier, eg outside a school.

All crossing points

- Dropped kerbs must be provided which are blended to a common level with the road surface. Where the design absolutely requires an upstand, it must not exceed 6mm.
- Any changes to footway alignments or widths must take account of the impact on pedestrian desire lines and the design of dropped crossing points.
- Gradients must comply with Ramps NSC7.
- Tactile paving must be provided in accordance with Dept. of Transport guidance.
- The camber of any road surface should be designed to allow a wheelchair user to access adjoining footways easily without the risk of footplates grounding.
- The kerb edge on crossing points should be finished with a hard wearing, white reflective paint.

- All controlled crossings require, on the green man phase, an audible signal and a tactile rotating cone under the control box.
- All drainage channels must be provided with flush fitting covers. Open channels are not acceptable
- Inspection covers for services should be flush with any adjoining surface.
- All footway crossfalls should be constructed at gradients of at least 1:50 and preferably be 1:70.

Other issues

Generally, tactile materials should be used to provide information about the immediate environment to provide certainty to any sensory impaired person where there are no clear cues as to the location of obstacles, or natural desire lines. A distinction should be made between the formal tactile paving approved by the Dept. of Transport (DfT), and more informal surfaces where simply using differing paving materials can define a location, but less overtly and serve other purposes. Examples include variations in surfaces to give areas identity for the benefit of people with dementia.

Crossings are an important example of the use of formal tactile paving. There are seven altogether. Further information on formal tactile paving can be found in, Guidance on the use of Tactile Paving Surfaces, (Department of Transport, 1998.

Work on adopted footways must comply with the New Roads and Street Works Act 1991.

Cross references overleaf…

Cross references

Street furniture NSC5

Steps NSC6

Ramps NSC7

Handrails NSC13

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Public realm and street furniture NSC5

Key principles

1 All areas must be designed so as to give them a clear spatial definition for all users using materials and layouts in ways which aid wayfinding and create a sense of clarity and confidence.

2 Wherever street furniture is used, free and unobstructed access along natural desire lines must always be provided. It must be grouped in clearly understood spatial patterns that reflect the needs of sensory and cognitively impaired users.

Design criteria

General

- A clear change in level must always be provided between pedestrian and vehicular areas, following the "step down to danger" principle.
- A contrasting colour should be used on either the carriageway or footway surface to distinguish between the two. Alternatively, a contrasting coloured kerb may be considered.
- Tactile paving must always be used at any vehicular crossing point.

Paving materials

- All paving on pedestrian routes must be smooth and avoid the use of setts or heavily riven materials.
- Joints on any paving units must be close bonded with a maximum gap of 5mm.
- Individual units must avoid the use of chamfered or tumbled edges.

Street furniture

- The design of any equipment must be sympathetic to disabled pedestrians who may frequently find the need to physically explore objects to identify them or who may inadvertently come into contact with them.
- All equipment should be at least 1m high and solid from the ground to the lowest edge, avoiding any projections below 2.4m high.
- Equipment should be located in groups, or located at the back or front edge of footways. No exception should be made for statutory services.

- Use should be made of poles etc. as a location for more than one item of equipment, for example, litter bins and signs.
- The use of bollards should be avoided wherever possible and only used where there is clear evidence of a need and other design solutions are not available.
- Any bollard should be at least 1m high and have:
  1. a smooth shape, with no angular edges
  2. a contrasting, coloured band at least 150mm wide at the top
  3. its overall colour must contrast with the surrounding footway
  4. it must not be linked to others by chains, rope etc.
- Seats should be provided with armrests, backs and spaces alongside them to allow a wheelchair user to sit alongside an ambulant companion.

Street cafés and shop displays

Any tables, chairs or other displays associated with cafés users, including menus and freestanding advertising boards, must be located wholly within clearly defined areas and away from natural desire lines. They must be bounded by a solid enclosure consisting of:

1. a barrier at least 1m high with a rigid feature eg a rail, at heights of both 100mm and 1200mm
2. uprights whose feet do not protrude and would otherwise obstruct pedestrians or café users
3. no chains or ropes etc linking any uprights

In addition cafés must provide:

4. access to main café entrance and any facilities eg toilets etc (see Cross References)
5. aisles at least 1m wide between tables etc when in use.

It is recommended shop forecourt displays follow the same guidelines.

Other issues

Alternatives to bollards are commercially available to deter the ram-raiding of commercial premises. These should be considered rather than a person with an impairment being disabled by the design of an entrance.

There may be cases where equipment will need to be placed in a location that is difficult for a visually impaired person to identify, or is simply unexpected. Where this occurs, a change in the surrounding surface

material and its colour must be considered to identify its position. However this should not be seen as the normal design rule.

Cross references

Pedestrian routes NSC4

Communication and information (includes details of signposting and wayfinding). NSC15

