



Scottish Health Facilities Note 20

**Access audits of primary
healthcare facilities**



Contents

About this series	<i>page 4</i>
Executive summary	<i>page 5</i>
1. The disabling environment	<i>page 6</i>
1.1 The built environment	
1.6 Disability	
1.11 The Disability Discrimination Act 1995	
1.12 The way forward	
2. Access audits	<i>page 9</i>
2.1 What is an access audit?	
2.4 When is an access audit carried out?	
2.9 Who carries out an access audit?	
2.13 Is specialist knowledge, skill or equipment required?	
3. Using the access audit tool	<i>page 12</i>
4. The checklists	<i>page 15</i>
A Approach	
B External level change	
C Entrance and lobbies	
D Reception and waiting	
E Corridor	
F Lift	
G Stairlift	
H Platform lift	
I Internal ramp	
J Internal stairs	
K Internal door	
L Spaces for staff and patients	
M WC provision – all toilet areas	
N Wheelchair-accessible WC – standard layout	
O Wheelchair-accessible WC – peninsular layout	
P Signs and information	
Q Means of escape	



5. After the audit	<i>page 72</i>
5.1 Acting on the findings	
5.5 The access improvement programme	
5.6 Working practices	
5.7 Minor physical alterations	
5.8 Structural changes	
5.10 External access	
5.11 Maintaining access	
Appendix A: Basic dimensional information	<i>page 75</i>
Appendix B: Existing legislation and guidance	<i>page 76</i>
Introduction	
Duties of building providers	
Town and country planning legislation	
Building legislation	
Appendix C: New legislation	<i>page 79</i>
Disability Discrimination Act 1995	
Service provision	
Employment	
Further guidance	
Appendix D: Selected further reading	<i>page 81</i>
Appendix E: Sources of advice and information	<i>page 83</i>
References	<i>page 86</i>
Other publications in this series	<i>page 88</i>

About this series

Scottish Health Facilities Notes (SHFNs) provide an insight into topics and issues particularly relevant to the provision of healthcare in Scotland. SHFNs are complementary to the Scottish Health Planning Note (SHPN) series presenting the background to the detailed design guidance given in the SHPNs. In some cases SHFNs consider a range of alternative options and the implications of these options in terms of cost and acceptability to the users. However, the opinions expressed in the SHFNs do not include or represent the formal policy of The Scottish Office Department of Health Management Executive.

Acknowledgements

SHFN 20 has been adapted from the core text provided by NHS Estates, England. We acknowledge the help given by the Centre for Accessible Environments in the development of the original publication and for allowing the use of material from 'Designing for Accessibility – an introductory guide'.

The cartoons are reproduced with the kind permission of Louis Hellman.

We also acknowledge the assistance of Disability Scotland in the preparation of this Scottish Health Facility Note.

The NHS in Scotland Estates Environment Forum thanks Mr Norman Raitt of Norman Raitt Architects for editing and adapting the text for the NHS in Scotland.

NOTE: The issue date for SHFN 20 Version 1.1 is September 2000. It has been amended to accommodate the name changes of Healthcare Engineering and Environment Unit to Property and Environment Forum Executive, and the Estate Environment Forum to Property and Environment Forum.



Executive summary

The purpose of an access audit is to assess the suitability of a building for use by people who have physical, sensory, or mental impairments.

This publication is intended to enable GP practice and health centre managers to carry out an access audit of their practice premises. The aim is to identify those aspects of the building which would need to be improved or modified to enable the premises to perform within the spirit of the Disability Discrimination Act 1995.

The access audit tool provided in this document offers a simple, practical approach for people who have little or no experience of access audits. No specialist equipment and only a little specialist knowledge is required to carry out the initial audit.

The self-audit team are advised to invite disabled people, the local access officer and other people with a particular interest in building design to participate, as this is likely to result in a more comprehensive audit.

Following the audit, deficiencies in the building design may emerge. Further investigation will be required to identify and prioritise potential solutions and costs. This process is generally more complex than the initial audit and it is recommended that self-audit teams consult specialists in building design and access for advice on the most appropriate solutions.

Dimensions used in this document are generally taken from Disability Scotland Access Guide and should be treated as the minimum requirements. For practices and health centres who have a high incidence of wheelchair users, reference should be made to Scottish Hospital Planning Note/Health Building Note 40 - Volume 5: Scottish Appendix. These documents give information on minimum dimensions to be used in toilets, lobbies, circulation, etc, as applied to larger healthcare buildings and hospitals to allow ease of use by people requiring assistance in walking, wheelchairs and trolleys, etc.

1. The disabling environment

The built environment

- 1.1 Buildings and the spaces separating or linking them have conventionally been designed, constructed and used in ways reflecting the size, strength and capabilities of an average fit and healthy person.
- 1.2 People who have been excluded or inconvenienced by the limitations of these norms have been considered to have “special needs”.
- 1.3 Recently, however, designers have been spurred on, particularly by legislation relating primarily to new buildings (see Appendices B and C), to provide for the safety and convenience of a much wider range of users, notably people with impairments.
- 1.4 In future it will no longer be acceptable to discriminate unreasonably against disabled people by providing them with lower standards of service or lesser employment opportunities (see paragraph 1.11 The Disability Discrimination Act 1995).
- 1.5 Thus two issues emerge for consideration and action – the location, design, construction and use of new facilities; and the alteration and adaptation of existing premises. These considerations extend beyond the fabric of buildings and their surroundings to the ways in which they are used.

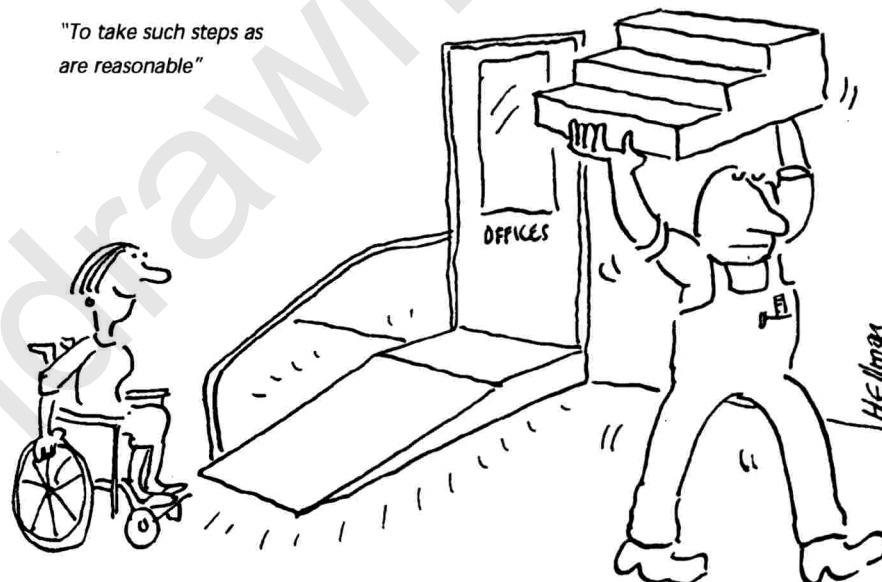
Disability

- 1.6 One approach to disability personalises the issues by viewing disability as a degree of impairment or functional limitation.
- 1.7 An impairment may result from physical, sensory or mental factors, which either prevents someone from undertaking a particular task or activity or requires him or her to accomplish that feat in a manner different from that considered “normal”. Simple examples are using a wheeled vehicle rather than walking, audiotape rather than the printed word, or sign language as an alternative to spoken communication.
- 1.8 Increasingly, opinion is departing from this model by using an approach which depersonalises disability. In this model, impairment remains as a personal characteristic but disability is the result of barriers in the environment or within the structure of society and its attitudes which result in the loss or limitation of opportunity to play a full role in the community.

- 1.9 In relation to the preceding examples, society deprives an individual of ability by failing to provide wheelchair-accessible routes or transport, information on audiotape or sufficient opportunities to use sign language.
- 1.10 The emphasis in this publication is on improving access to primary healthcare facilities for disabled people. However, altering a building to meet the needs of disabled people improves access for all users, including parents with young children and elderly people. A well-planned system of information signs not only aids people with mental or visual impairments to find their way around the building but also helps to create a stress-free environment for everyone.

The Disability Discrimination Act 1995

- 1.11 The Disability Discrimination Act 1995 outlaws discrimination against disabled people in recruitment and employment and in the provision of goods and services. As service providers and as employers, healthcare providers must ensure – from 2 December 1996 – that all reasonable steps are taken to adapt the workplace for disabled people and that the service is not run in a way which makes it unreasonably difficult or even impossible for a disabled person to use. The implementation of the Act's requirements is progressive, but it is expected that all anti-discriminatory measures will have been introduced by 2005.



The way forward

- 1.12 The first step towards meeting the requirements of the Act is for healthcare providers to carry out a thorough evaluation of their premises. This publication focuses on the built environment and the way it is used, and provides a practical tool for identifying any inadequacies. The way forward is to treat these inadequacies not as problems but as challenges and opportunities.

*Sorry, but we can't
work miracles, you
know!*



2. Access audits

What is an access audit?

- 2.1 An access audit is a measure of performance of a building or a service, against the capabilities and convenience of those people who use it, or who wish to use it.
- 2.2 In order to establish how well a building serves its users, it is essential to use reliable design standards and advice against which to judge its performance.
- 2.3 A further essential element is the structured approach to audit. A proven approach is a journey through the building beginning with its approach(es), continuing through the entrance(s), penetrating both horizontally and vertically to all parts, using its facilities and equipment, and finally exiting in an emergency situation.

When is an access audit carried out?

- 2.4 While an access audit is normally a snapshot of an existing building in use, an audit is a valuable tool in other situations.
- 2.5 When choosing a site for new premises, a site audit can establish whether:
 - the site is big enough for the accommodation together with associated car parking for practice staff and patients;
 - the site is close enough to public transport services;
 - the terrain is too hostile for some users; or
 - the adjoining road network is provided with pavements of sufficient width and a network of dropped kerbs.
- 2.6 During design and construction, adoption of appropriate standards and constant monitoring should ensure that the architect and contractors hand over an accessible building.
- 2.7 When considering a move to an existing building, an audit can establish what alterations and extensions are necessary, and whether they can be achieved and at what cost. This could help decide whether to continue with the proposed move or search for alternative premises.

- 2.8 The effects of change within an existing building should be audited, for example re-equipment, refitting, or redecoration, to ensure accessibility is at least maintained or to ascertain whether the change presents an opportunity for improvement.

Who carries out an access audit?

- 2.9 The practice team has the choice of two approaches: the use of an audit consultant or do-it-yourself, each of which has advantages and disadvantages.
- 2.10 Many individuals, groups and organisations carry out access audits on a consultancy basis. In appointing an audit consultant it is advisable to agree a clear brief. If this brief extends beyond the identification of a building's deficiencies into the area of recommending possible solutions, it is necessary to establish that the consultant is sufficiently experienced in or qualified to advise on design, construction, equipment, safety and emergency evacuation issues, and that he or she understands how a wide range of disabled people use the environment. This approach can create excellent results in a short period of time.
- 2.11 However, a consultant is not usually familiar with the building prior to the audit. Rarely does his or her contract allow sufficient time for an in-depth study of the way a building is used, the work practices of its staff, or the sometimes complex inter-relationships between the various spaces and activities.
- 2.12 The self-audit carried out by people who are familiar with the building – the staff and service users – enhances the value of an audit. The self-audit is also an educational programme for practice staff, as those involved in the process acquire a knowledge and understanding of the changes that result and are therefore less likely to create new barriers or to take actions which reduce the benefit of alterations.

Is specialist knowledge, skill or equipment required?

- 2.13 The first stage of an audit, the survey, can be carried out by a relatively uninformed person or group. As mentioned above, an audit carried out by a small team of people familiar with the fabric of the building, its range of functions, and the way in which it is used, is preferable, as this will lead to a thorough audit, related to activity.
- 2.14 After completion of the initial survey, when results are being analysed and potential solutions formulated, audit teams should seek specialist advice – especially when priorities have to be established and compromises made.



- 2.15 Guidance may be available from the local authority access officer, or an access group of disabled people. Disability Scotland holds registers of local access groups.
- 2.16 Technical advice relating to buildings, finishes and equipment is available from the NHS in Scotland Property and Environment Forum, or Disability Scotland, which also has a panel of access auditors and a register of architects. (See Appendix V for listings.)
- 2.17 Plans of the building and its approaches will be required to index the completed checklists. As a unique record is made of each space or feature, some checklists (for example internal doors and WCs) will be used several times, and each of these needs to be related accurately to the component it describes. The use of professional plans, however, is not essential. Sketches drawn approximately to scale will suffice as a visual index for the purpose of the audit.
- 2.18 Apart from standard office supplies, the sole piece of equipment required for carrying out this audit is a two-metre metal tape. With only very few exceptions, the linear standards and advice accompanying the checklists can be measured using this tool.
- 2.19 The use of more sophisticated equipment to measure light levels, the resistance of door closers etc is not necessary for a general-purpose audit – a subjective judgement is adequate. However, it is recommended that subjective judgements are made by people most likely to be adversely affected. For example:
- floor coverings should be assessed by a wheelchair user and someone with a walking aid;
 - lighting levels should be assessed by a visually impaired person and a hearing impaired person who relies on lip reading;
 - door closers should be tested by someone with reduced strength or mobility;
 - background noise levels, acoustics and reverberation should be assessed by a hearing-impaired person.
- 2.20 The audit team is strongly advised to thoroughly absorb the Notes accompanying each checklist before carrying out the audit and to refer to them during the audit. This will improve understanding of the checklist items and ensure a high quality audit. If necessary, professional advice should be sought.

3. Using the access audit tool

- 3.1 The series of checklists in Chapter 4 can be used to audit all types of primary healthcare facility. The typical components of a primary healthcare centre are:
- patient reception and waiting area;
 - consulting, examination and treatment rooms;
 - offices;
 - utility spaces and stores;
 - WCs;
 - staff facilities.
- 3.2 An access audit is approached in the same way whether the premises are used for the delivery of general practitioner services alone, or whether an extended range of facilities is provided, such as a pharmacy, treatment or rehabilitation services, and accommodation for visiting consultants. Whatever the size or scope of the service, the way disabled people use a building and the design solutions to meet their needs remain the same in principle.
- 3.3 Paragraph 3.10 below highlights the main features of the practice premises that will need to be assessed.
- 3.4 The checklists are presented in the form of questions requiring yes/no answers. A “no” indicates a problem which will need to be investigated further, and possibly resolved. A comments space is also included and its use is recommended as many questions cannot be answered with a simple “yes” or “no”. These comments will be very useful to those who will be responsible for design improvements.
- 3.5 Each checklist is accompanied by notes and/or dimensioned diagrams, providing audit teams with reliable technical standards against which to evaluate their premises. None of the recommendations is of a lower standard than the legal requirements for new buildings in this country. Some, in the light of experience, exceed the legal minimum, and many cover aspects of access not included within the legislation.
- 3.6 Measurements given in the notes and diagrams are metric and, except where identified, the standard unit is the millimetre.
- 3.7 A single checklist is intended to be used as many times as its topic occurs in a building, each one being a unique record.



- 3.8 Where staff and visitors have different access routes to separate entrances, with perhaps semi-segregated internal circulation patterns, and separate facilities such as car parking and WCs, the access requirements for both groups of users should be assessed.
- 3.9 Some checklists, such as vertical circulation in a single storey building, may be discarded as appropriate.
- 3.10 In a publication of this nature it is only possible to cover in detail typical elements likely to be contained in most buildings. Audit teams wishing to adapt the tool to assess aspects of their own building which lie beyond these common areas can do so easily, provided the basic principles of access audit are applied.

Main elements of an access audit

Parking

- adjacency of car park to building
- width of bays reserved for wheelchair users
- adjacency of wheelchair-accessible bays to building
- provision of ramps at changes in level

Approach

- even, slip-resistant, unobstructed route to building
- provision of handrails and resting places on ramps
- accessibility of all public entrances
- width and type of access doors
- thresholds

Internal circulation

- suitability of lobbies for wheelchair users
- width of corridors
- obstructions and projections in corridors
- width of internal doors
- suitability of flooring
- vertical circulation
- design of staircases
- provision of handrails and landings



- provision of lifts
- accessibility of lift controls
- provision of visual and audible signals

Toilets

- provision of unisex wheelchair-accessible toilets
- position and design of fixtures and fittings

Consulting and treatment areas

- provision of low counter at reception desk
- provision of induction loop
- suitability of lighting
- provision of waiting space for people in wheelchairs
- accessibility of consulting and treatment areas
- provision of telephones suitable for use by disabled people

Other features

- adequacy of information signs
- suitability of offices and rest room facilities for disabled staff
- provision of audible and visual fire alarms
- emergency evacuation procedures for disabled people



4. The checklists

- A Approach**
- B External level change**
- C Entrance and lobbies**
- D Reception and waiting**
- E Corridor**
- F Lift**
- G Stairlift**
- H Platform lift**
- I Internal ramp**
- J Internal stairs**
- K Internal door**
- L Spaces for staff and patients**
- M WC provision – all toilet areas**
- N Wheelchair-accessible WC – standard layout**
- O Wheelchair-accessible WC – peninsular layout**
- P Signs and information**
- Q Means of escape**



Approach

CHECKLIST A

Yes No

Pedestrian access

1. Is the building within convenient walking distance of:

a public highway?

public transport?

car parking?

