

ACCESS TO BUILDINGS

Car Parking Spaces

External Travel

External Hazards

Approach to the Building

Stepped Access

Accessible Entrances

Car Parking Spaces

- For disabled people, car access is vital. In car parks, provision should be made for disabled drivers and cars carrying disabled passengers. Parking should be provided as near to the principal entrance as possible and under cover is desirable. If payment is required, provide level and unobstructed access to pay and display units.
- The surface of a designated parking bay should be firm and level, slip resistant and have a 1200mm transfer zone alongside and at the rear of the vehicle.
- If people need to obtain tickets for pay and display parking, the ticket dispensing machines need to be accessible to wheelchair users and people of short stature. They should be adjacent to the designated parking and have controls between 750mm and 1200mm from ground level.

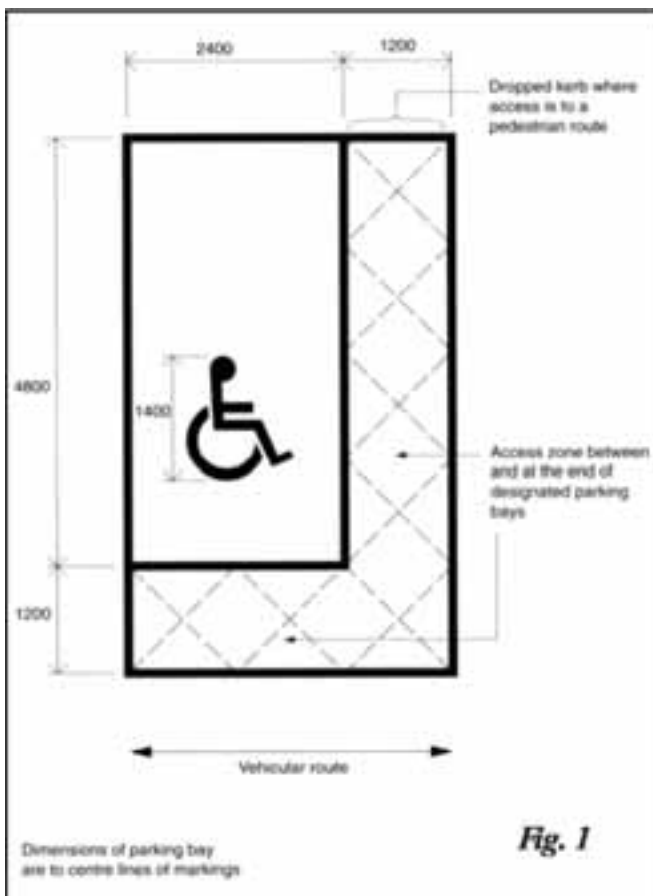
- Guidance on designated parking, ticket dispensing machines, vehicular control barriers and multi-storey car parks can be found in BS 8300.
- The recommended numbers of reserved spaces vary in accordance with the type and capacity of car parks as follows:

Car parks associated with employment premises and provided for employees and visitors.

- 5% of the total parking capacity should be designated for disabled motorists.

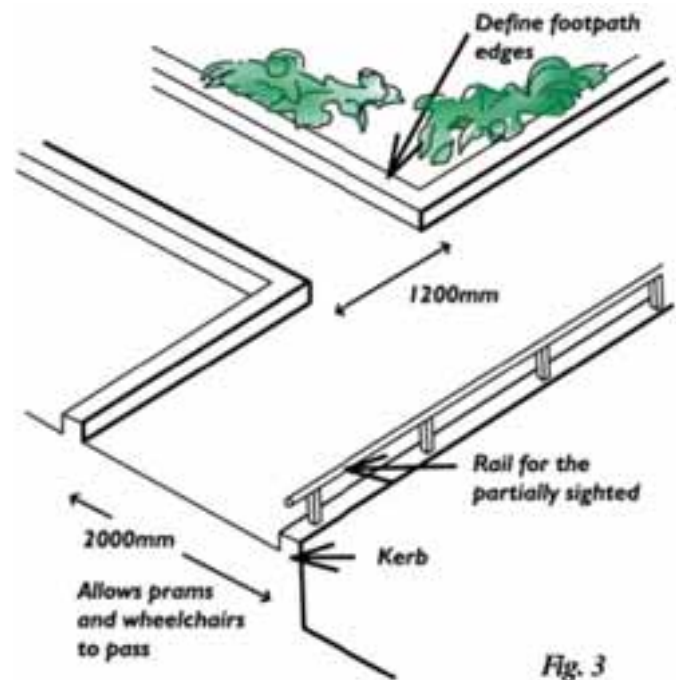
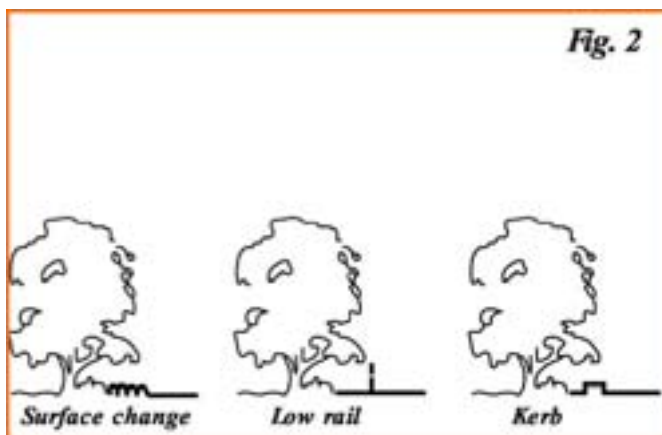
Car parks associated with shopping areas, leisure or recreational facilities