For more equality guidance please see the council's website **TheAccessOfficer**

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Steps NSC6

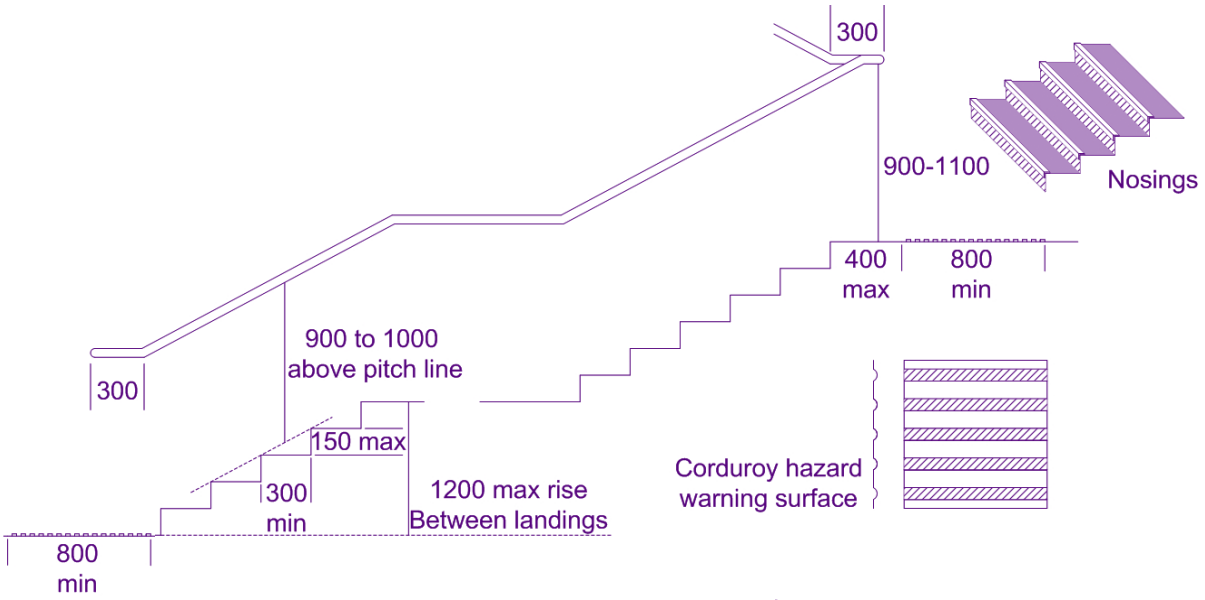
Key principles

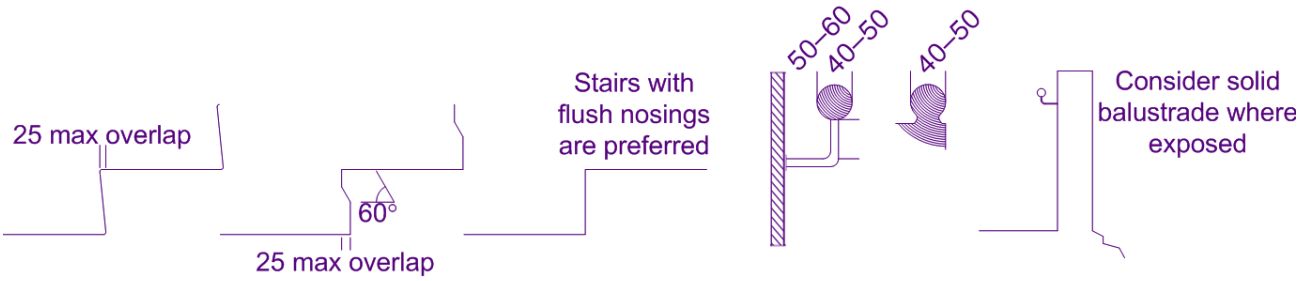
Steps must also be clearly identifiable with regular, even patterns of risers and treads.

Design criteria

The dimension criteria in the diagrams below should always be followed. They are based on feedback from disabled people as to what they feel works well, within national legislation and guidance. Hence, they are a deliberate mix of external and internal guidance with the aim of promoting the needs of the person using them.

Attention is drawn to gradient criteria.





- A change in texture and colour should always be provided on the surface at the top and bottom of an external flight. Formal styles of tactile paving are available and are recommended. (See Dept. of Transport guidance for external steps).
- The maximum vertical rise between landings should be 1.2m.
  A maximum of 12 risers are permitted for a going less than 350mm.
  A maximum of 18 risers are permitted for a going of more than 350mm.
- Landings should be at least 1.5m deep.
- Handrails are required to both sides which should extend 300mm beyond the top and bottom steps. They should be made of a non-conductive material so they are not cold to the touch.
- The flight should be at least 1m wide, (measured between handrails).
- Treads must be non-slip with the nosings highlighted in a bright contrasting colour.
- Open (or glazed) risers should be avoided.
- External step should be placed undercover whenever opportunity arises.

Other issues

Diminishing steps, where the edge is tapered off, (see picture) should be avoided. They remove the definition of where and when the changes in level commence for the visually impaired person.

The use of glazing as an infill panel between handrails and steps should be avoided unless it is clearly highlighted by way of bright coloured manifestation that contrasts clearly with the surrounding background in both directions.

Cross references continued overleaf…

Cross references

Ramps NSC7

Handrails NSC13

Doors NSC8

Further information on tactile paving can be found in, Guidance on the use of Tactile Paving Surface (Department of Transport, 1998).

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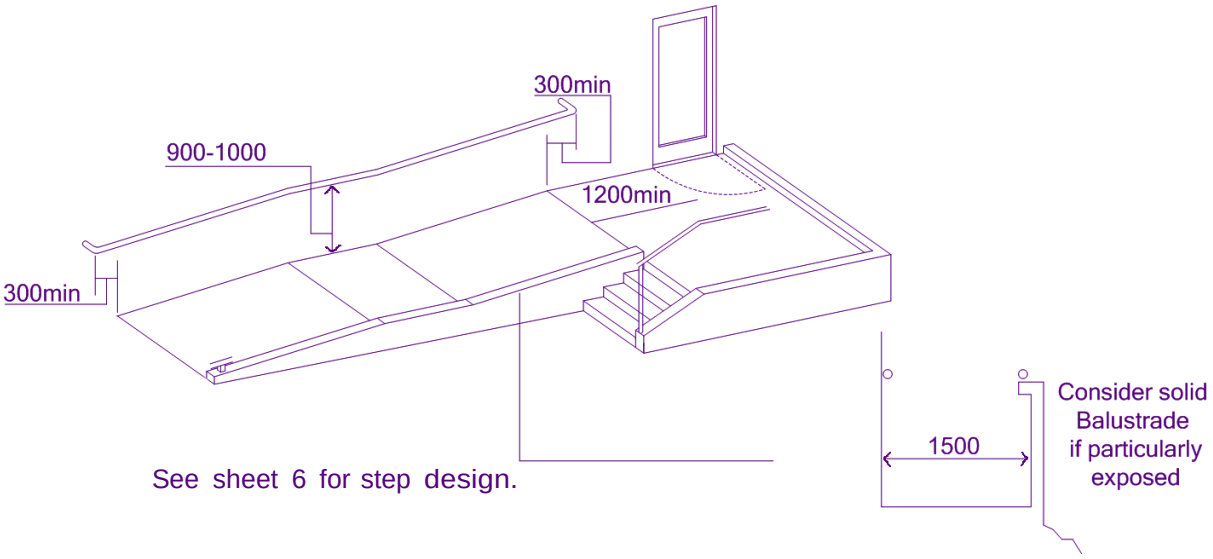
Ramps NSC7

Key principles

A ramped surface must always be provided to overcome any change in level. Wherever possible, it must be located within the natural pedestrian desire line and not located in a manner that gives it a secondary status.