2. Is the route free of kerbs?

3. Is the surface relatively even and slip-resistant?

4. Is the route wide enough?

5. Is the route level or easily graded?

6. Is it free of hazards such as bollards, litter bins, and building features such as outward-opening doors, windows or overhangs?

7. Is it adequately lit?

8. Is it identified by visual, aural or tactile information?

Vehicular access

9. Is car parking provision reserved for people with reduced mobility?

If not, go to question 14

10. Is this provision clearly marked?

11. Is it suitably surfaced?

Checklist A continues on page 17



Yes **No**

12. Are the spaces kept free from misuse?
13. Is storage space available for outdoor powered scooters?

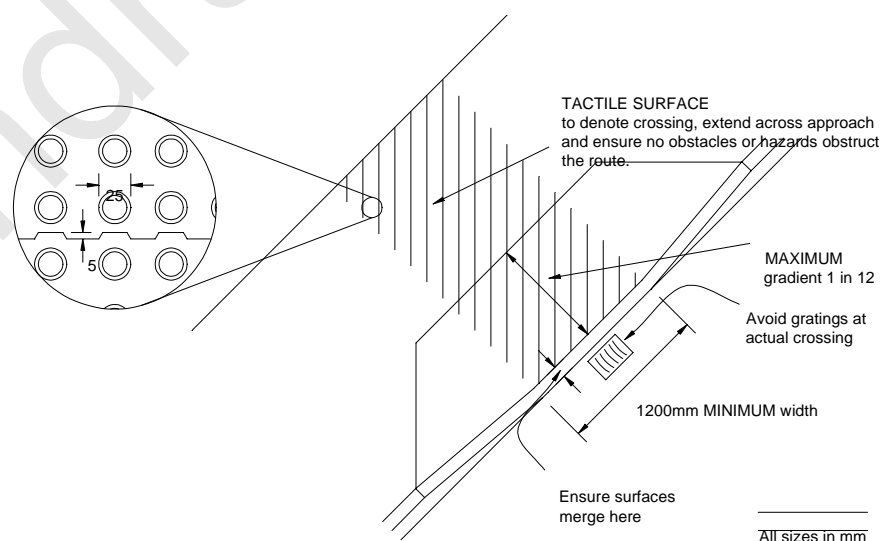
General

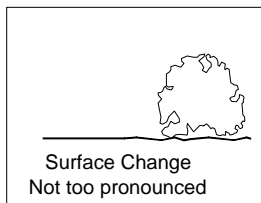
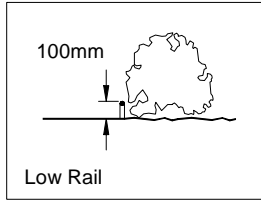
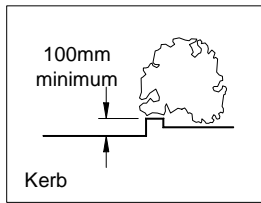
14. Is the route to the building kept free of fallen leaves, frost, snow and ice?

Comments

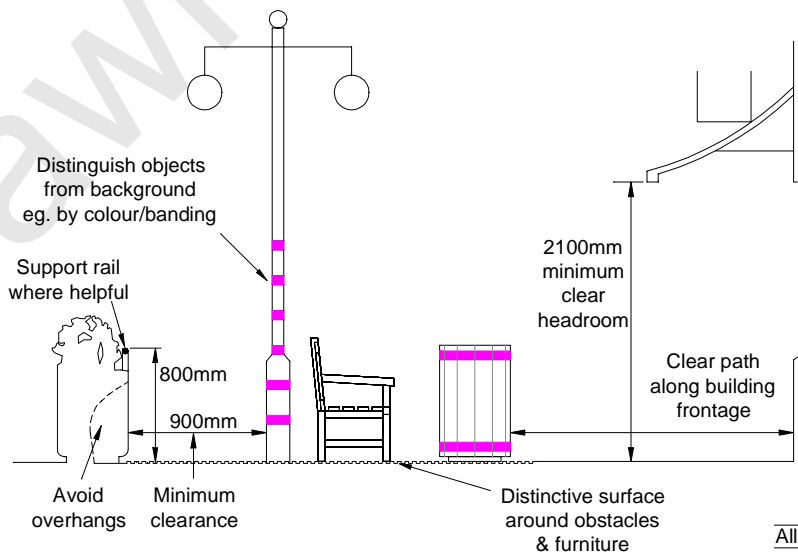
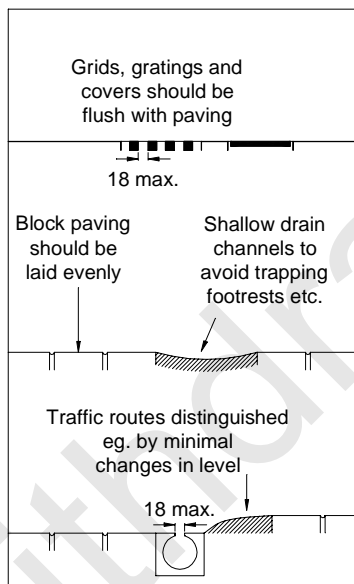
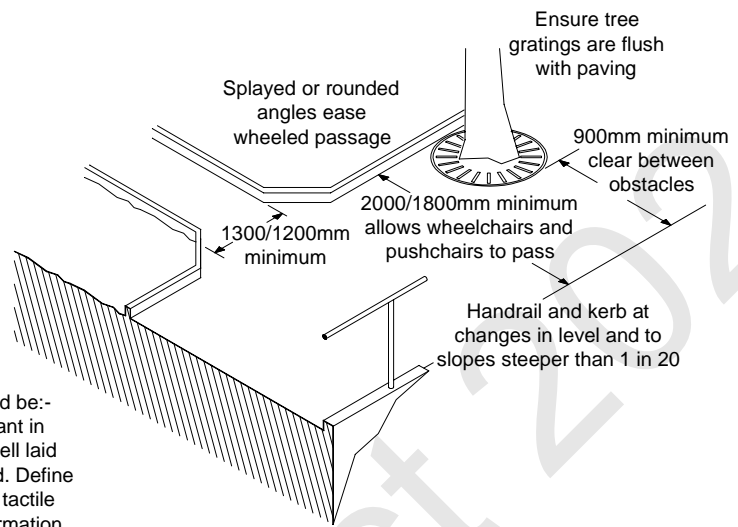
Notes

1. Maximum recommended walking distances are 50 m uncovered and 100 m covered. On routes exceeding these lengths the provision of appropriate intermediate seating should be considered.
2. Dropped kerbs should be available where on-street parking is in use, and also on both sides of nearby highways to facilitate road crossing by wheelchair users. Where dropped kerbs are used, tactile paving should be laid.
3. A width of 1800 mm to 2000 mm is recommended.
4. A maximum gradient of 1 in 20 is recommended, but shorter sections of no more than 5 m can be as steep as 1 in 12. Handrails should be provided for gradients greater than 1 in 20. Routes with a gradient greater than 1 in 20 should be treated as a ramp (see Checklist B).
5. Street furniture should be minimised, grouped together in logical positions and colour-contrasted from the surroundings.
6. Avoid pools of light and darkness.
7. Consider colour and texture changes, planting chosen for colour and scent, and tapping rails.
8. Wide bays are essential for users of wheelchairs and walking aids to permit transfer. One bay with an individual access aisle should be 3600 mm wide. Two bays with a shared access aisle require 6000 mm. Six percent of all car parking spaces should be wheelchair-accessible, with a minimum provision of three spaces.
9. Gravel and loose stones should be avoided.

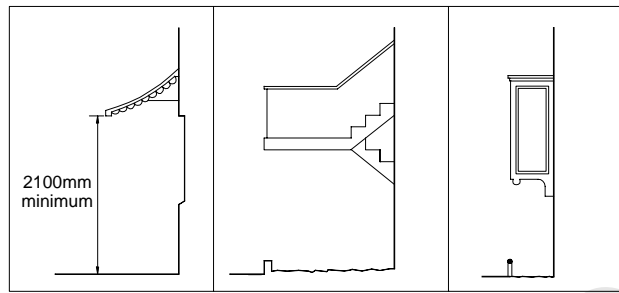
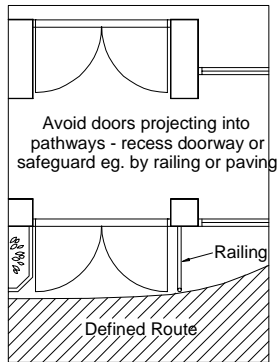




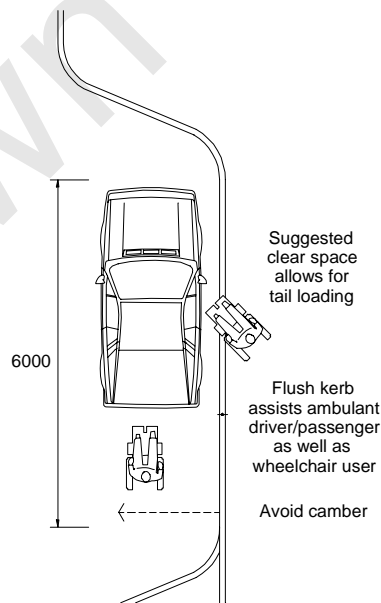
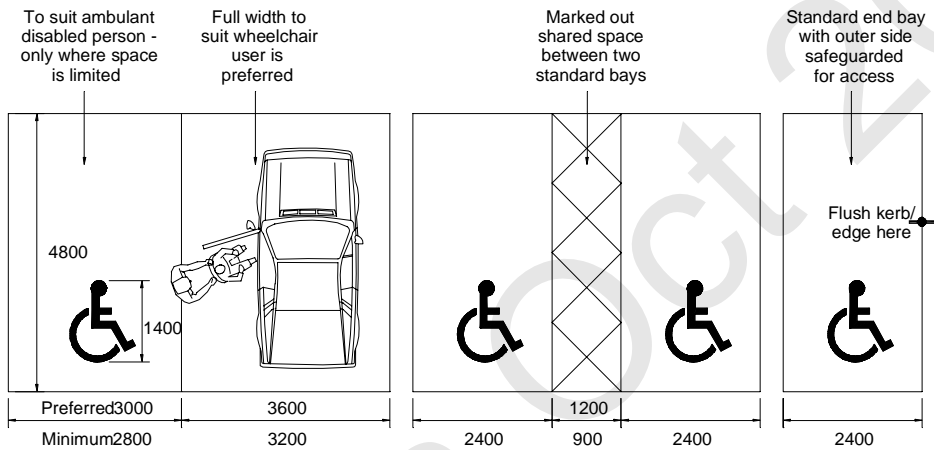
Surfaces should be:-
firm, slip resistant in
all weathers, well laid
and maintained. Define
path edges for tactile
and visual information
as suggested.



All sizes in mm



Avoid low headroom and/or safeguard building projections



All sizes in mm



External level change

CHECKLIST B	Yes	No
1. Is there a permanent or portable ramp? <i>If not, go to question 8</i>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are there level approach spaces at the top and bottom of the ramp?	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the ramp wide enough and suitably graded?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are ramp landings long enough and provided at intermediate levels?	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the surface of the ramp slip-resistant, particularly when wet?	<input type="checkbox"/>	<input type="checkbox"/>
6. Are the edges protected to prevent accidents?	<input type="checkbox"/>	<input type="checkbox"/>
7. Are suitable handrails provided on each side?	<input type="checkbox"/>	<input type="checkbox"/>
8. If a safe and convenient ramp cannot be constructed, is a platform lift or a wheelchair stairlift in good working order available?	<input type="checkbox"/>	<input type="checkbox"/>
9. Are there steps?	<input type="checkbox"/>	<input type="checkbox"/>
10. Is there a visual and tactile warning at the top and bottom of each flight?	<input type="checkbox"/>	<input type="checkbox"/>
11. Are suitable handrails provided on each side?	<input type="checkbox"/>	<input type="checkbox"/>
12. Is the lighting adequate and well-positioned?	<input type="checkbox"/>	<input type="checkbox"/>
13. Are goings or treads long enough and each of the same length?	<input type="checkbox"/>	<input type="checkbox"/>
14. Are risers shallow enough, all the same height and unlikely to trip users?	<input type="checkbox"/>	<input type="checkbox"/>

Checklist B continues on page 22



- | | Yes | No |
|---|--------------------------|--------------------------|
| 15. Are all nosings clearly defined? | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Are landings large enough and provided at intermediate levels in a long flight? | <input type="checkbox"/> | <input type="checkbox"/> |

Comments

Notes

- 1/9. While ramps are essential to enable wheelchair users to change level, steps are preferred by many ambulant disabled people. Both alternatives should be available.
2. Clear approach spaces should be 1200 x 1200 mm.
3. Minimum recommended usable width is 1200 mm; absolute maximum gradient for short distance only is 1 in 12.



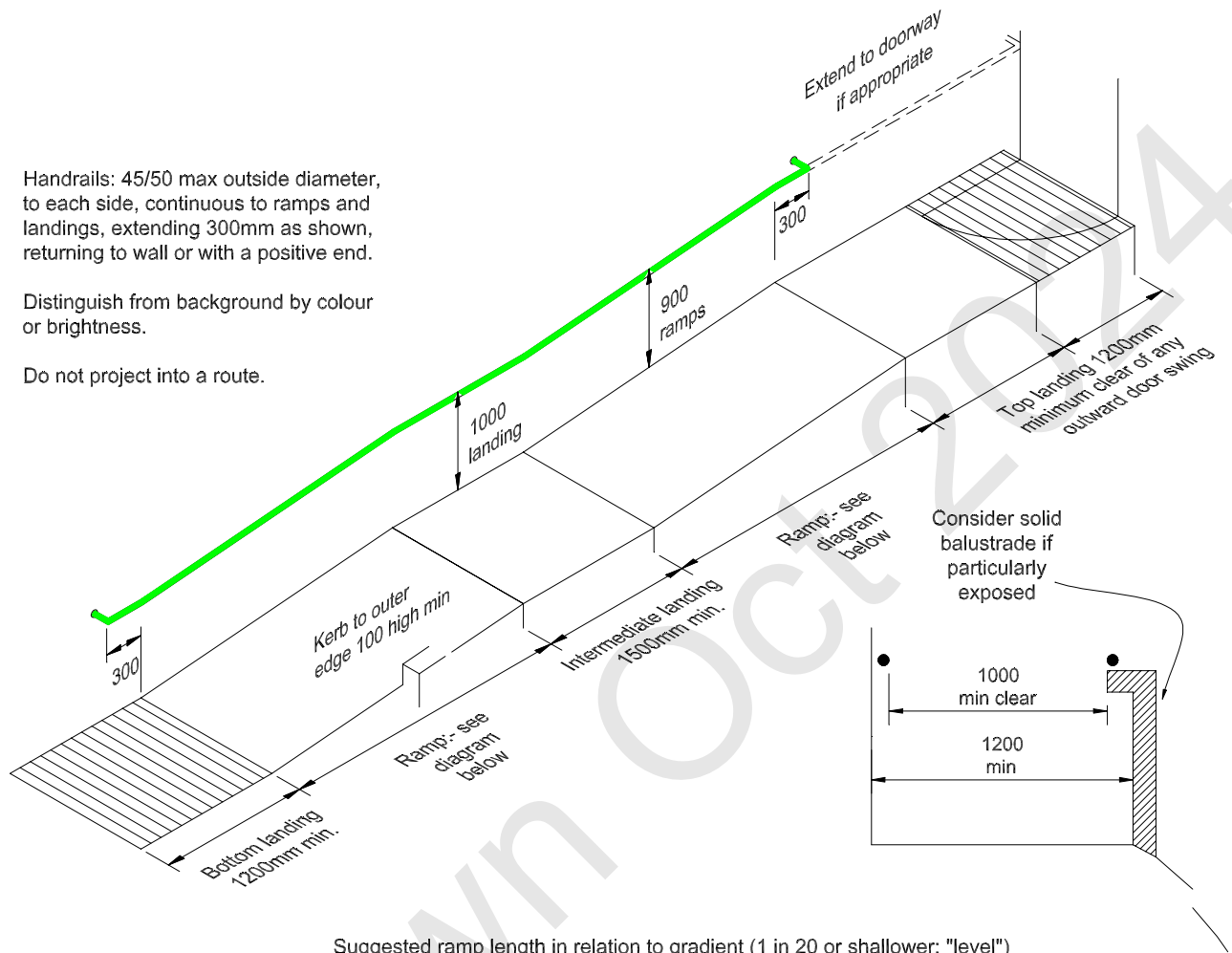
4. Ramp landings should be 1500 mm in length and provided at intervals of no more than 5000 mm (for a gradient of 1 in 15 or steeper) or 10,000 mm (for gradients between 1 in 15 and 1 in 20).
5. Proprietary non-slip vinyls or ceramic floor tiles may be more suitable than ordinary vinyls or linoleum. In addition to the type of finish, consideration should also be given to cleaning and maintenance treatment and the nature of footwear used.
6. Edges should have a minimum upstand of 100 mm and should be colour-contrasted.
7. A handrail should be provided at 900 mm above the ramp surface. Handrails should be colour-contrasted and continue beyond the top and bottom of a ramp or stair by 300 mm to enable location by blind or visually-impaired users, and to allow mobility-impaired users to achieve stability. Materials which are not extremely hot or cold to the touch should be used, such as hardwood or nylon-coated metal.
10. A change in surface texture and colour at the top and bottom of each flight of steps is needed to act as a warning to visually-impaired people. The use of tactile strips on stair handrails may also be considered.
11. See note 7.
12. Lighting should be positioned so that users do not traverse steps within their own shadows.
- 13/14. Each step profile in a flight should be identical, as the rhythm established by a user increases confidence and safety. Risers should not be open, as they allow feet to catch on the underside of the tread, and are therefore hazardous to those using sticks and canes. Risers should be a maximum of 170mm and treads should be no greater than 280mm.
15. Nosings should be 50 to 60 mm deep on both the tread and riser. They should be coloured to contrast with the stairs. Edges should be firmly fixed and non-slip.
16. Landings should be 1200 mm in length. The maximum permitted height for the rise of a flight of external steps between landings is 1200 mm, and it is recommended that there is a minimum of three and a maximum of nine steps.