- One space for each disabled employee plus 6% of the total capacity for visiting disabled motorists.
- Car parking spaces for the disabled should be signposted using the international symbol of the disabled (fig. 46, page 53), which can also be painted on the ground with the legend "Disabled Drivers Only."

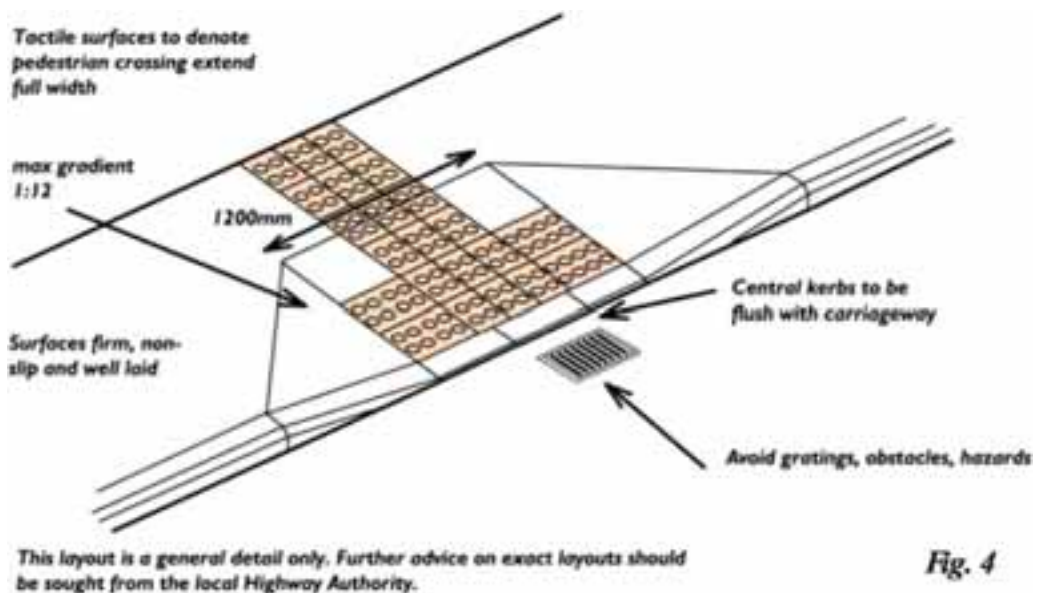


External Travel

- Routes of travel across grass or paved areas should be highlighted. This can be achieved by contrasting colour, texture or by directional paving.
- Covers and gratings should be flush with pavings, the maximum gap being 18mm.
- Define footpath edges with either kerb, low rail or a surface change.
- At changes in level and to slopes steeper than 1:15 a handrail and kerb should be provided. A lower rail and kerb should be provided as a guide for partially sighted people using canes.



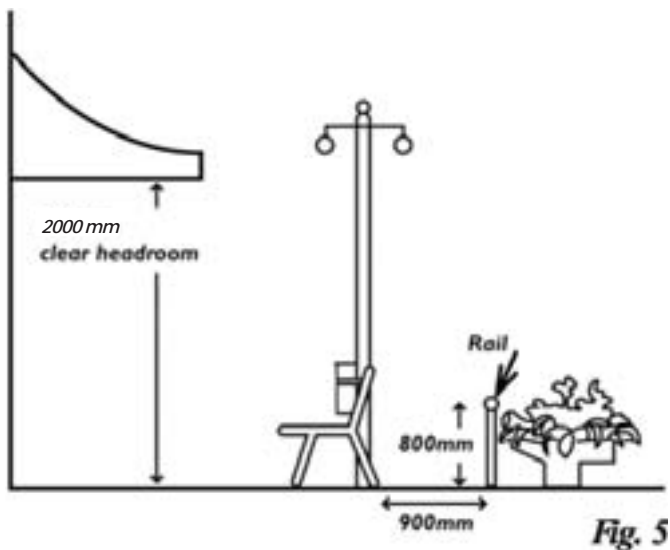
- Pedestrian crossing points require special attention.
- Red tactiles should be used at controlled crossings and buff coloured tactiles at uncontrolled crossings.