Design criteria

Acceptable gradients for all ramps are set out in the table and diagram below. It shows the maximum rise permissible for a gradient before a rest platform is required. For ramped surfaces between 2m and 10m long, it is acceptable to interpolate between the maximum gradients, i.e. 1:14 for a 4m going or 1:19 for a 9m going (see diagram).



Interpretation of gradient criteria

It is considered that the gradient standards should be adhered to for all new and major refurbishment projects and in all situations where it is practicable to construct the ramp. Circumstances may arise where gradient criteria cannot be met on existing, smaller premises e.g. local parades of shops, including newsagents etc. In these cases appropriate formal written advice should be sought from an access advisor. In all cases no gradient should exceed 1:12.

Maximum gradient criteria for ramps

Rise (mm)	Maximum length of ramp	Maximum gradient	Rise (mm)	Maximum length of ramp	Maximum gradient	Rise (mm)	Maximum length of ramp	Maximum gradient
167	2	12	333	5	5	444	8	18
174	2.1	12.1	338	5.1	5.1	448	8.1	18.1
180	2.2	12.2	342	5.2	5.2	451	8.2	18.2
187	2.3	12.3	346	5.3	5.3	454	8.3	18.3
194	2.4	12.4	351	5.4	5.4	457	8.4	18.4
200	2.5	12.5	355	5.5	5.5	459	8.5	18.5
206	2.6	12.6	359	5.6	5.6	462	8.6	18.6
213	2.7	12.7	363	5.7	5.7	465	8.7	18.7
219	2.8	12.8	367	5.8	5.8	468	8.8	18.8
225	2.9	12.9	371	5.9	5.9	471	8.9	18.9
231	3	13	375	6	6	474	9	19
237	3.1	13.1	379	6.1	6.1	476	9.1	19.1
242	3.2	13.2	383	6.2	6.2	479	9.2	19.2
248	3.3	13.3	387	6.3	6.3	482	9.3	19.3
254	3.4	13.4	390	6.4	6.4	485	9.4	19.4
259	3.5	13.5	394	6.5	6.5	487	9.5	19.5
265	3.6	13.6	398	6.6	6.6	490	9.6	19.6
270	3.7	13.7	401	6.7	6.7	492	9.7	19.7
275	3.8	13.8	405	6.8	6.8	495	9.8	19.8
281	3.9	13.9	408	6.9	6.9	497	9.9	19.9
286	4	14	412	7	7	500	10	20
291	4.1	14.1	415	7.1	7.1			
296	4.2	14.2	419	7.2	7.2			
301	4.3	14.3	422	7.3	7.3			

Basic ramp criteria

- Ensure there is an alternative means of access for wheelchair users, for example, a lift, when the total rise is greater than 2m.
- It must have a surface width between walls, upstands or kerbs of at least 1.5m.
- The ramp surface must be slip resistant, especially when wet, and of a colour that contrasts visually with that of the landings.
- The frictional characteristics of the ramp and landing surfaces must be similar.
- A landing must be provided at the foot and head of the ramp at least 1.2m long and clear of any door swings or other obstructions.
- Any intermediate landings must be at least 1.5m long and clear of any door swings or other obstructions.

- Intermediate landings at least 1800mm wide and 1800mm long must be provided as passing places when it is not possible for a wheelchair user to see from one end of the ramp to the other or the ramp has three flights or more.
- All landings must be level, subject to a maximum gradient of 1:60 along their length and a maximum cross fall gradient of 1:40.
- There must be a handrail on both sides, 900–1000mm high.
- A kerb must be provided on the open side of any ramp or landing at least 100mm high, which contrasts visually with the ramp or landing.
- Clearly sign-posted steps must also be provided, in addition to the ramp, when its rise is greater than 300mm (equivalent to 2 × 150mm steps).

Other issues

Guidance is given in BS8300:2010 on lighting ramped access routes.

It is important to ensure that the tactile paving provided at the top of the steps is aligned so as to lie clear of the width of the ramp.

A ramp is preferable, in principle, to the provision of a short rise lift, particularly in licensed premises.

Long ramps should be avoided since they can be tiring and so a barrier to access. If the design requires a series of steep ramps there may be a case for a lift to be installed instead.

Where ramp criteria must be varied in the context of a development application, an access statement should be compiled to set out the case for a change to the standard. (Separate guidance is available on access statements from the Access Officer).

Cross references

Handrails NSC13

Pedestrian routes NSC5

Steps NSC6

Doors NSC7

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Doors NSC8

Key principles

Any door can be a major barrier to a disabled person. It is therefore important it adheres to all the principles set out in this leaflet to minimize its impact. Where there is a high pedestrian flow they should be automated. Any door must meet three key needs:

1. Be easy to operate.
2. Be clearly identifiable.
3. It must be safe to use.

Design criteria 1: manually operated doors

They must achieve all the following criteria:

- Have a clear opening width to at least one door leaf where there are two, of at least:
    1. 800mm where they are approached straight on or 90 degrees from a corridor 1500mm wide. Or:
    2. 825mm when approached from 90 degrees from a corridor 1200mm wide
- Provide an area of clear wall space on the opening edge of the door at least 300mm wide.

- Require a force to open them that does not exceed 20N.
- Have a vision panel that is located no higher than 500mm from the floor and stretches to at least 1500mm high.
- Have a threshold that does not exceed 15mm high on external doors and a level sill on all internal doors.
- Provide kickplates at least 350mm high.
- Make use of contrasting coloured materials on the frame and door face to highlight the door within a wall. The edges of a glass door should also be apparent when the door is open
- Use door furniture that contrasts with the face of the door and is suitable for people with limited dexterity, for example, D-shaped pull handles or lever handles approximately 100mm long.
- All door furniture should be located 1m above floor level wherever space allows.
- Large areas of glazing should be highlighted by way of a bright, contrasting coloured strip at least 150mm wide, located at heights of 1050mm and 1500mm above the floor, contrasting visually with the background when seen through the glass in all light conditions.