Note: Tactile warning strips are recommended top and bottom of each flight.

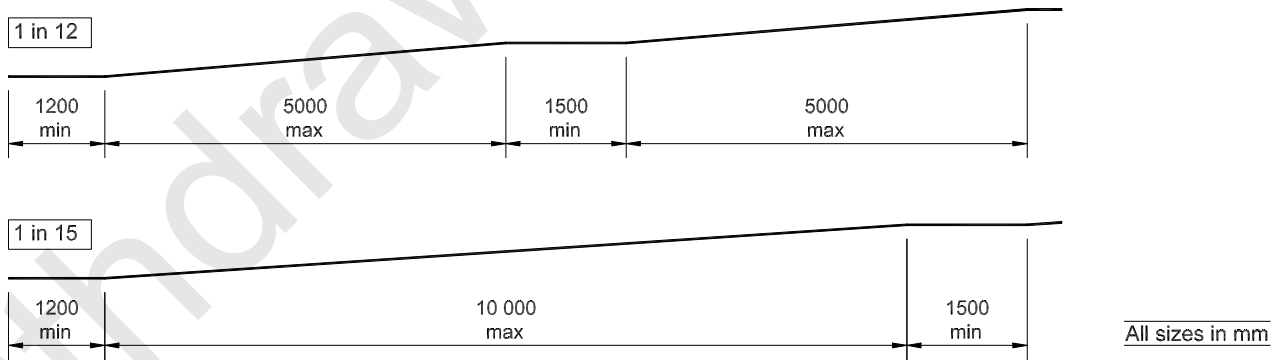
Handrails: 45/50 max outside diameter, to each side, continuous to ramps and landings, extending 300mm as shown, returning to wall or with a positive end.

Distinguish from background by colour or brightness.

Do not project into a route.

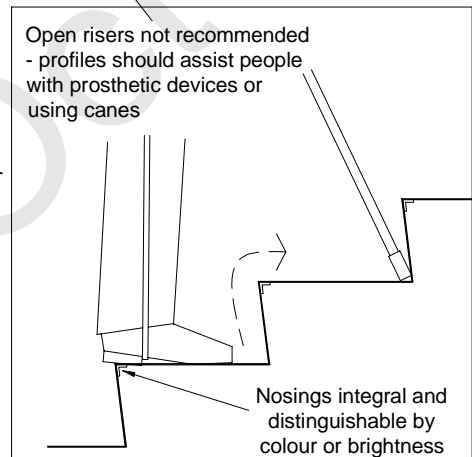
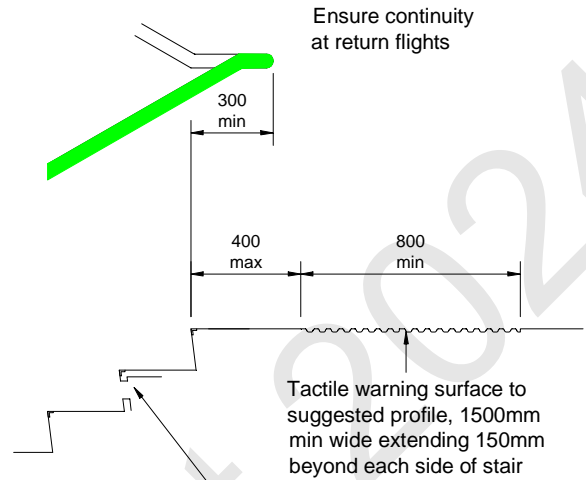
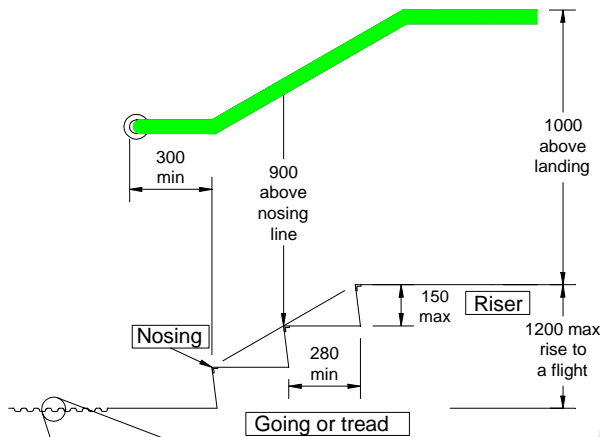


Suggested ramp length in relation to gradient (1 in 20 or shallower: "level")



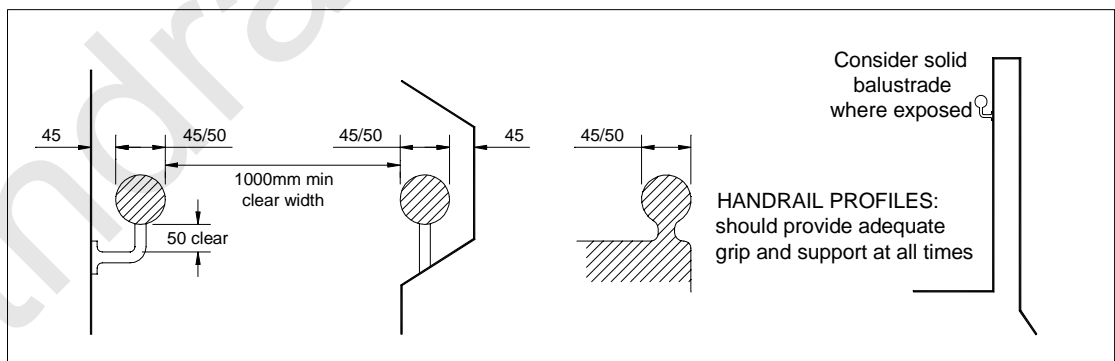
HANDRAILS: max 45/50mm outside diameter to each side, continuous to flight and across landings, extending 300mm as shown, returning to wall or with a positive end - not projecting into a route of travel.

Distinguish rails from background by colour or brightness.



LANDINGS: top, intermediate, bottom - all 1200mm long minimum, clear of any door swings

Note: Tactile warning strips are recommended top and bottom of each flight.



All sizes in mm



Entrance and lobbies

CHECKLIST C (Use separate sheet for each entrance)

Yes No

- | | Yes | No |
|---|--------------------------|--------------------------|
| 1. Is the door clearly distinguishable from the facade? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. If the door is frameless glass, is it easily recognisable to prevent people colliding with it and to aid visually impaired people? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the door opening wide enough for all users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Does it have a level or flush threshold? | | |
| 5. Can people each side of the door, either standing or seated, see each other? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is adequate space available alongside the leading edge for a wheelchair user to open the door while clear of the door swing? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is the door handle at a height suitable for both standing and seated users and clearly located? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Is the handle easily gripped and operated? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Is the force required to open or close the door minimal? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. If a door closer is fitted, is it a delayed closer, a slow action closer or minimum necessary closer pressure? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. If the door is automatically operated, does it have both visual and tactile information and warnings? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Is there a facility to summon help? | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Is there a revolving door?
<i>If not, go to question 16</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Is there an alternative single leaf door adjacent? | <input type="checkbox"/> | <input type="checkbox"/> |

Checklist C continues on page 27



- | | Yes | No |
|--|--------------------------|--------------------------|
| 15. Is the single leaf door kept unlocked? | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. If the door is security protected, is the system suitable for use by, and within reach of, people with sensory or mobility impairments? | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Is any weather mat of firm texture and flush with the floor? | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. Are regular checks of entrance doors made to ensure proper functioning? | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. If a lobby is provided, does the inner door meet the same criteria as the entrance door? | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. Does the lobby layout enable users, particularly those in wheelchairs, to clear one door before approaching and opening the second with minimal manoeuvring? | <input type="checkbox"/> | <input type="checkbox"/> |

Comments



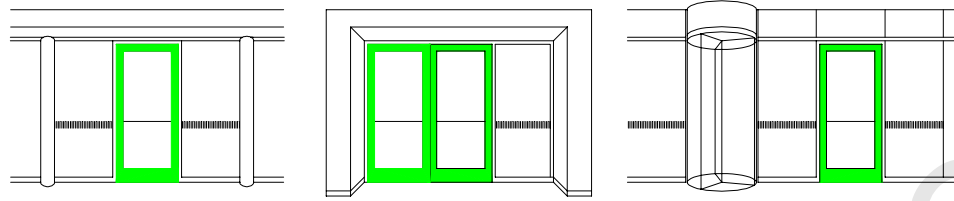
Notes

Disabled people should be able to negotiate independently the entrance to a building, as assistance from staff is unlikely to be available.

The area immediately beyond the entrance should have a lighting transition zone in which users with sight impairments can allow their eyes to adjust between different levels of brightness.

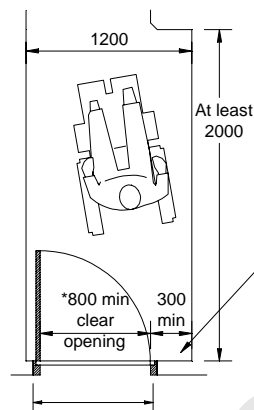
The route to reception should be clearly identified.

2. Glass doors should be identified by coloured signs at eye level, or coloured, full-width horizontal door handles.
3. A minimum clear opening of 800 mm is required. Double doors giving a clear opening of 1600 mm preferred.
6. A clear width of 300 mm must be provided on the handle side of the door to allow space for approaching and opening the door.
7. The colour of handles should contrast to that of the door.
8. Knobs and round pull handles should be avoided, as people with impaired hand function find them difficult to use.
9. To allow everyone, including children, elderly and frail people, to open it easily.
10. Automatic sliding doors are preferable to automatic swing doors, but may not always be achievable in context.



Ensure entrances are distinguishable by detailing, colour or other features.

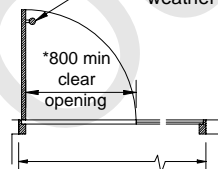
Provide accessible entrance adjacent to standard size revolving doors, preferably in common use for entry.



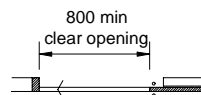
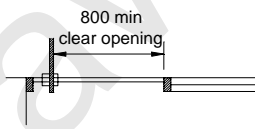
Doorset
1000→850 clear opening

Space here allows wheelchair users and others with limited mobility to approach and open door- essential with self closing doors.

Full height door pulls may restrict effective opening, as will substantial weather bar.



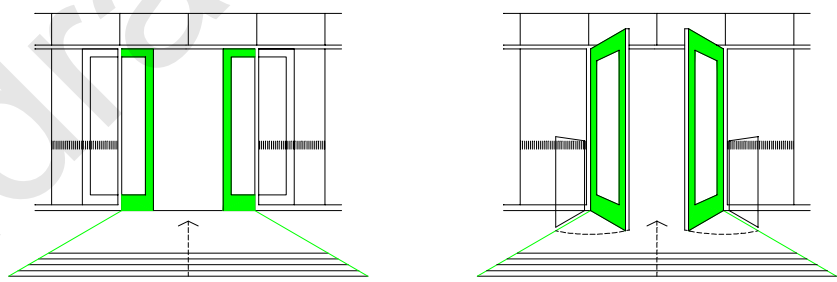
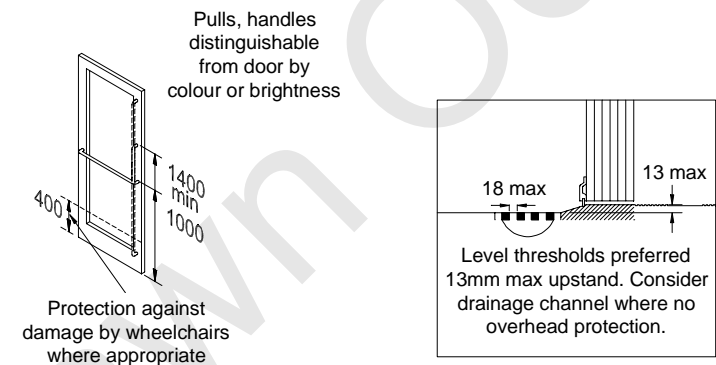
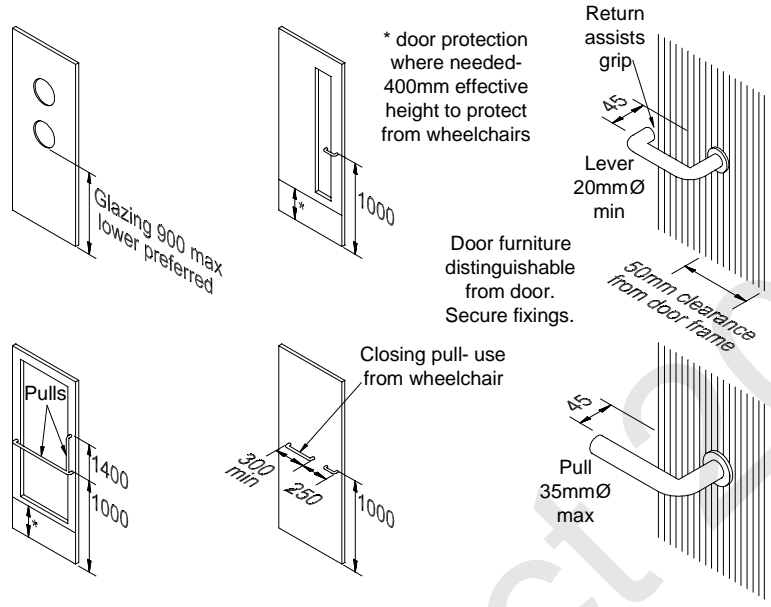
Doorset
*1800→810 clear to each leaf
less than 1800→unequal leaves
necessary to ensure 800 mm
minimum clear to one leaf.



Maintain clear opening width with pivoted or sliding doors.
Exit doors: where not combined with entrances these also should have clear opening widths as above as well as level thresholds, and external ramps where necessary.

All sizes in mm

See also page 35 for further information on lobbies.