External Hazards

LANDSCAPE FURNITURE

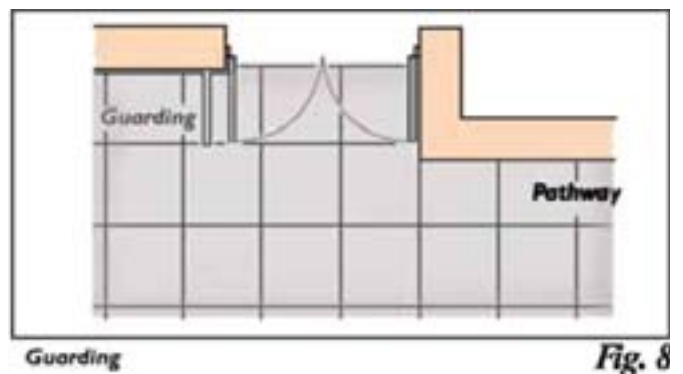
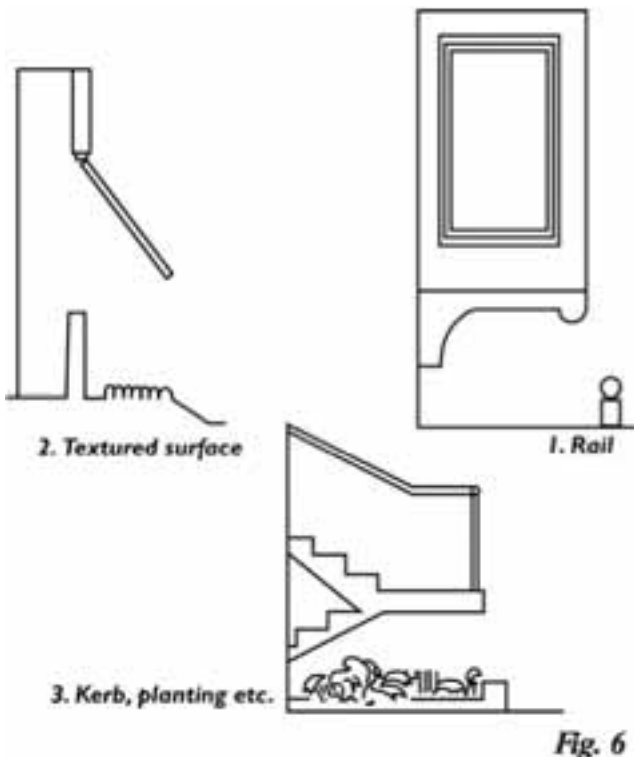
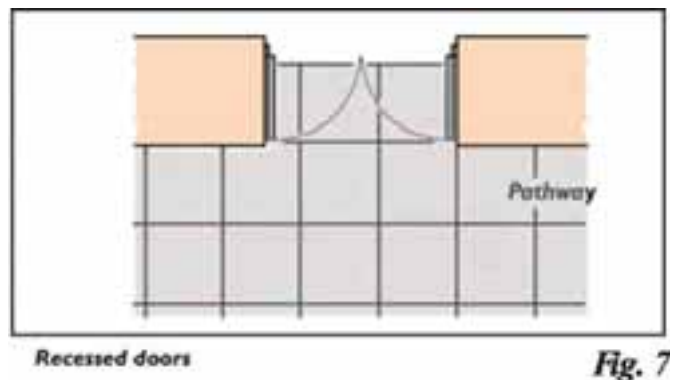
- The provision of landscape furniture requires careful thought. It needs to be made distinguishable from the background, i.e. by colour contrast and should be detectable at low level for people with impaired vision.



- Avoid overhangs, especially at ground level.
- Guard against building projections by the use of (1) rails, (2) textured surfaces, (3) kerbs and planting, etc.

DOORS

- Doors which open outwards should not cause an obstruction on a path which runs along the face of a building, i.e. recess the doors or provide suitable guarding.



External Hazards

- There should be a convenient access into the building for disabled people, whether they are visitors to the building or work in it and whether they arrive on foot or in a wheelchair.
- If space outside the principal entrance is restrictive, an alternative accessible entrance in common use should be provided.
- Car parking spaces should be provided adjacent to the principal entrance or the accessible entrance in common use.
- Clearly signposted steps should be provided when the rise of the ramp exceeds 300mm. The surface of the ramp should be slip resistant and of a colour that contrasts visually with that of the landings.