Do not

- Use frameless glass doors.
- Light coloured frames for example, aluminium, in combination with fully glazed doors.
- Revolving doors.

Design criteria 2: automated doors

- All doors must at least comply with the manual swing door criteria.
- The operation of the doors should be tailored to the pedestrian flows, making use of automatic sensors wherever possible to operate the doors.
- Any manually operated switches should be located between 750mm and 1000mm above the floor level, illuminated from behind, and use raised tactile lettering and pictograms.
- Doors should automatically open and shut.
- Have infra-red sensors to protect individuals against being caught by the movement of the doors.
- Be clearly illuminated.
- Have warning symbols on the face of the doors.

Other issues

Where automated doors swing towards a pedestrian it is important to have a sound that is clearly audible within the surrounding environment to warn of their movement.

Cross references

Steps NSC6

Ramps NSC7

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TheAccessOfficer

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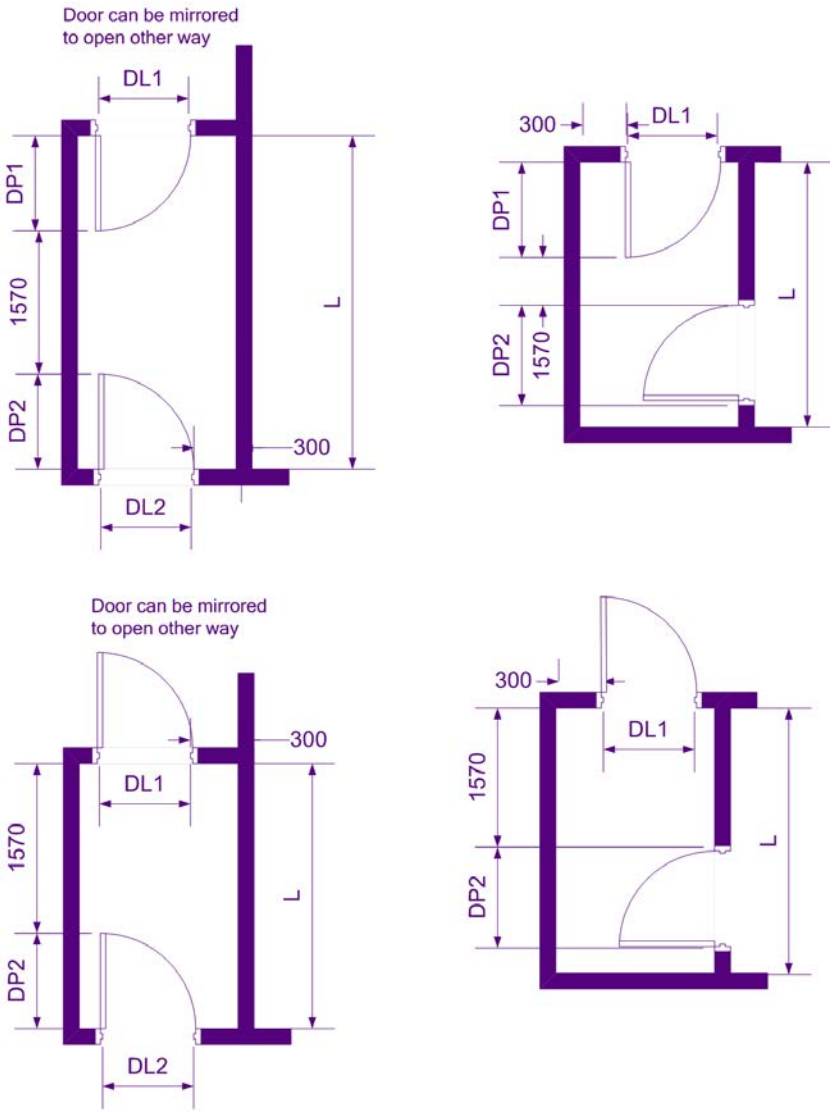
Lobbies NSC9

Key principles

The design of a lobby should not focus on the ventilation and climatic issues at the expense of the underlying functional requirement for any entrance to be able to provide simple and easy access for everyone, as described in Doors NSC8.

Many public buildings have double doors at the entrance with a lobby between them to minimise heat loss. If this space is too small anyone with a mobility impairment can become trapped. Where right angled turns are involved, as occurs in some smaller shops and restaurants, additional space is needed.



DL1 and DL2 = door leaf dimension of the door to the lobbies. DP1 and DP2 = door protection into the lobbies.
L = minimum length of the lobby.
1570 = length of occupied wheelchair and campanion (or larger scooter)

Remember, for every 100mm increase above 300mm in the dimension of the door recess (which gives greater overlap of the wheelchair over the door swing), L can be reduced by 100mm up to a maximum of 600mm reduction.

Design criteria

- Account should be taken of the need for additional space if a turning manoeuvre of any kind is required.
- The use of coloured manifestation to identify doors, frames and surrounding walls where extensive areas of glazing are used is very important.

Other issues

Many retailers have taken the step of removing doors and lobbies altogether to allow a better view into the premises. Mechanical ventilation and heating controls have been used to control climatic conditions. For any impaired person it ensures access is much easier.