Automatic opening doors- define approach, provide tactile and visual information, hinged doors are potentially hazardous - safeguard the immediate approach to them

All sizes are in mm



Reception and waiting

CHECKLIST D (Use separate sheets for each reception area) **Yes** **No**

- | | | | |
|-----|---|--------------------------|--------------------------|
| 1. | Are signs designed and located to convey information to visitors with sight impairments and wheelchair users with lower eye levels? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | Does the lighting level minimise danger and maximise convenience for people with impaired sight? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | Are floor surfaces: | | |
| | slip resistant, even when wet? | <input type="checkbox"/> | <input type="checkbox"/> |
| | easily manoeuvred by wheelchair users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | Are any junctions between floor surfaces tripping hazards or obstacles to wheelchair users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | Is any reception desk suitable for both approach and use from both sides by people in either standing or seated positions? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. | Is it fitted with an induction loop for communication with hearing aid users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. | Is external communication possible by minicom (textphone) as well as standard telephone? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. | Is the reception desk lighting, together with its background, designed to facilitate lip-reading? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. | Is British Sign Language available? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. | Is a public telephone available?
<i>If not, go to question 15</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. | Is it mounted in a position and at a height suitable for all users? | <input type="checkbox"/> | <input type="checkbox"/> |

Checklist D continues on page 32



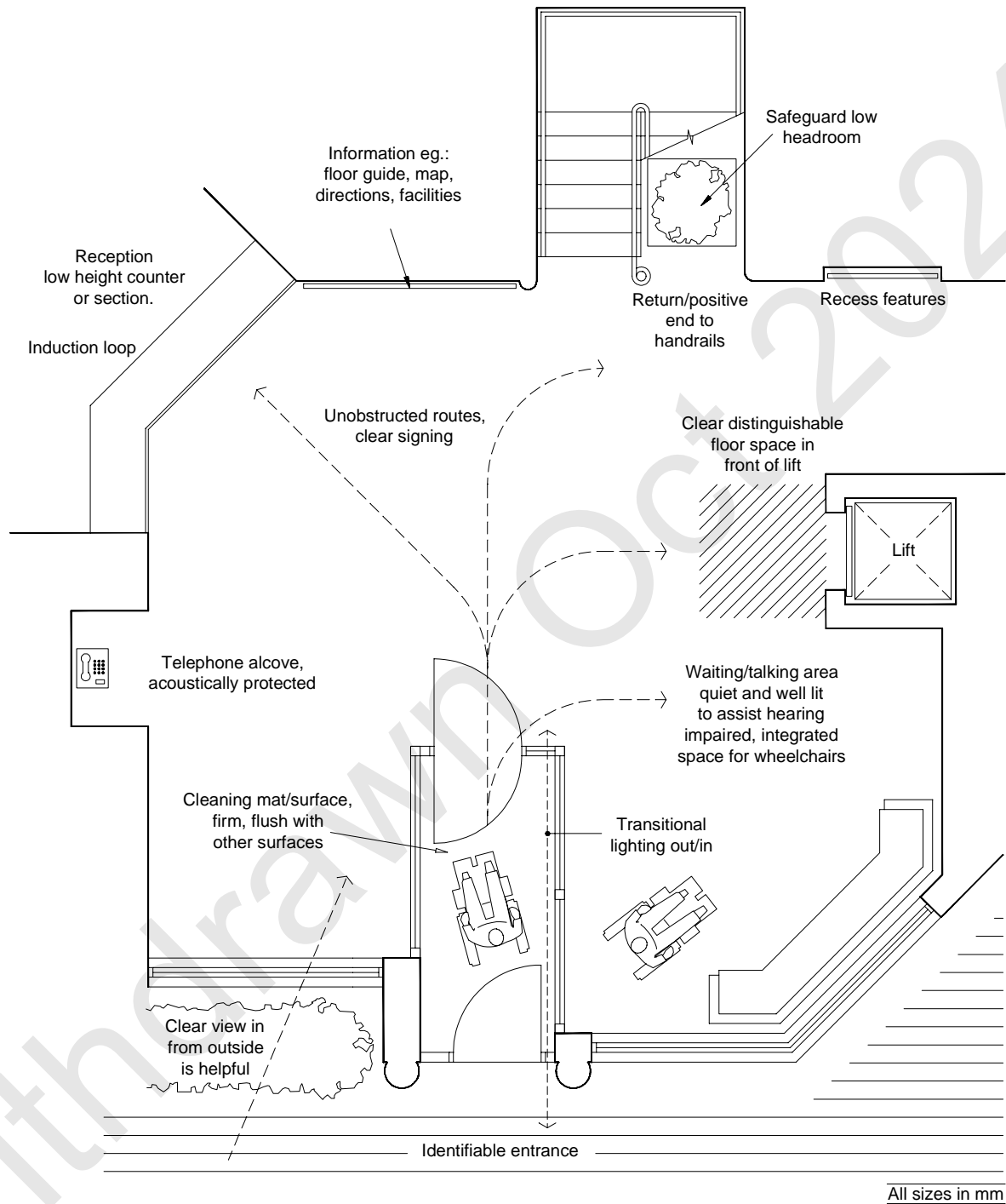
	Yes	No
12. Is it equipped with an inductive coupler?	<input type="checkbox"/>	<input type="checkbox"/>
13. Is the waiting area equipped with seating designed for ease of use?	<input type="checkbox"/>	<input type="checkbox"/>
14. Is space available clear of the circulation area for wheelchair users to wait?	<input type="checkbox"/>	<input type="checkbox"/>
15. Are patient calls or announcements also displayed in visual form?	<input type="checkbox"/>	<input type="checkbox"/>
16. Is the route from the reception/waiting area to consulting and treatment areas clearly indicated by visual and tactile signs?	<input type="checkbox"/>	<input type="checkbox"/>
17. Are information notices easy to read and displayed at heights convenient for all users?	<input type="checkbox"/>	<input type="checkbox"/>
18. Is information which is intended for patients to take away available in large print, Braille and audio-tape versions?	<input type="checkbox"/>	<input type="checkbox"/>
19. Are all finishes matt, non-reflective and colour-contrasted?	<input type="checkbox"/>	<input type="checkbox"/>

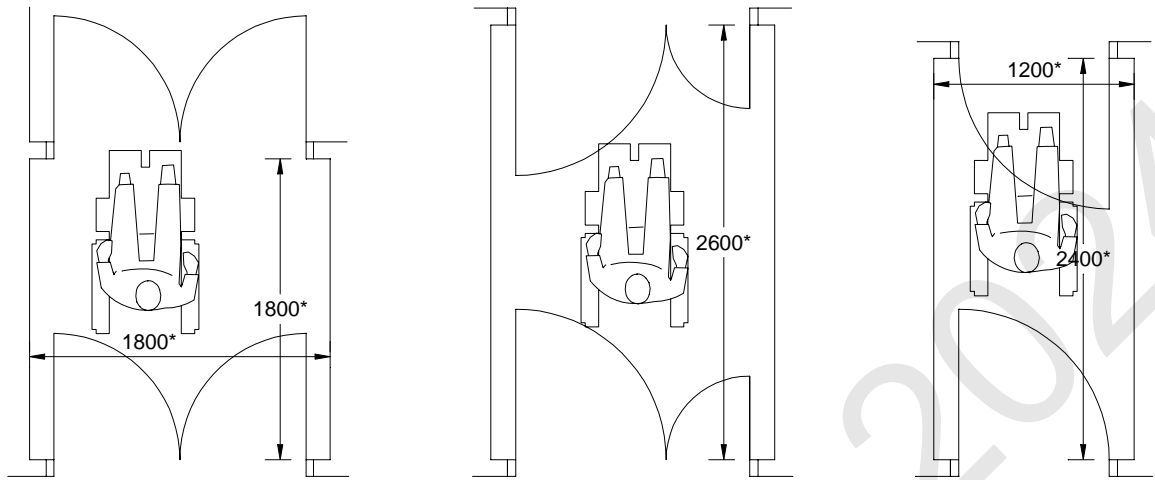
Comments



Notes

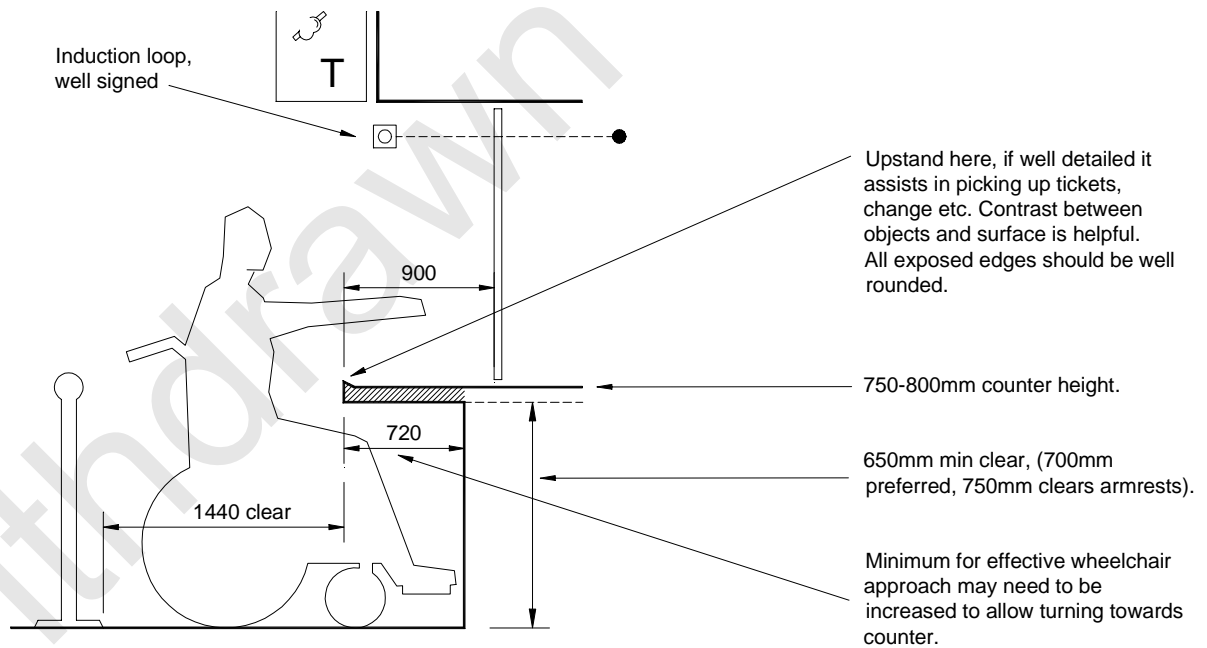
2. Lighting levels should be high and should minimise shadows and dark areas.
6. An induction loop converts sound via a microphone into a varying magnetic field which is converted back to amplified sound by an individual's hearing aid. An induction loop is of no value if its presence is not clearly indicated so that users can switch their hearing aids to the T-position. It is not a secure means of communication, so care has to be exercised when dealing with confidential information.
7. Minicom (textphone) is a telephone equipped with an electronic keyboard and screen which allows profoundly deaf, hard of hearing and speech impaired people to communicate directly with others who have similar equipment or with an ordinary telephone through Typetalk.
8. Backlighting should be avoided, either natural or artificial, and backgrounds should be plain rather than "busy" or distracting.
12. An inductive coupler enables people with hearing aids to use the telephone.
13. A variety of seating should be provided. One or two seats should be provided close to the reception counter so that people may rest if they wish while queuing for information.



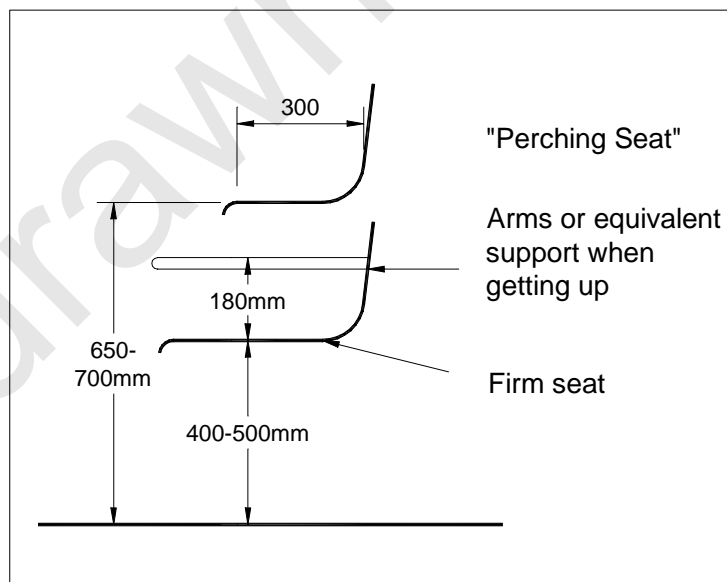
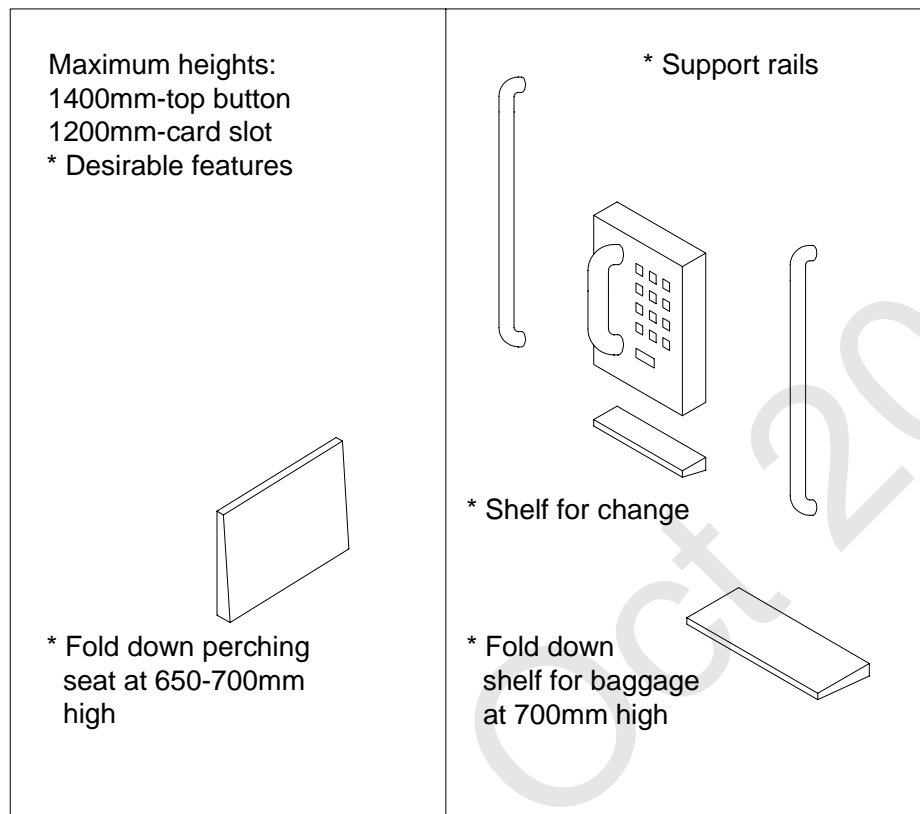


* critical dimensions

LAYOUT OF LOBBIES: will be determined by door layout, operation and by need of wheelchair users and others to pass clear of one door before approaching and opening the second, preferably with a minimum of manoeuvring.



All sizes in mm



All sizes in mm



Corridor

CHECKLIST E (Use separate sheets for each corridor)

Yes No

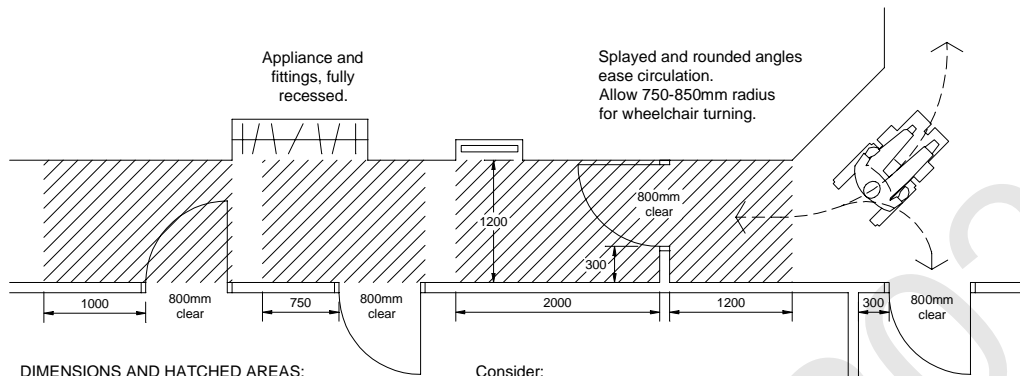
- | | | |
|--|--------------------------|--------------------------|
| 1. Is the corridor wide enough for a wheelchair user to manoeuvre and for other people to pass? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Do any lobbies allow users, including wheelchair users, to clear one door before approaching the second with minimal manoeuvring? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the corridor free from obstruction to wheelchair users and hazards to people with impaired sight? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is turning space available for wheelchair users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does natural and artificial lighting avoid glare and silhouettes? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are visual clues available to help orientation? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Do floor surfaces: | | |
| allow easy passage to wheelchair users? | <input type="checkbox"/> | <input type="checkbox"/> |
| minimise light reflection? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are textured surfaces used to convey information to people with sight impairments? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Are any directions or information signs clearly visible from both standing and seated positions? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Are signs tactile, for use by people with sight impairments? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Are regular checks made to ensure the above features are maintained? | <input type="checkbox"/> | <input type="checkbox"/> |



Comments

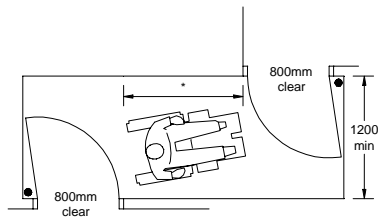
Notes

1. The corridor should be 1200 mm wide minimum.
3. Radiators and equipment such as fire extinguishers should be recessed. Outward-opening doors are hazardous to people with sight impairments and should be avoided.
5. Windows should not be situated at the ends of corridors.
6. Functional areas may be differentiated through the use of pictograms or colour. For example, the doors of WCs, consulting rooms, offices etc could be painted different colours.
8. Differently textured wall finishes can improve orientation for blind people, in the way that colour does for visually impaired people. A change in floor texture in a corridor can alert a blind person to a door alongside, or warn them of one ahead.

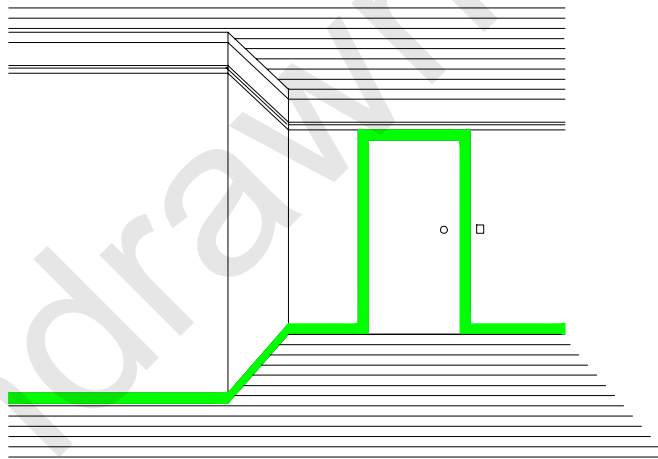


DIMENSIONS AND HATCHED AREAS: provide minimum space for use of standard wheelchair to approach and turn through doorways.

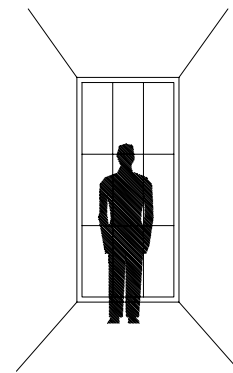
Consider: Increased circulation and door opening widths, particularly in entrance areas of public buildings. Doors opening into routes may be hazardous, particularly if not self closing.



- Lobbies generally as for entrance lobbies
- nominal 100mm - door opening beyond 90° eases turning through doorway
 - * critical dimension



Provide visual information by distinguishing floor, wall and ceiling planes, door surrounds, decorative features



Avoid silhouetting in circulation and meeting spaces

All sizes in mm



Lift

CHECKLIST F (Use separate sheets for each lift)

	Yes	No
1. Is a lift available?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is its location clearly defined by visual and tactile information?	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the floor indicator clear and the call controls within easy reach of all users?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there sufficient unobstructed space immediately outside the lift for wheelchair users to wait and manoeuvre?	<input type="checkbox"/>	<input type="checkbox"/>
5. Does the door open wide enough for wheelchair users?	<input type="checkbox"/>	<input type="checkbox"/>
6. Does the door have a delayed-action closer and an override (not a door-edge pressure system) to allow slow entry or exit?	<input type="checkbox"/>	<input type="checkbox"/>
7. Are the car dimensions sufficient to allow space for a wheelchair user plus escort?	<input type="checkbox"/>	<input type="checkbox"/>
8. Does the car have support rails, appropriately designed and positioned?	<input type="checkbox"/>	<input type="checkbox"/>
9. Are the controls, including the emergency call, located easily using the visual or tactile information, and within reach of all users?	<input type="checkbox"/>	<input type="checkbox"/>
10. Is there voice indication of the floor reached?	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the functioning of the lift and its control checked regularly?	<input type="checkbox"/>	<input type="checkbox"/>
12. Is there an alternative suitable stair?	<input type="checkbox"/>	<input type="checkbox"/>

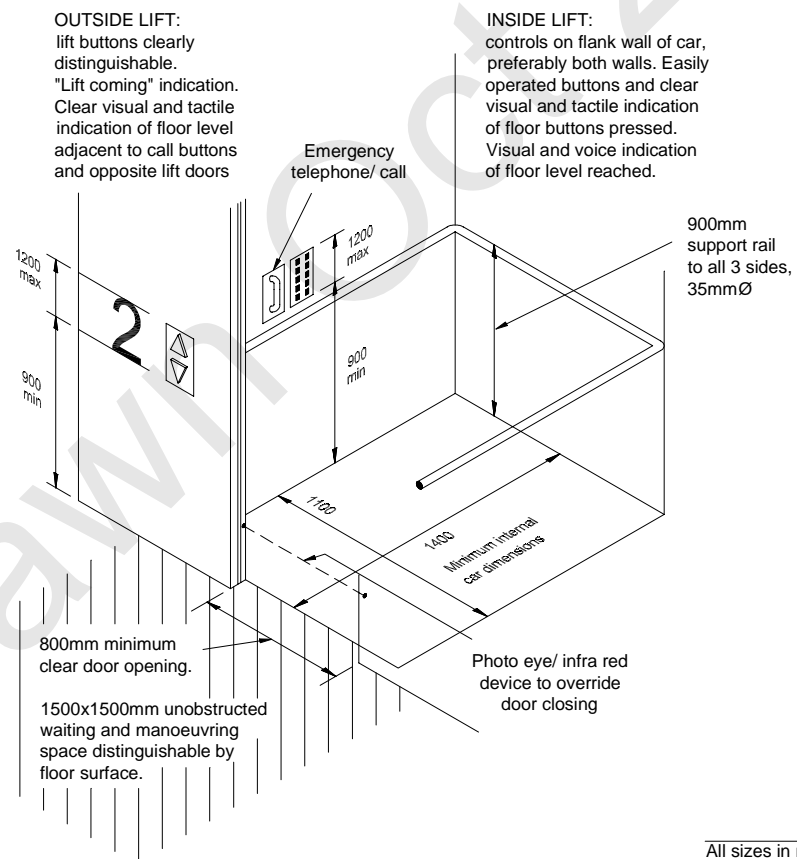


Comments

Notes

1. In buildings of more than one storey, for some people a lift is the only way of travelling between floors.
2. There should be a contrast of tone and colour between the walls and the lift doors, and between the landing and the lift floor, to assist visually impaired people. Additionally, a distinguishable floor surface – measuring at least 1500 x 1500 mm – outside the lift door area will assist visually impaired people to locate the lift door.
3. In buildings with more than two floors it is important to identify the floor number, not only alongside the lift door but also on the opposite wall for the benefit of those within the lift.
4. An unobstructed area of 1500 x 1500 mm is required, which should have a distinguishable floor surface (see note 2).
5. Lift doors should provide a minimum clear opening width of 800 mm.
6. The door-edge pressure system is not suitable for frail users.
7. The minimum size illustrated equates to a standard 8-person lift car.
8. As well as handrails as a means of support, some users may wish to use a fold-down seat.

9. Tactile lettering is only of value when it is raised rather than recessed; and the controls should be mounted part-way along a side wall, as the traditional corner location is probably the most inconvenient to reach from a wheelchair.
10. In buildings of more than two storeys this is the only positive orientation system for blind people.
12. Stairs should always be provided as an alternative to a lift, as some people experience apprehension about lift use, even to the degree of phobia, and will always prefer to use stairs. In an emergency situation, when the lift cannot be used, a well-designed stair will minimise the number of people needing assistance to evacuate the building.





Stairlift

CHECKLIST G (Use separate sheets for each stairlift)

Yes **No**

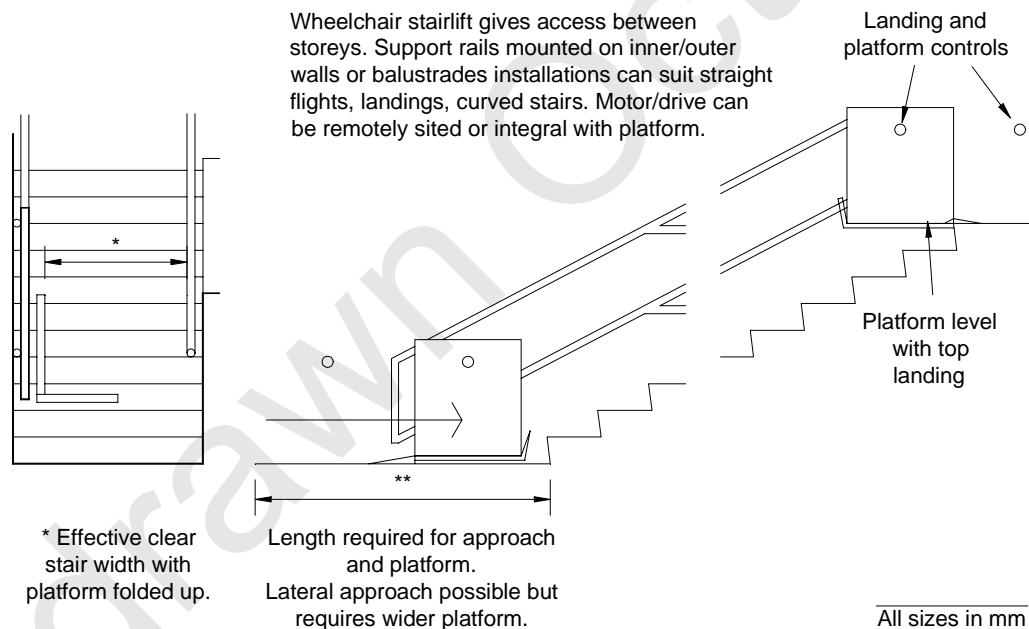
- | | | |
|---|--------------------------|--------------------------|
| 1. Is the platform of adequate size for wheelchair users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is approach possible and convenient at the lower landing? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is approach possible, convenient and safe at the upper landing? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are the fixed controls at the lower and upper landings clearly identifiable and within convenient reach of both standing and seated users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. When not in use, is the platform powered to revert to its folded position so that it does not place stair users with visual impairments at risk? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. In the event of power failure or emergency, does the platform return automatically to the lower landing? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is the equipment maintained and its operation checked regularly? | <input type="checkbox"/> | <input type="checkbox"/> |

Comments

Notes

A stairlift is not recommended as a means of vertical circulation in a new building, but can be effective as an improvement to an existing building in which space is not available for a passenger lift or the cost is prohibitive.

A smaller version than that illustrated is available for passenger standing or using a fold-down seat. If this is used by a wheelchair user, space must be available at the lower level to store his or her wheelchair, and a wheelchair and associated storage must be provided for use at the upper level.



Models are available for external as well as internal use.

The minimum “effective clear stair width” should be 800 mm.
The minimum “length required for approach and platform” should be 1500 mm.



Platform lift

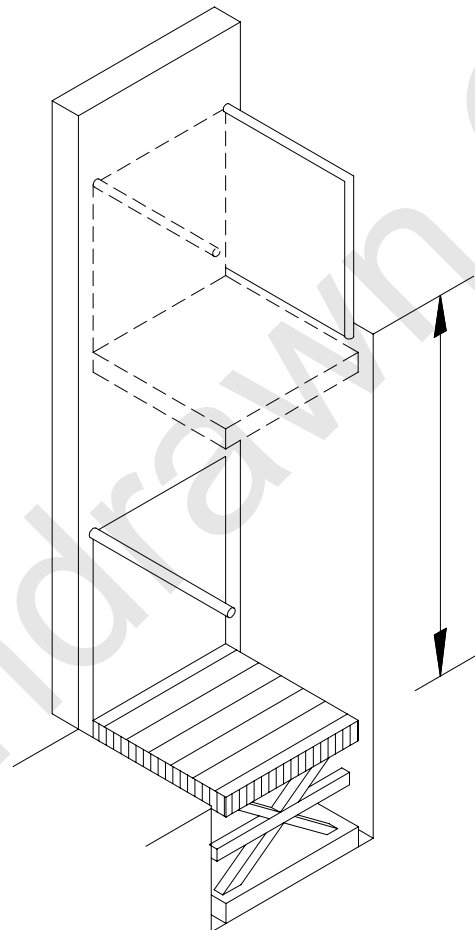
CHECKLIST H (Use separate sheets for each platform lift) **Yes** **No**

1. If a change of level exists within a storey of a building, is a platform lift provided?
2. Can the platform lift be approached by wheelchair users at both upper and lower landings?
3. Are the call controls at both levels clearly identifiable and within convenient reach of both standing and seated users?
4. Is the platform of sufficient size for wheelchair use and manoeuvre?
5. Are the platform controls easily identifiable and usable by both wheelchair users and standing passengers?
6. In the event of power failure or emergency, does the platform return automatically to the lower level and allow egress?
7. Is the equipment maintained and its operation checked regularly?
8. Is there an alternative accessible stair?

Comments

Notes

This equipment is only recommended currently for use to travel vertically not more than 1980 mm. Thus it can accommodate a change of level within a single floor of a building, or a level change between a car park or highway to an entrance door. Internally it must not replace an escape stair.



Short rise platform,
lift mechanism to
one side, end or
below platform.
Landing barriers
interlocked with lift
operation.

Travel up to
1980mm
(BS 6440: 1983)

All sizes in mm



Internal ramp

CHECKLIST I (Use separate sheets for each ramp)

Yes **No**

- | | | |
|---|--------------------------|--------------------------|
| 1. For a short rise within a single storey, is a permanent or portable ramp available? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is it wide enough and suitably graded? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the surface slip-resistant? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are exposed edges protected to prevent accident? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does it have a suitable handrail each side? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is the ramp maintained free of obstruction, both to the facility itself and its approaches at both levels? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Does a suitable alternative stair exist? | <input type="checkbox"/> | <input type="checkbox"/> |

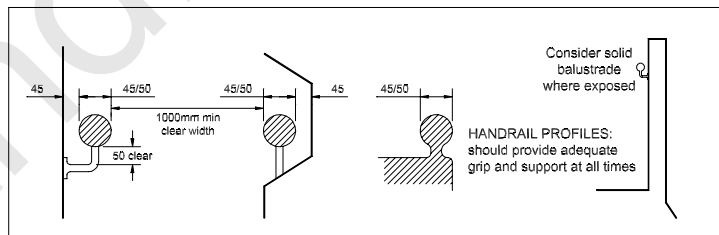
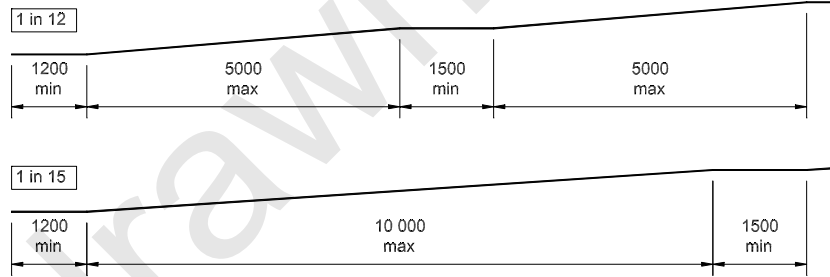
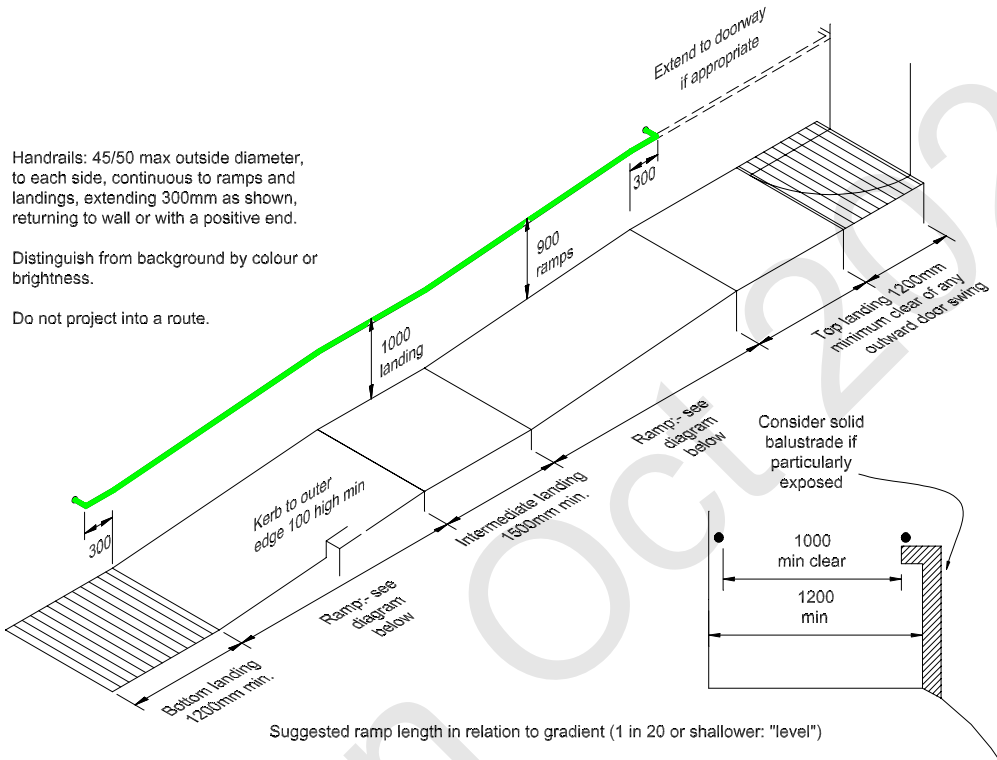
Comments



Notes

Within the limited confines of a building, a short-rise platform lift may be more easily accommodated than a ramp.

2. The ramp should be at least 1200 mm wide, with an unobstructed clear width between handrails of 1000 mm. Absolute maximum gradient is 1 in 12.
4. The open side of a ramp or landing should have a raised kerb, in a contrasting colour, in order to prevent feet and wheels slipping off.
5. Colour contrast for handrails allows partially-sighted people to locate them, and extensions beyond top and bottom of a ramp give blind users directional information and mobility-impaired users stability before use.