Cross references overleaf…

Cross references

Doors NSC8

Steps NSC6

RampsNSC7

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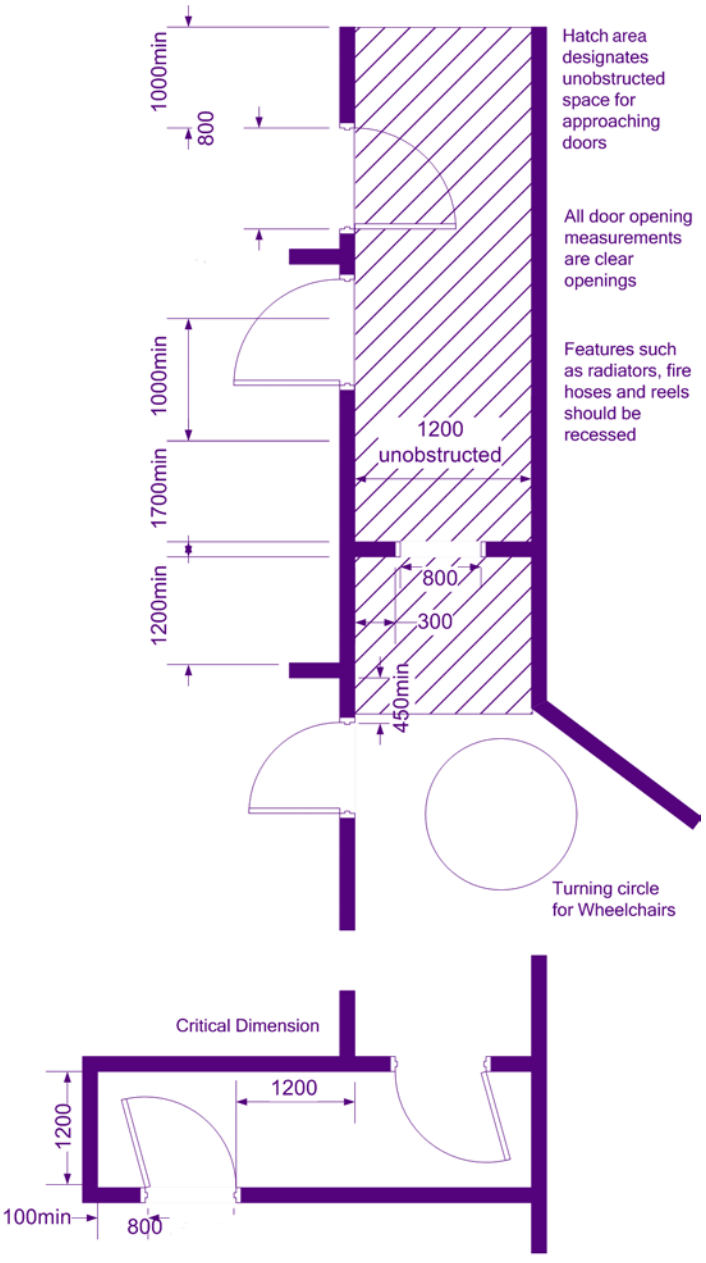
Corridors NSC10

Key principles

Corridors have evolved into multi use spaces with schools using them for teaching small groups or offices as break out space. In using them in this way the needs of people moving about them must still be met in full. It is therefore important to maintain the basic space standards described here to enable everyone to use a building at all and to do it safely and easily.

Design criteria



- Corridors should always be level or ramped.
- Single steps must be avoided.
- Widths.
    1. Provide a minimum unobstructed width of at least 1200mm.
    2. Where corridors have an unobstructed width of less than 1800mm, they must have passing places at least 1800mm long and with an unobstructed width of at least 1800mm at reasonable intervals.
    3. To recess all furniture and equipment eg radiators, fire extinguishers, or seats.
- Ensure all doors within a corridor have glass visibility panels (see Doors NSC8).
- All doors within corridors must be colour contrasted and well-defined against the background walls of the corridor.
- Use door furniture which contrasts with the face of the door.

- Floors must have a clear colour and tonal contrast with the surrounding walls.
- Dominant, bright light sources eg large windows must be screened.
- Avoid using rounded or knob style handles. Install lever or D-pull styles.
- Fix signs to walls adjacent to opening side of door not the doors, so they can always be located and act as a wayfinding cue.
- Any door opening towards a corridor, which is a major access route or an escape route, must be recessed so that when fully open, it does not project into the corridor space.
- Corridors must be at least 1800 mm wide where doors, such as to unisex toilets, open outwards into the corridor. A change in floor texture and colour would be valuable to highlight its location.

Other issues

See Design Templates for diagrams and information on turning circles of people with different mobility aids, parents with prams etc.

Cross references continued overleaf…

Cross references

- Communication and information NSC15 for more information on wayfinding
- Doors NSC8
- Lobbies NSC9
- Means of escape NSC16

For more equality guidance please see the council's website TheAccessOfficer

To obtain a copy in an alternative format or language write to:

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NSC11 Lifts

Key principles

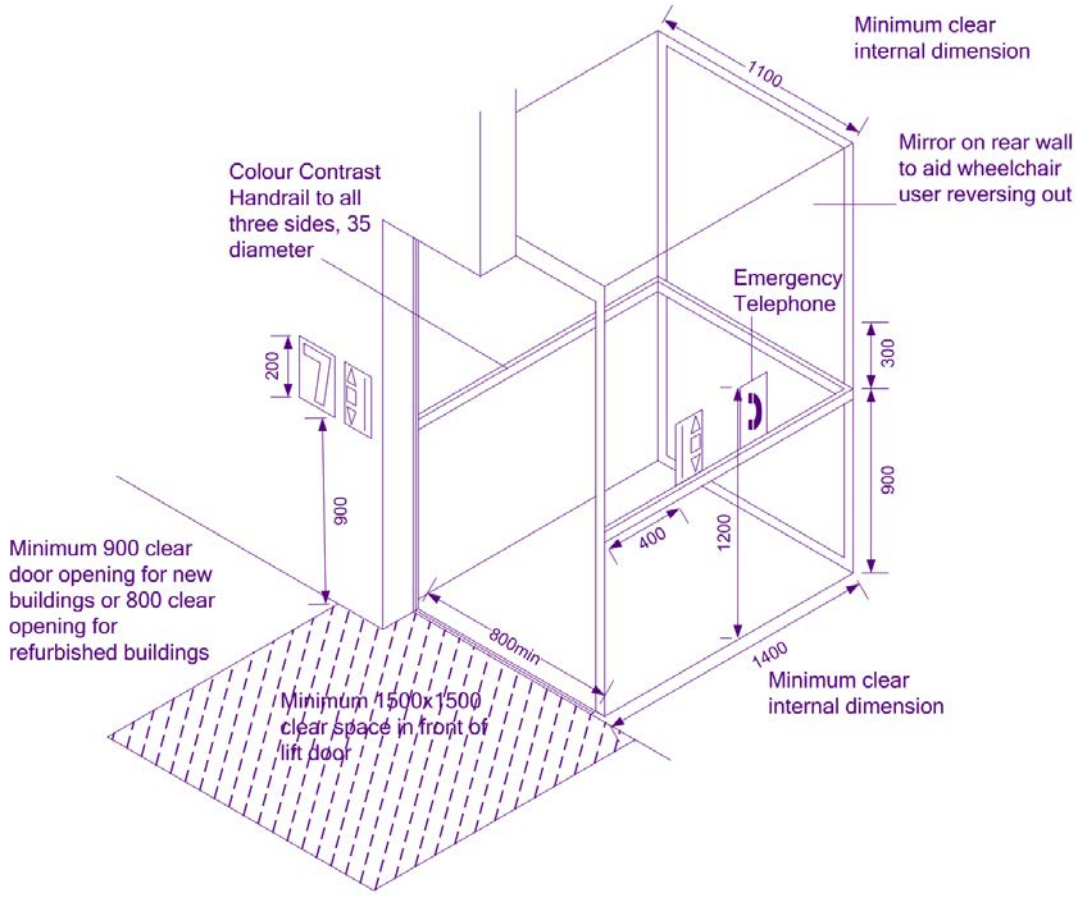
A lift must always be provided as an alternative to stairs or an escalator for moving between floors. The lift must be suitable for the numbers of people, the number of floors, time and speed requirements and it must be operable by everyone, independently.

The design objective should be to ensure that a wheelchair user, anyone else with a mobility aid, or someone with an assistance dog who may be sensory impaired, may enter the lift and operate the controls turning, where relevant, to face the door.

There are four sections to this information sheet:

General criteria for all lifts
This describes the areas around lifts where users will wait, and the standards for the lift call controls.

Traditional, enclosed passenger car lifts
These should be installed in all new developments and all others wherever it is practical to construct a lift to the appropriate standards.



Short-rise lifts
This style of lift might be installed in a new development, where, due to site constraints, a passenger lift cannot be accommodated and the aim would be to serve intermediate level changes within the floor of a building.

Stair lifts
They should primarily only be installed in existing buildings where no alternative is available.

Design criteria

1 General criteria for all lifts

- An area at least 1500mm by 1500mm should be provided outside any lift entrance.
- Seating must be provided in the lift lobby to cater for anyone unable to stand whilst waiting (numbers should reflect the size and capacity of the lifts).
- The floor number must:
  1. Be indicated on a sign on each floor opposite the car door.
  2. Contrast visually with the surrounding face plate.
  3. The face plate similarly must contrast with the surface on which it is mounted.
- The landing call button symbols must be raised to facilitate tactile reading.
- All call and control buttons must be located wholly within the height range of 900mm to 1100mm, contrast visually with the surrounding face plate, and the face plate similarly must contrast with the surface on which it is mounted.

Traditional enclosed passenger car lift

- Lift car floor area must be at least 1500mm by 1500mm to allow users to turn conveniently and to accommodate a scooter.
- The control panel should be wholly within in the height range of 900mm to 1100mm, vertically or horizontally arranged.
- All controls must have raised letters and symbols.
- A clear audio system must be included to describe all the actions of the lift eg doors closing, floor number, etc.
- An effective clear width of at least 900mm must be provided to the car door. Power-operated horizontal sliding doors are preferred.

- Doors are fitted with timing devices and infra-red re-opening activators to allow adequate time for people and any assistance dogs to enter or leave.
- The floor of the lift should not be of a dark colour and should have frictional qualities similar to, or higher than, the floor of the landing.
- Handrails are provided on all lift walls where there is no door, with their top surface at 900mm (nominal) above the floor and located so that they do not obstruct the controls or the mirror.
- A suitable emergency communication system is fitted suitable for use by sensory impaired people.

Short-rise lifts: design criteria

This type of lift should be used where it would be impractical to construct a traditional design solution or they are not available.

- There is a significant change in level that cannot be physically overcome with a ramp, as opposed to a pure design expectation.
- That a short rise lift would be appropriate, given the nature of the use of the building.
- The flows of people will be low.
- An alarm system should be installed linked to a member of staff.
- It should be capable of independent operation by the user.
- The character of the location is suitable eg not prone to vandalism, subject to supervision by work colleagues or building management staff.

Stair lifts

They are defined as equipment that either has a platform, or a seat and is fixed to the side of a traditional staircase or wall.

They should only be installed:

- In existing buildings or in extreme cases in buildings undergoing refurbishment where practical construction problems arise. Where a design solution is available that avoids their use, the council would normally expect such a solution to be implemented.
- Where a ramp, vertical passenger car or short rise lift (described above), cannot be constructed.
- Where the council's recommended guidance on this type of lift is followed. It covers the health and safety aspects of their electrical and mechanical specification. (See NSC2 background documents and information).

Other issues

Drawing together the differing needs of people with a variety impairments can be difficult in the field of lift design due to the conflicts that can occur. It is therefore important that where needs can be met they are not ignored. If there are particular known group of people who use a building meeting their specific needs should always be considered but not at the expense of others.