All sizes in mm



Internal stairs

CHECKLIST J (Use separate sheets for each internal stair) **Yes** **No**

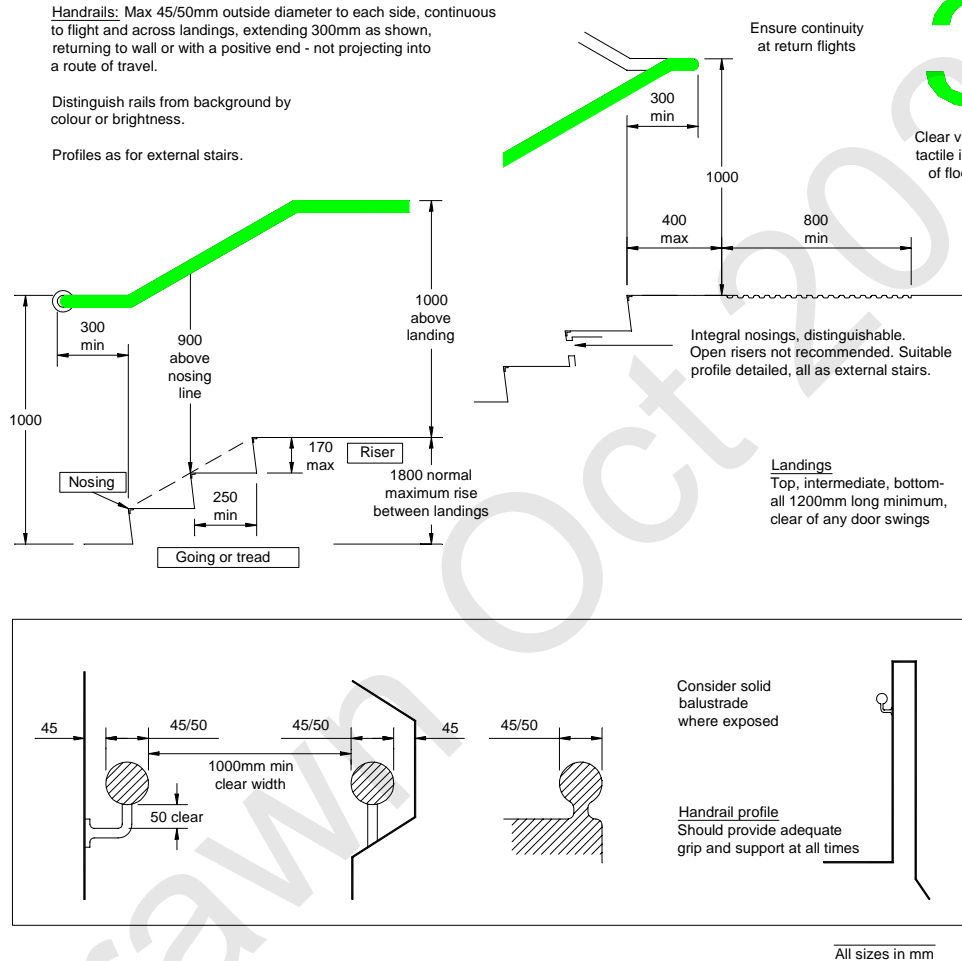
- | | | |
|--|--------------------------|--------------------------|
| 1. Is the location of the stair adequately signed at each level? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is each level clearly identified by tactile and visual information? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is there a visual warning at the top and bottom of each flight? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Does the stair have a suitable handrail each side? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is there adequate, well-positioned lighting? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are goings or treads long enough and each of the same length? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Are risers shallow enough, all the same height, and unlikely to trip users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are all nosings clearly defined? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Are landings long enough and provided at intermediate levels in a long flight | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Is the facility maintained in good condition and regularly checked for obstructions? | <input type="checkbox"/> | <input type="checkbox"/> |

Comments



Notes

3. A change in surface texture and colour at the top and bottom of each flight of steps is useful to act as a warning to visually-impaired people. The use of tactile strips on stair handrails may also be considered.
4. Handrails should be provided at 900 mm above the line of nosing. They should be colour-contrasted and continue beyond the top of a stair by 300 mm to enable location by blind or visually-impaired users, and to allow mobility-impaired users to achieve stability.
5. People should not have to negotiate stairs which lie within their own shadows.
- 6/7. Each step profile in a flight should be identical, as the rhythm established by a user increases confidence and safety. Risers should not be open, as they allow feet to catch on the underside of the tread, and are therefore hazardous to those using sticks and canes.
8. Nosings should be 50 to 60 mm deep on both the tread and the riser. They should be coloured to contrast with the stairs. Edges should be firmly fixed and non-slip.
9. Landings should be 1200 mm in length (straight flights only). The maximum permitted rise in height for a flight of internal steps between landings is 1800 mm.



The drawing meets the requirements of the Technical Standards Part T of the Building Standards (Scotland) Regulations 1990 but the Disability Scotland Access Guide suggests the preferred dimensions for treads and risers should be as follows:

Treads: preferred dimension 300 mm (280 mm minimum).

Risers: preferred dimension 150 mm (170 mm maximum).



Internal door

CHECKLIST K (Use separate sheets for each door or door type or link audit of doors to the Checklist L sheets for different rooms)

Yes No

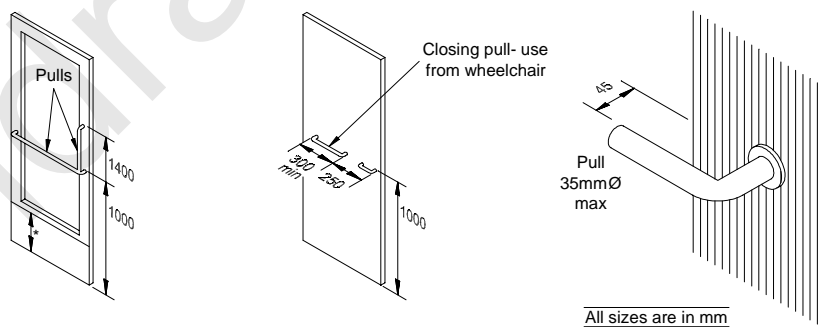
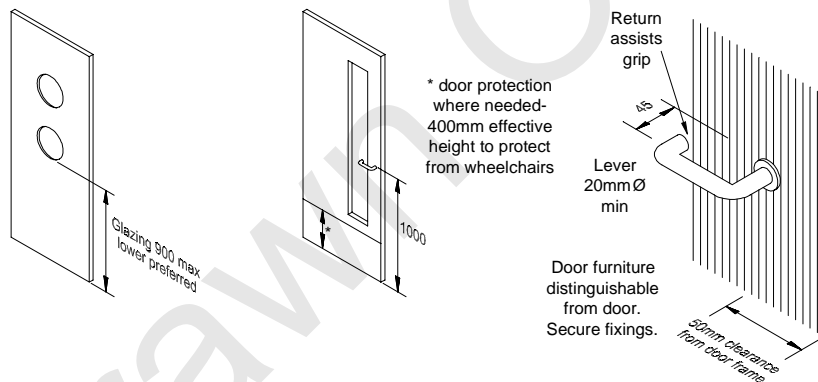
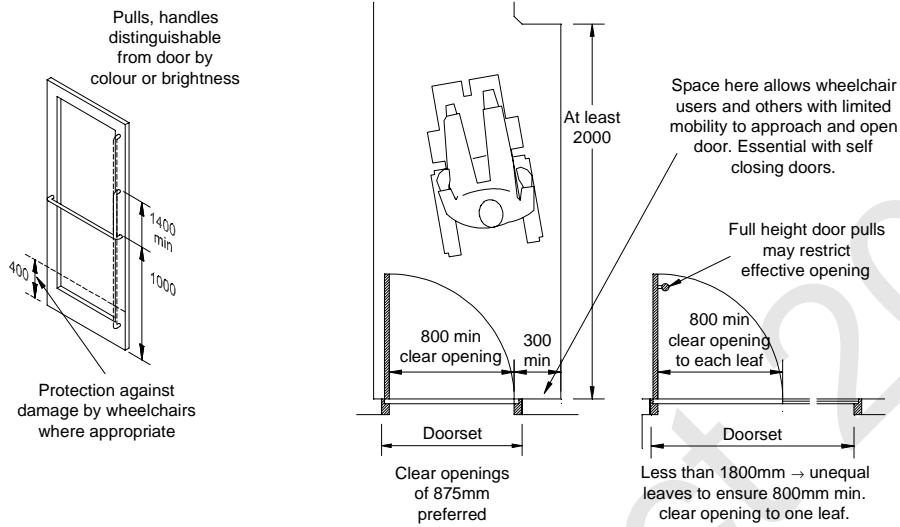
1. Is the door absolutely necessary for fire safety or functional reasons? Yes No
2. Is it distinguishable from its surroundings? Yes No
3. If the door is glass, is it easily recognisable to prevent people colliding with it and to aid visually-impaired people? Yes No
4. Can people each side of the door, either standing or in a wheelchair, see each other? Yes No
5. Is the clear opening width sufficient for a wheelchair user? Yes No
6. Is there adequate space alongside the leading edge for a wheelchair user or someone with limited mobility to reach the door control while clear of the swing? Yes No
7. Is the door handle at a height suitable for both standing and seated users? Yes No
8. Is the handle clearly distinguishable from the door itself? Yes No
9. Can it be easily gripped and operated? Yes No
10. If a door closer is fitted, is it a delayed closer, a slow-action closer, minimum necessary closer pressure, or hold-open, that is, with magnets linked to the alarm system? Yes No
11. Are regular checks made to ensure proper functioning? Yes No



Comments

Notes

1. Each door is a barrier or obstacle, and removal should be considered if not a fire door, or necessary for security, privacy or energy conservation.
2. The door frame should be in a different colour and tone from the door and wall to highlight its position. Handles should be similarly distinguished.
3. Large areas of glazing should be highlighted by a contrasting area not less than 150 x 150 mm, positioned at eye level (standing) and repeated lower for people in wheelchairs.
4. Obviously not appropriate for WCs, examination or treatment rooms.





Spaces for staff and patients

CHECKLIST L (Use separate sheets for each room)

Yes No

- | | Yes | No |
|--|--------------------------|--------------------------|
| 1. Is function or use identified by visual and tactile information? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are lighting, heating and ventilation controls easily reached and used? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the lighting designed to meet the needs of a wide range of users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Can it be adjusted to suit the range of activities and tasks carried out? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is circulation space allowed for wheelchair users? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is it maintained free of obstructions which would create hazards for people with sight impairments? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Are storage, record systems and items of equipment suitable for use from a seated position and by people with hearing or sight impairments? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are telephones fitted with inductive couplers? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Are all areas where information is given or meetings held fitted with a sound enhancement system? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Is its performance checked regularly? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Does a consulting/examination room make provision for convenient use by a disabled patient, as well as his or her escort? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Are changing cubicles suitable for wheelchair users, with room for assistance to be given if required? | <input type="checkbox"/> | <input type="checkbox"/> |

Checklist L continues on page 57



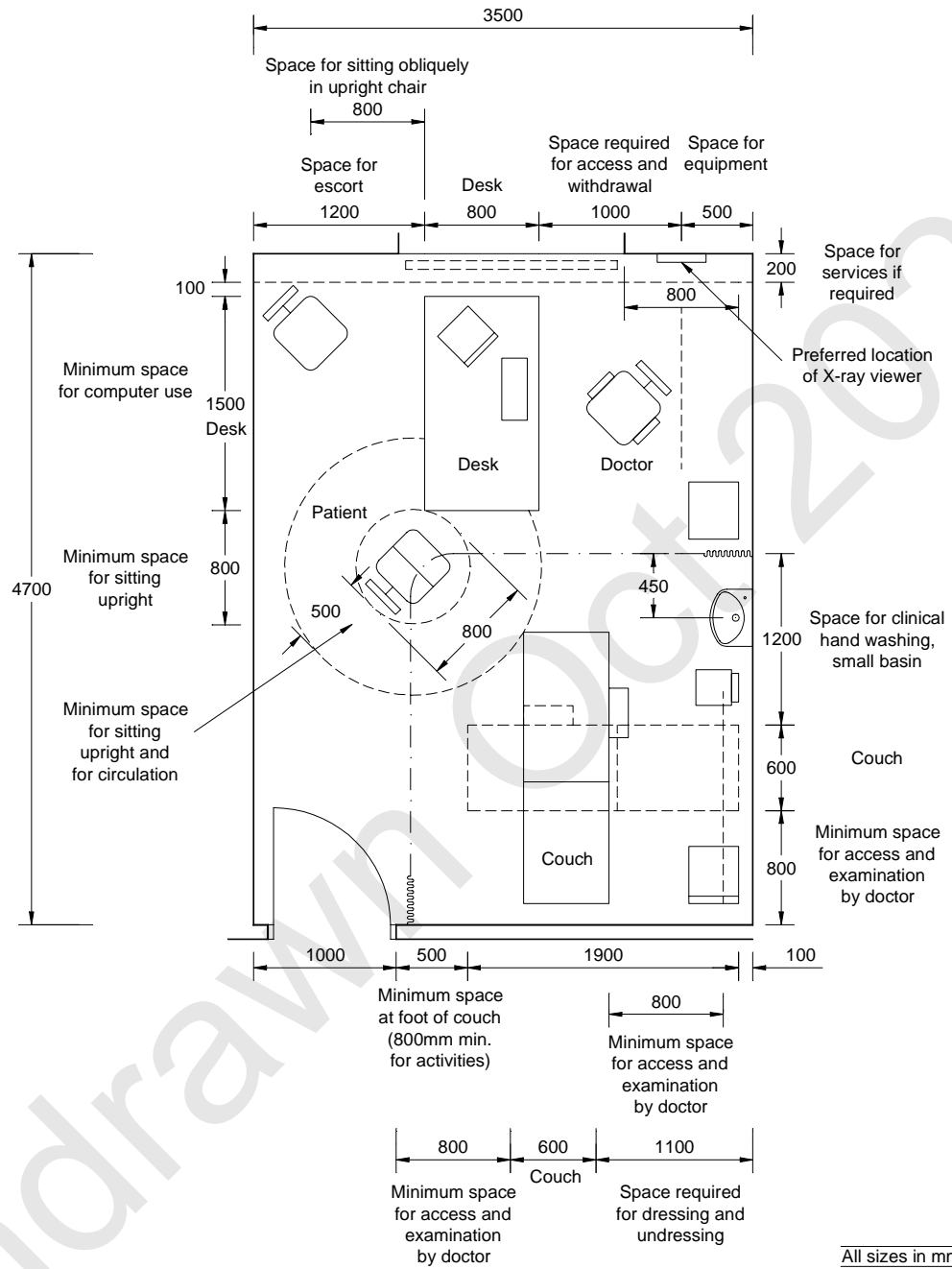
- | | Yes | No |
|--|--------------------------|--------------------------|
| 13. Is the examination couch capable of height adjustment to facilitate easy transfer? | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Is the area laid out so that a lip-reader is not disadvantaged by viewing the speaker against a background of natural or artificial light? | <input type="checkbox"/> | <input type="checkbox"/> |

Comments

Notes

Work spaces must be sufficiently flexible to meet the needs of all disabled staff, both present and future.

2. Recommended height above floor level for light switches, controls etc 900 – 1050 mm. Recommended height above floor level for power points 700 – 900 mm.
9. While induction loops are the most common equipment to assist hearing-aid users, conversations can be overheard by other hearing-aid users in adjoining rooms, as there is overspill beyond the loop itself both horizontally and vertically. An alternative infra-red system could be considered for use in the most sensitive areas.



See HBN 40: Common Activity Spaces for more information on space requirements.