Cross references

Commuication and information NSC 15

Steps NSC6

Ramps NSC7

Lobbies NSC9

For more equality guidance please see the council's website TheAccessOfficer

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Toilets NSC12

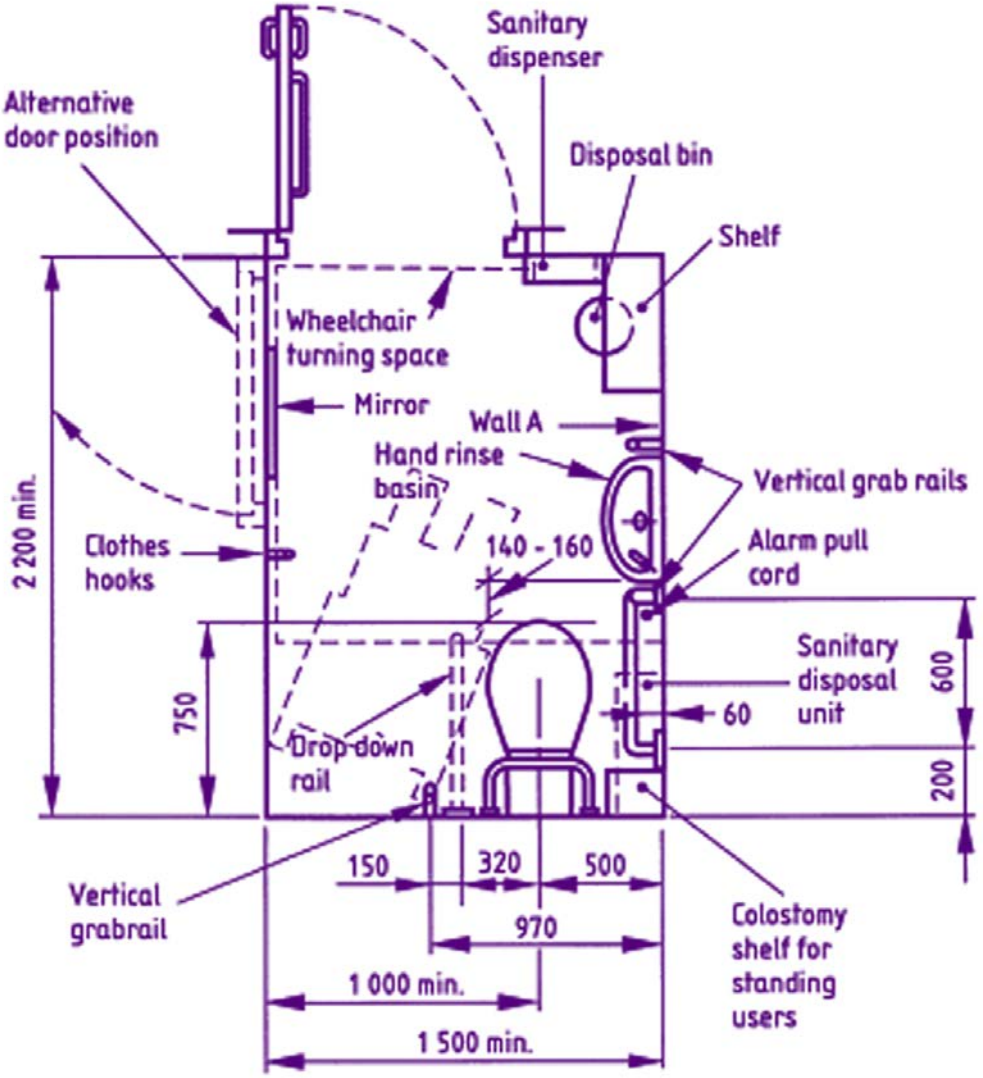
Key principles

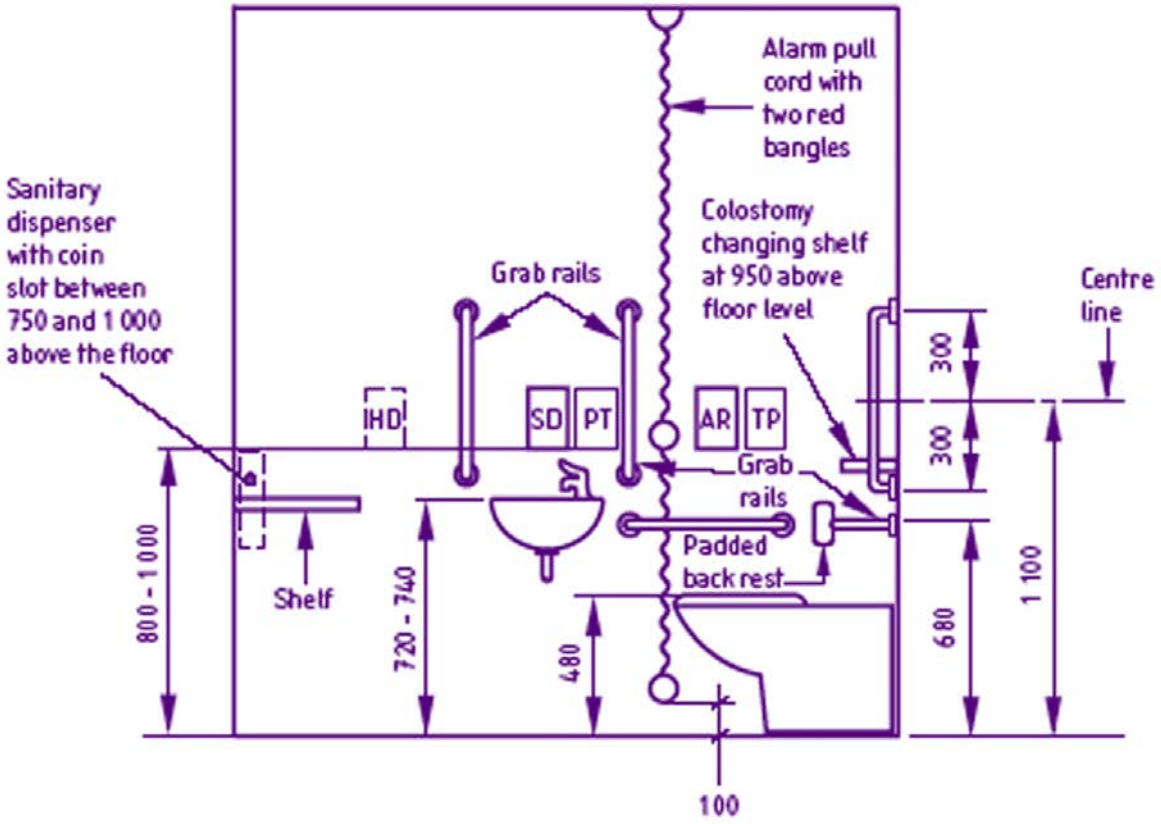
Accessible unisex toilets must always be available which are suitable for all the disabled people using the building, in accordance with section one below. Separately, any single sex facilities must provide for the ambulant disabled person who may not actually need the full range of facilities available in the unisex toilet, but could, if they are suitably designed, easily make use of the single sex facilities.