WC provision – all toilet areas

CHECKLIST M

Yes No

1. Is WC provision made for people with disabilities, including wheelchair users? Yes No
2. Do all toilet areas have slip-resistant floors? Yes No
3. Are they readily distinguishable, by colour contrast, from the walls? Yes No
4. Are all fittings readily distinguishable by colour from the background? Yes No
5. Are all door handles and locks easily gripped and operated? Yes No
6. Do ambulant disabled people and people using walking aids have sufficient space to manoeuvre? Yes No
7. Can ambulant disabled people raise and lower themselves in the standard cubicles? Yes No
8. Is a disabled person's travel distance to a suitable WC greater than that for an able-bodied person? Yes No
9. Are finishes matt, colour-contrasted, and non-reflective? Yes No

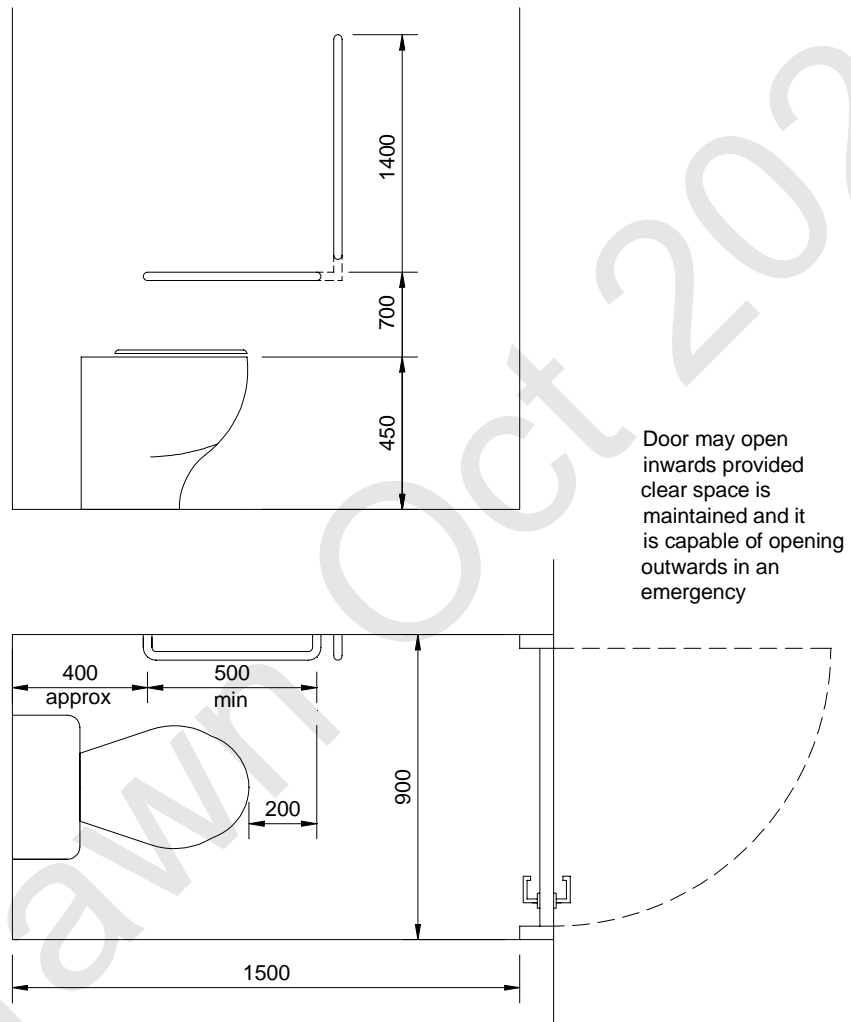


Comments

Notes

Often overlooked are the needs of people with sight impairments, together with ambulant disabled people or people who use walking aids who have difficulty in raising and lowering themselves without support.

9. Reflection and glare can cause visually-impaired people to become disorientated.



WC Compartment, ambulant disabled.

Note: dimensions are minimum dimensions.



Wheelchair accessible WC – standard layout

CHECKLIST N (Use separate sheets for each different WC compartment)	Yes	No
1. Can the WC be approached by a wheelchair user – that is, is the route free of steps, corridor obstructions, narrow doors etc?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is the location clearly signed?	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the travel distance to this WC greater than that to a standard WC?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there sufficient space outside the toilet compartment for manoeuvre and door opening?	<input type="checkbox"/>	<input type="checkbox"/>
5. Are the door handles, lock and light switch easily reached and operated?	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the compartment large enough to allow unassisted or assisted manoeuvring into position for frontal, lateral, angled and backward transfer?	<input type="checkbox"/>	<input type="checkbox"/>
7. Are the fittings arranged to facilitate these manoeuvres?	<input type="checkbox"/>	<input type="checkbox"/>
8. Are both hand washing and drying facilities within reach of someone seated on the WC?	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the tap appropriate for use by a person with limited dexterity, grip or strength?	<input type="checkbox"/>	<input type="checkbox"/>
10. Are suitably designed grabrails fitted in all the positions necessary to assist manoeuvring?	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the manoeuvring area free from obstructions, eg boxed-in pipework, radiators, cleaners' buckets or occasional storage?	<input type="checkbox"/>	<input type="checkbox"/>

Checklist N continues on page 63



Yes No

12. If more than one standard layout WC is provided, are the layouts handed (a left-sided approach and a right-sided approach)?

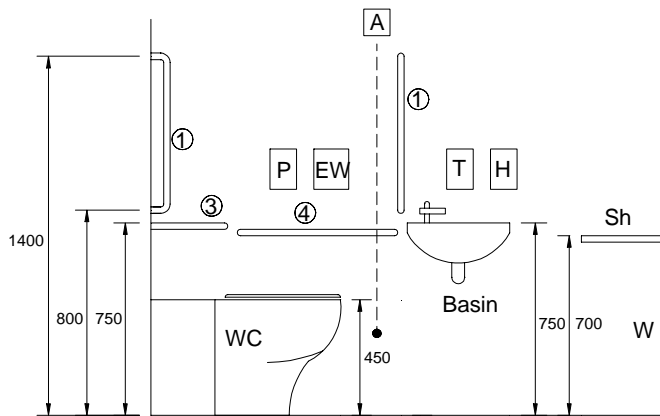
Comments

Notes

Users may have sight impairments, so colour contrast should be used to identify equipment, controls and grabrails.

An emergency alarm should be fitted. A cord which reaches to within 300 mm of the floor will be accessible to a fallen user. To avoid embarrassment the alarm should be located in a permanently staffed rather than public area.

5. Recommended height for light switches – 90-1050 mm. Pull cord switches are preferred.
6. An inward-opening door will not facilitate the manoeuvres necessary in a compartment of the size illustrated. The additional length required needs to be sufficient to accommodate the door swing. If an inward-opening door is used it should be able to be opened outwards in an emergency.
7. The WC needs to project from the back wall as illustrated, to enable wheelchair alignment for a lateral transfer. The flush handle should be positioned at the wheelchair side of the cistern.



STANDARD LAYOUT

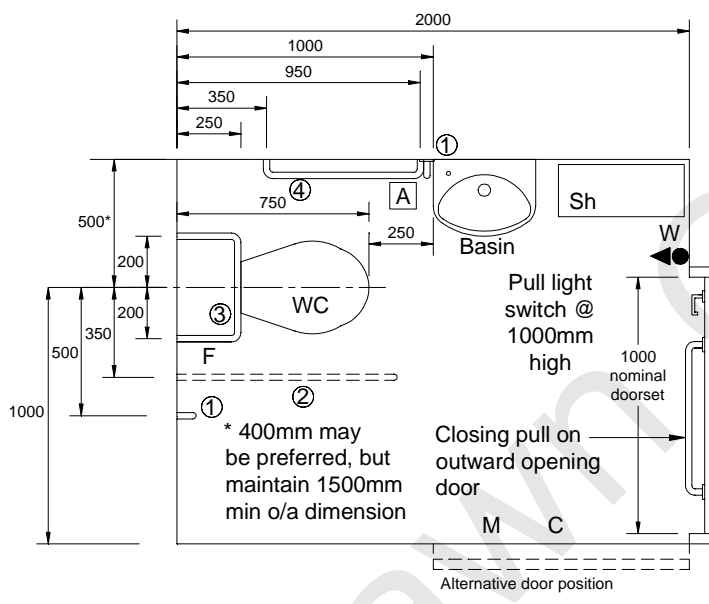
(1500w x 2000l min)

The dimensions relating WC fitting to basin and associated fittings and equipment, and to wheelchair manoeuvring space are critical for independent use. Overall dimensions shown are minimum and could, with advantage, be increased.

GRAB RAILS

35mm diameter, good grip when wet, well fixed, contrast with walls.

- ① fixed vertical rail
- ② drop down rail
- ③ fixed horizontal rail behind WC
- ④ fixed horizontal rail



WC - closed type seat, very well fixed

Basin - single lever operated mixer tap

P - toilet paper dispenser

T - paper towel dispenser

EW - emergency wipes

} Single handed use

H - electric hand drier

F - flushing lever pull

M - mirror 400w x 900h at 900mm to bottom (not glass)

C - coat hook at 1400mm high

A - alarm cord, distinctive pull, extend to low level

W - sealed container for incontinence pads, and other disposables.

Sh - low shelf for bags etc.

All sizes in mm



Wheelchair accessible WC – peninsular layout

CHECKLIST O (Use separate sheets for each different WC compartment) **Yes** **No**

1. Can the WC be approached by a wheelchair user, that is, is the route free of steps, corridor obstructions, narrow doors etc?
2. Is the location clearly signed?
3. Is the travel distance no greater than that required of an able-bodied person?
4. Is there sufficient space outside the toilet compartment for manoeuvre and door opening?
5. Are the door handles, lock and light switch easily reached and operated?
6. Is the compartment large enough to allow manoeuvring into position for frontal, lateral (from both sides), angled and backward transfer unassisted and with assistance?
7. Are the fittings arranged to facilitate these manoeuvres?
8. Are both handwashing and drying facilities approachable by and within reach of someone in a wheelchair?
9. Is the tap appropriate for use by a person with limited dexterity, grip or strength?
10. Are suitably designed grabrails fitted in all the positions necessary to assist manoeuvring?
11. Is the manoeuvring area free from obstructions, eg boxed-in pipework, radiators, cleaners' buckets or occasional storage?



Comments

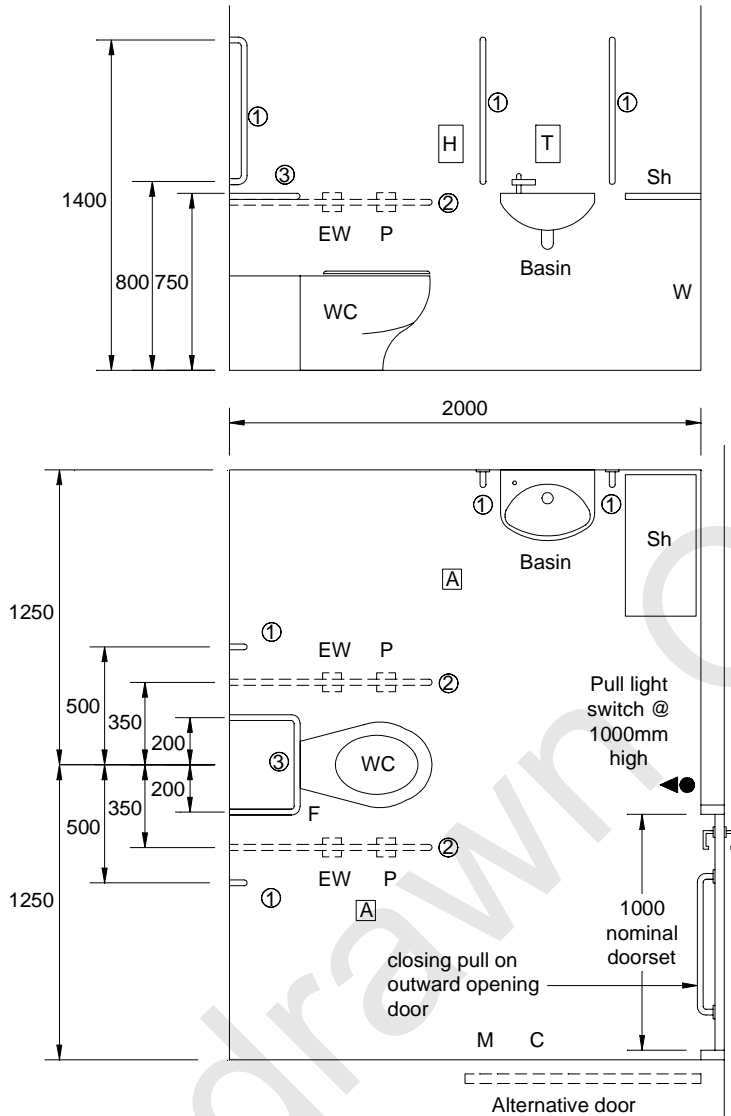
Notes

The WC illustrated is suitable for independent and assisted use. The peninsular layout allows a user to transfer to the WC from either side, an important choice for some users, but at the cost of a larger cubicle. It cannot provide a wash-hand basin within reach of someone seated on the WC, a situation which can be resolved by chemical wipe dispensers mounted on the drop-down rails.

Users may have sight impairments, so colour contrast should be used to identify equipment, controls and grabrails.

An emergency alarm should be fitted. A cord which reaches to within 300 mm of the floor will be accessible to a fallen user. To avoid embarrassment the alarm should be located in a permanently staffed rather than public area.

7. The WC needs to project from the back wall as illustrated to enable wheelchair alignment for a lateral transfer.



PENINSULAR LAYOUT

(2500w x 2000l min)

Basin should be approachable in a wheelchair with all associated fittings within reach.

Note dispensers attached to drop down rails to facilitate independent use from seated position on WC.

GRAB RAILS

35mm diameter, good grip when wet, well fixed, contrast with walls.

- ① fixed vertical rail
- ② drop down rail - note fittings attached in peninsular layout
- ③ fixed horizontal rail behind WC

WC - closed type seat, very well fixed

Basin - single lever operated mixer tap

P - toilet paper dispenser

T - paper towel dispenser

EW - emergency wipes

} Single handed use

H - electric hand drier

F - flushing lever pull

M - mirror 400w x 900h at 900mm to bottom

C - coat hook at 1400mm high

A - alarm cord, distinctive pull, extend to low level

W - sealed container for incontinence pads and other disposables

Sh - low shelf for bags etc.

All sizes in mm



Signs and information

CHECKLIST P

	Yes	No
1. Can users readily find their way to and into the building?	<input type="checkbox"/>	<input type="checkbox"/>
2. Once inside, are the functions of rooms and spaces clearly identified by visual and tactile means?	<input type="checkbox"/>	<input type="checkbox"/>
3. Are lines of vision, both externally and internally, maintained free from obstruction?	<input type="checkbox"/>	<input type="checkbox"/>
4. Where tactile signs are used, are approaches to them kept free from obstruction?	<input type="checkbox"/>	<input type="checkbox"/>
5. Are displays of information to take away within reach of both ambulant and wheelchair users?	<input type="checkbox"/>	<input type="checkbox"/>
6. Is take-away information available in alternative formats such as large print, audiotape and Braille?	<input type="checkbox"/>	<input type="checkbox"/>

Comments



Notes

The colour of signs should be consistent throughout the building; characters, text and symbols on signs must contrast in colour and tone with their background, and the background should in turn contrast in colour and tone with the surface to which the sign is fixed.

Signs should have a matt, non-reflective surface, and should not be placed behind glass. Backlighting, either natural or artificial, should be avoided.

The characters used on signs should be of a plain font type – that is, not italic or highly stylised. Words are easier to read if upper-case letters are used only for the first letter of a sentence or proper noun, and lower-case for all other letters. For each 1000 mm viewing distance a lower-case letter should be a minimum 5 mm high, with capitals and numerals approximately 33% taller.

Comfortable heights for viewing door – or wall-mounted signs are 1200–1700 mm for a standing adult and 750–1350 mm for a wheelchair user.

Single signs within the common convenient height range 1200–1350 mm can be obscured by free-standing objects or users. An option to be considered is duplication of each sign at levels suitable for standing and seated users.

To enable maximum information to be conveyed to partially-sighted users, the signs should be tactile. Engraved signs have very limited value, while embossing is a far more satisfactory technique. The depth of embossing must be 1–1.5 mm and the edges slightly rather than half-rounded. Touch reading can be used on letters ranging in height from 15 to 60 mm. Unobstructed approach to within 500 mm of the sign is needed.

Signs should not be surrounded by other information, for example posters.



Means of escape

CHECKLIST Q

	Yes	No
1. Is the audible alarm system supplemented by a visual system?	<input type="checkbox"/>	<input type="checkbox"/>
2. Are personal vibrating alarms provided to employees with hearing impairments?	<input type="checkbox"/>	<input type="checkbox"/>
3. Are ground-floor exit routes as accessible to all, including wheelchair users, as the entrance routes?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is vertical escape from a floor above or below the entrance floor possible using a fire-protected lift with an independent power supply?	<input type="checkbox"/>	<input type="checkbox"/>
5. If people with disabilities cannot completely evacuate the building, can they reach places of relative safety or refuges?	<input type="checkbox"/>	<input type="checkbox"/>
6. Is a personal emergency egress plan available for each member of staff needing assistance?	<input type="checkbox"/>	<input type="checkbox"/>
7. Is there an overall escape strategy for visitors who may need assistance?	<input type="checkbox"/>	<input type="checkbox"/>
8. Are the exit routes checked regularly for freedom from combustible material and obstacles, including locked doors?	<input type="checkbox"/>	<input type="checkbox"/>
9. Are both the general escape strategy and the personal emergency plans checked and tested regularly for efficiency and effectiveness?	<input type="checkbox"/>	<input type="checkbox"/>



Comments

Notes

Effective escape deals with two different groups of people: staff who know the building and should be conversant with the procedure, and visitors with little knowledge of the escape strategy.

Disabled people may be in either or both of these groups at any point in time. People with disabilities also come within two general categories: some disabilities have little or no effect on independent escape given good alarm and sign systems; others may need assistance.

Therefore, two interrelated strategies are recommended. A general one will deal with the unknown, namely a group of visitors whose composition varies continually. A second strategy covers each individual employee who needs to escape, and should be devised with the agreement of each individual employee.