Unisex facilities for disabled people should be at least located wherever single-sex provision is provided.

There are two sections to this information sheet:

- Unisex provision
- Single sex provision





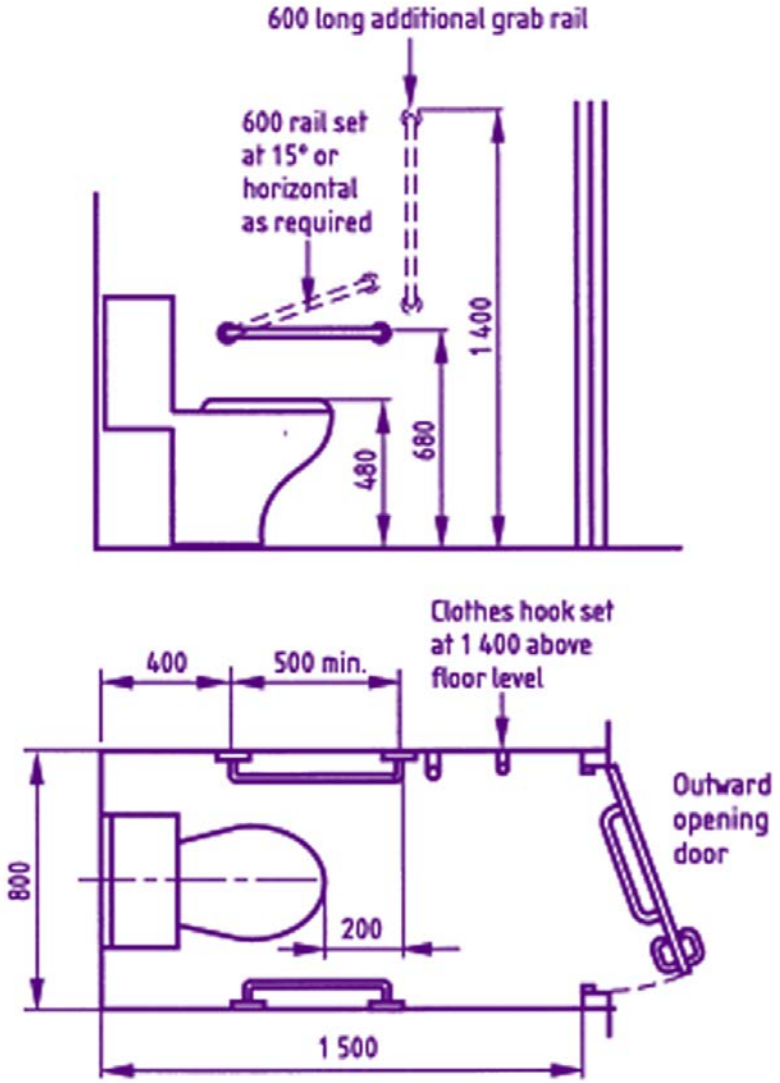
HD. Possible position for automatic hand dryer (see also figure 58)
S.D Soap dispenser
PT. Paper towel dispenser
AR. Alarm reset button
TP Toilet paper dispenser

Height of drop down rails to be the same as the other horizontal grab rails

Design criteria: unisex provision 1

The cubicle must meet the following criteria:

- Measure at least 2.2m by 1.5m with an outward opening door. or
- Measure at least 2.4m by 1.5 with an inward opening door.
- Have a door with a clear opening width of at least 900mm.
- Provide for transfer from a wheelchair to the toilet from the front or side.
- Handrails, soil pipes or other features in the cubicle must not obstruct a second person assisting the disabled user of the facility.



- The layout, handrails and other equipment must conform to the layout shown in the diagram on page 2 or in accordance with the BS 8300:2010
- Handrails must contrast with the background colour scheme.
- All door locks etc should be designed for people with limited dexterity making use of lever style handles.
- The toilet flush must be on the off-side and located no higher than 1m from the floor.

- In addition to the alarm specified in BS8300, (see above) consideration should be given to an alarm that consists of a cord running around the entire internal perimeter of the cubicle. It should be located 150mm above floor level and having a contrasting colour to the background walls and floor.
- The hand dryer must be accessible from the toilet.
- A unisex cubicle is located as close as possible to the entrance and/or waiting area of the building. See diagrams for full layout details.
- Alternative, additional peninsular layouts are described in BS8300:2010.

Design criteria: single sex provision 2

- Where the toilet accommodation is accessible to wheelchair users.
- At least one urinal must be set at a lower height of 500mm (measured to the rim from the floor level).

- At least one wash hand basin must be located at a height of 700mm where the toilet accommodation is accessible to ambulant disabled people.
- At least one urinal must be set at a lower height of 500mm.
- In general all others wash hand basins must be located at a height of 800mm.
- In the above cases the rim of any urinal must project at least 360mm from the wall.
- A single handrail must be provided above any urinal and a 600mm long handrail located on either side of the urinal, with their mid-point positioned 1100mm above the floor.
- A space at least 900mm wide by 1350mm deep must be provided in front of any urinal.
- A space at least 1500mm by 1500mm should be provided in front of any wash hand basin.
- At least one cubicle and thereafter one in every five must:
    1. Be at least 800mm wide.
    2. Have an outward opening door fitted with a horizontal bar on the inner face to assist closing.
    3. Have a clear door width of at least 750mm.
    4. Have a toilet pan at least 480mm high (measured to top of seat).
    5. Be provided with three handrails, 680mm high from the floor, located on the rear wall and each of the sides of the cubicles.
- All door locks etc must have a lever style handles suitable for use by people with limited dexterity.
- All controls, such as light switches etc must be in the height range of 900mm to 1200mm, including hand dryers and operable by someone with limited dexterity.
- All controls taps and handrails must contrast with the surrounding background, walls or facilities.
- Facilities conforming to these standards must be clearly signed.

Other issues

Access to any toilet facility must be in accordance with NSC 8 and 9. BS8300 contains detailed guidance on provision for domestic situations.

Cross references

Doors NSC8

Receptions NSC18

For more equality guidance please see the council's website TheAccessOfficer

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