Further guidance is available by consulting references listed in Appendix 4.

5. A place of relative safety or refuge could be a separate fire protected compartment or a designated space within an escape stair which does not obstruct use of the escape route by other people.

5. After the audit

Acting on the findings

- 5.1 After the audit has been carried out, the first step is to review the findings. This will enable a speedy recognition of the scale of issues to be tackled. Problems may be found to be localised in one area, or be widespread; they may be relatively easy to resolve, or pose a significant challenge. Not infrequently, hazards to any user of a premises are highlighted by an audit.
- 5.2 Depending on the extent of the issues revealed, an audit team may either identify ready solutions or may wish to call on professional external advice.
- 5.3 When structural changes are indicated, professional advisers, for example architects, are recommended to develop a costed programme of improvements which takes on board the severity of the problem, the logistics of building work and the capital investment that may be required.
- 5.4 In extreme circumstances this exercise may indicate that the most cost-effective business solution is a move to different premises.

The access improvement programme

- 5.5 As indicated above, an access improvement programme may be developed internally or by commissioning external advice. There are likely to be three main routes to improvement, only one of which incurs additional capital cost.

Working practices

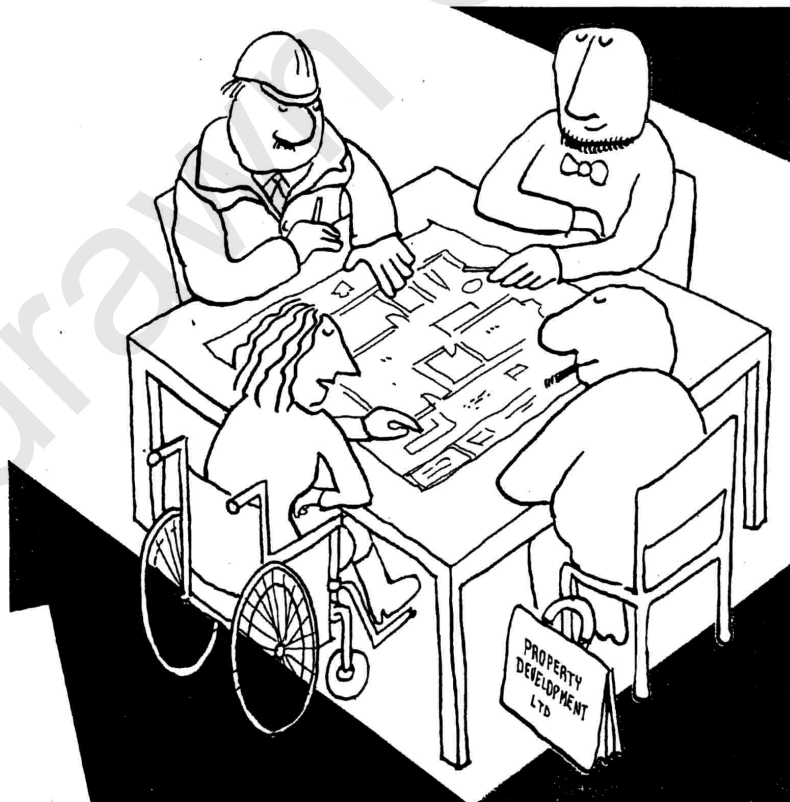
- 5.6 Many improvements to access are easy to implement by simple changes in working practice, for example the appropriate storage of goods and equipment to keep circulation areas and wheelchair accessible WCs free of clutter; the allocation of the responsibility to a member of staff to keep external areas clear of fallen leaves, snow etc; the relocation of activity from a noisy area to a quieter one for hearing-impaired people.

Minor physical alterations

- 5.7 Significant levels of improvement in accessibility result from the use of appropriate fixtures, fittings and finishes. Most premises will have a budgeted programme for planned maintenance as well as a budget for ad-hoc repairs and replacement. It is advisable to review the former in the light of the audit findings in order to ensure that when the maintenance programme is carried out the most suitable colours, for example, are used to improve the ease with which doors are identifiable by visually- and mentally-impaired people, or the floor surfaces/coverings enable the use of wheelchairs or walking aids etc. Similarly the suitability of a component or fitting about to be replaced should be considered. If the access improvement programme indicates a need for change, the early opportunity to do so should be taken.

Structural changes

- 5.8 The resolution of problems which require structural alteration or redesign should always be carefully planned and programmed. Where premises are leased, this may need negotiation and agreement with landlords and other parties.





- 5.9 If the building is listed, consent will be required. Specialist advice should be sought. Project teams may wish to obtain 'Disabled Access to Historic Buildings and Monuments' Technical advice Note 7 from Historic Scotland. 'Access to the Historic Environment: meeting the needs of disabled people' by Lisa Foster is also recommended.

External access

- 5.10 The audit may identify problems which are outside the direct control of the practice, for example poorly-located bus stops and parking areas or the lack of dropped kerbs. Bus companies and local highway authorities are often receptive to suggestions for changes when the problems are explicitly identified.

Maintaining access

- 5.11 Regular reviews should be carried out to ensure that access is maintained, so that changes in working practices, the installation of additional equipment or furniture etc do not inadvertently compromise the accessibility of the premises.

Appendix B: Existing legislation and guidance

Introduction

1. In relation to primary healthcare provision, the general existing legislative provisions can be grouped into three categories:
 - duties of building providers;
 - planning legislation;
 - building legislation.

Duties of building providers

2. The **Chronically Sick and Disabled Persons Act 1970** (extended to Scotland 1972) includes the provision in Section 4 that “any person undertaking the provision of any building or premises to which the public are to be admitted, whether on payment or otherwise, shall, in the means of access both to and within the building or premises, and in the parking facilities and sanitary conveniences to be available (if any), make provision, in so far as it is in the circumstances both practicable and reasonable, for the needs of members of the public visiting the building or premises who are disabled”.
3. The Ministry of Housing and Local Government **Circular 65/70** confirms that in the context of this legislation, “provision” covers not only new construction but also the conversion of existing buildings.
4. The **Chronically Sick and Disabled Persons (Amendment) Act 1976** extends these requirements by including provision for disabled employees in places of employment, whether or not the public is admitted.
5. In practice, a basic omission has rendered this legislation ineffective since its enactment. This omission is the failure to appoint an enforcement agency to ensure compliance by building providers.
6. The **Disabled Persons Act 1981** relates these duties to town and country planning legislation. This is achieved by requiring local planning authorities to draw the attention of applicants for planning permission, when relevant permissions are granted, to their responsibilities under the provisions of the Chronically Sick and Disabled Persons Act 1970 (as amended).



7. **BS 5810: British Standard Code of Practice for Access for the Disabled to Buildings 1979** is the source of design guidance referred to in the notification of planning permissions. It is a voluntary code of practice which includes, in relation to buildings, approach, internal planning, lavatories, general design recommendations and signs.
8. Over the last few years this document has increasingly been considered inadequate in scope, and not all its recommendations are believed to be supported by sufficient research.
9. New empirical research is now being commissioned with a view to a complete review and ultimate replacement of BS 5810.

Town and country planning legislation

10. The **Town and Country Planning (Scotland) Act 1972** provides for the determination by planning authorities of applications for planning permission. Section 36 of the **Local Government (Miscellaneous Provisions) (Scotland) Act 1981**, adds a new subsection numbered (4A), to section 26 of the 1972 Act. The new subsection provides that when a planning authority grant an application for planning permission relating to premises open to the public, they are to ensure that the applicant is aware of the duty imposed by sections 4 and 5 and 7 to 8A of the **Chronically Sick and Disabled Persons Act 1970**. These parts of the 1970 Act require any person providing premises (including sanitary conveniences) which are to be open to the public to make provision, where reasonable and practicable, for the means of access and parking to be designed to meet the needs of disabled people, with appropriate signposting indicating the availability of these facilities. Developers are made aware of their duty under the 1970 Act by means of a note added to the formal intimation by the planning authority of the grant of planning permission. The developer's attention is specifically drawn to the **BSI Code of Practice on Access for the disabled to Buildings (BS5810: 1979)** which explains the manner in which appropriate provision can be made for the needs of disabled people in the design of buildings.



Building legislation

11. **Building Standards (Scotland) Regulations (1990)** controls the construction and alteration of buildings. Part T of the **Technical Standards to the Building Standards (Scotland) Regulations (1990)** defines disabled people as 'persons with a physical, hearing or sight impairment which affects their mobility or their use of buildings'. The standards accompanying Part T define the provision for such persons to allow them to gain access to and use a building. Limitations to the application of the standards are defined. The "Provisions deemed to satisfy the standards" defines minimum provision of design and construction which comply with the standards. Standards for Means of Escape for disabled people are set out in Part E of the Technical Standards.

Appendix C: New legislation

Disability Discrimination Act 1995

1. The Disability Discrimination Act 1995 provides new rights to disabled people as a means to eliminate or, at least, reduce substantially discrimination which, either overtly or covertly, prevents many people carrying out everyday activities or makes it difficult for them to do so.
2. For the purposes of this Act alone a new definition of disability is adopted. While disability may still be mental, physical or sensory it also needs to be substantial, which in this context means more than minor or trivial. Also, a disability must have a long-term effect, which means that it has lasted for at least 12 months, or can be expected to last for at least 12 months or the remainder of the life of the person affected.
3. The providers of primary healthcare will be affected directly by this legislation both as service providers and as employers.

Service provision

4. Any persons who provide services, irrespective of the size or scale of the operation, will be required to take reasonable measures to ensure that they are not discriminating against service users or potential users with a disability.
5. It will become against the law to:
 - refuse to serve someone because of their disability;
 - offer service of a worse standard or in a worse manner than normal to a disabled person;
 - provide a service to a disabled person on terms which are different from those offered to a non-disabled person;
 - run a service in a way which makes it unreasonably difficult or even impossible for a disabled person to use.
6. Actions which may be required to enable disabled people to access services include:
 - removing physical obstacles;
 - providing equipment;
 - providing services in a different way.



7. The timetable for bringing into force all these anti-discriminatory measures is not yet finally determined, but progressive implementation began on 2 December 1996.

Employment

8. In all aspects of employment, including recruitment, training, promotion and dismissal, it is now against the law for employers to treat disabled people less favourably than other people.
9. Actions required to help a disabled person to do a job include:
 - changing the workplace;
 - changing the way a job is done.
10. Employers who employ fewer than 20 people are exempt from the legal requirement, but government encourages them to follow good practice guidelines.
11. The employment provisions of the Act came into force on 2 December 1996.

Further guidance

12. The following documents relating to the Disability Discrimination Act are now available from HMSO.
 - **Guidance on matters to be taken into account in determining questions relating to the definition of disability;**
 - **Code of Practice: Rights of Access: Goods, Facilities, Services and Premises;**
 - **Code of Practice for the elimination of discrimination in the field of employment against disabled persons or persons who have had a disability.**

Appendix D: Selected further reading

Designing for Accessibility by Tessa Palfreyman BSc(Eng), Centre for Accessible Environments, updated 1994

Reducing Mobility Handicaps – Towards a Barrier Free Environment, Institute of Highways and Transportation, 1991

Good Loo Design Guide by Stephen Thorpe, BArch RIBA, Centre for Accessible Environments, 1988

Barrier Free Design – A manual for building designers and managers by James Holmes-Sledge, Butterworth, 1986

BS 5810: 1979 Code of Practice for Access for the Disabled to Buildings, British Standards Institution

BS 5588: Part 8: 1988 Fire Precautions in the Design, Construction and Use of Buildings – Code of Practice for Means of Escape for Disabled People, British Standards Institution

Personal Emergency Egress Plans, Northern Officer Group, c/o Equal Opportunities Department, Wakefield Metropolitan Borough Council, 1993 (available from Centre for Accessible Environments)

Health Building Note 36, Local Healthcare Facilities, NHS Estates, HMSO, 1995

Health Building Note 40, Common Activity Spaces, Vols 4 and 5, Designing for Disabled People, NHS Estates, HMSO

Designing for the Disabled, Selwyn Goldsmith. RIBA 1963, 1976. ISBN 0 900630 50 7.

Buildings for All to Use, Sylvester Bone. CIRIA 1996. ISBN 0 86017 448-4.

Building Sight, Peter Barker, Jon Barrick, Rod Wilson, RNIB 1995. ISBN 1 85878 074 8.

Disabled Access to Historic Buildings and Monuments, Victoria Young and Dennis Urquhart. Historic Scotland: Technical Advice Note 7, 1996. ISBN 1 900168 23 5.



A design guide for the use of colour and contrast to improve the built environment for visually impaired people. Based on research undertaken at the University of Reading. 1997. Copies from Wayne Collins Associates, Devon House, 171-177 Great Portland Street, London W1N 6NY.

Access to the Historic Environment: meeting the needs of disabled people: Lisa Foster. Donhead Publishing Ltd, 1997. ISBN 1 873394 18 7.



Appendix E: Sources of advice and information

Identification of local access groups

Disability Scotland
5 Shandwick Place
Edinburgh
EH2 4RG
Tel: 0131 229 8632

Identification of access officers

Access Officers' Association
Membership Secretary
Access Officer
Norwich City Council
Planning and Architectural Services Department
City Hall
Norwich
NR2 1NH
Tel: 01603 212533

Disability organisations

RNIB
224 Great Portland Street
London
W1N 6AA
Tel: 0171 388 1266

RNID
105 Gower Street
London
WC1E 6AH
Tel: 0171 387 8033



Information, training, publications, access audits

Centre for Accessible Environments

Nutmeg House
60 Gainsford Street
London
SE1 2NY
Tel: 0171 357 8182

Products and equipment

Disabled Living Foundation

380–384 Harrow Road
London
W9 2HU
Tel: 0171 289 6111

British Floorcovering Manufacturers Association

10 Bristol Road
Kemptown
Brighton
BN2 1AP
Tel: 01273 694285

British Rubber Manufacturers Association

90 Tottenham Court Road
London
W1P 0BR
Tel: 0171 580 2794

Interpave (The Concrete Block Paving Association)

60 Charles Street
Leicester
LE1 1FB
Tel: 0116 253 6161



British Sign Association

Swan House
207 Balham High Road
London
SW17 7BQ
Tel: 0181 675 7241

Automatic Door Suppliers Association

411 Limpsfield Road
The Green
Warlingham
Surrey
CR4 9HA
Tel: 01883 624961

Guild of Architectural Ironmongers

8 Stepney Green
London
E1 3JU
Tel: 0171 770 3431

Association of Builders Hardware Manufacturers

Heath Street
Tamworth
Staffs
B79 7JH
Tel: 01827 52337

National Association of Lift Makers

33–34 Devonshire Street
London
W1N 1RF
Tel: 0171 935 3013

Institute of Sound and Communications Engineers

4B High Street
Burnham
Slough
SL1 7JH
Tel: 01628 667633

References

Acts and Regulations

The Chronically Sick and Disabled Persons Act. TSO, 1970

The Chronically Sick and Disabled Persons (Amendment) Act. TSO, 1976

The Disabled Persons Act. TSO, 1981

Town and Country Planning Act. TSO, 1990

The Building Standards (Scotland) Regulations (1990) Part T. TSO, 1994.

Disability Discrimination Act. TSO, 1995

Code of practice for the elimination of discrimination in the field of employment against disabled persons or persons who have had a disability. Department of Education and Employment, TSO, 1996

Guidance on matters to be taken into account in determining questions relating to the definition of disability. Department of Education and Employment, TSO, 1996

Code of practice: Rights of Access: Goods, facilities, services and premises. Department of Education and Employment, TSO, 1996

Access for the disabled: Development Control Policy Note 16. Out of print, 1985

General policy and principles: Planning Policy Guidance Note 1. TSO, 1992

Planning and the historic environment: Planning Policy Guidance Note 15. TSO, 1994

British Standards

BS 5810: 1979 Code of practice for the disabled to buildings. British Standards Institute, 1979

BS 5588: Part 8: 1988 Code of practice for means of escape for disabled people. British Standards Institute, 1988

NHS Estates publications

Health Building Notes (HBNs)

36 – Local healthcare facilities. NHS Estates, TSO, 1995 (issued in 2 volumes)

40 – Common activity spaces. NHS Estates, TSO, 1995 (issued in 5 volumes)

General publications

Tessa Palfreyman, **Designing for accessibility.** Centre for Accessible Environments, 1994

Reducing mobility handicaps-towards a barrier free environment. Institute of Highways and Transportation, 1991

Peter Barker, Jon Barrick, Rod Wilson, **Building sights.** Royal National Institute for the Blind, 1995

Disabled Access to Historic Buildings and Monuments. Historic Scotland Technical Advice Note 7, 1996.

Stephen Thorpe, **Good loo design guide.** Centre for Accessible Environments, 1988

James Holmes-Sledge, **Barrier free design – A manual for building designers and managers.** Butterworth, 1986

Personal emergency egress plans. Northern Officer Group, c/o Equal Opportunities Department, Wakefield Metropolitan Borough Council, 1993



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