Fig. 9 Relationship of ramp gradient to the going of a flight

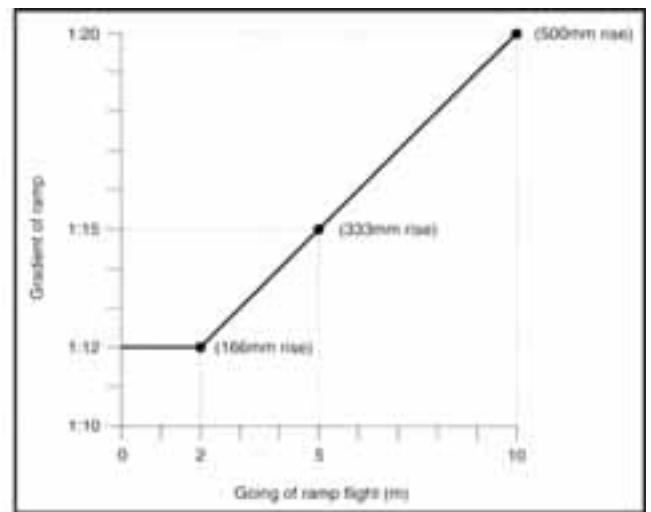


Table 1 Limits for ramp gradients

Going of a flight	Maximum gradient	Maximum rise
10 m	1:20	500mm
5 m	1:15	333mm
2 m	1:12	166mm

Notes:
For goings between 2m and 10m, it is acceptable to interpolate between the maximum gradients, i.e. 1:14 for a 4m going or 1:19 for a 9m going (see Fig. 9).

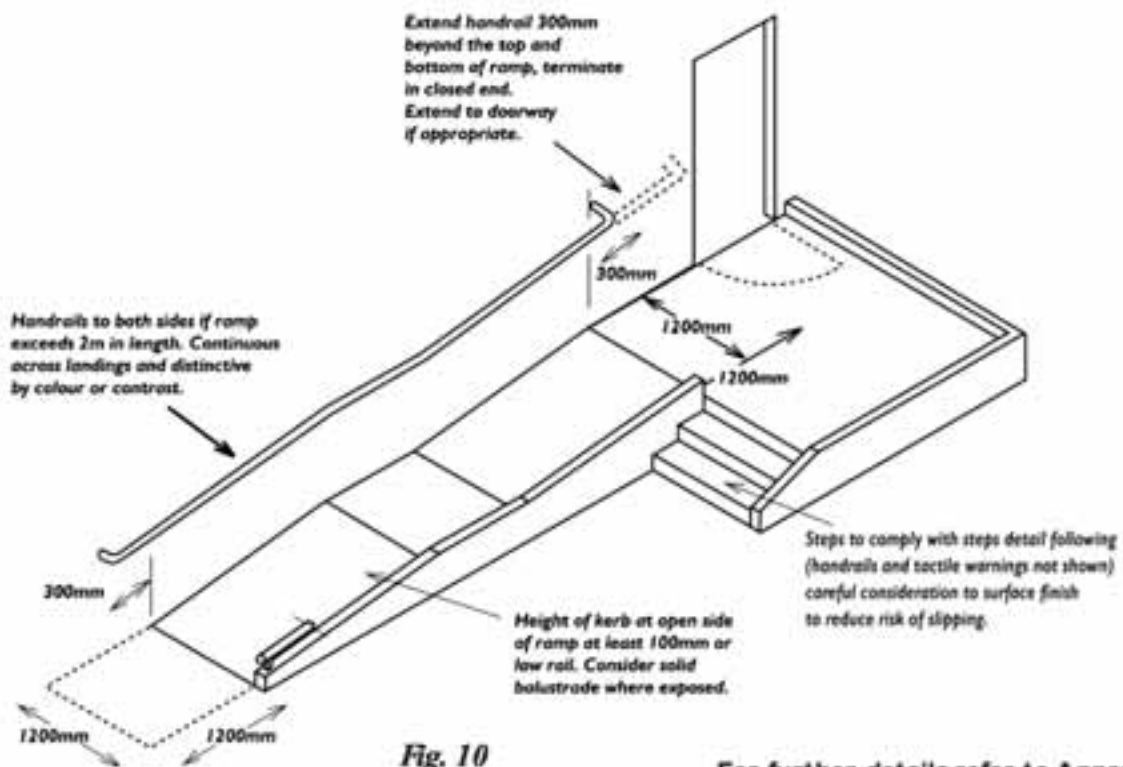


Fig. 10

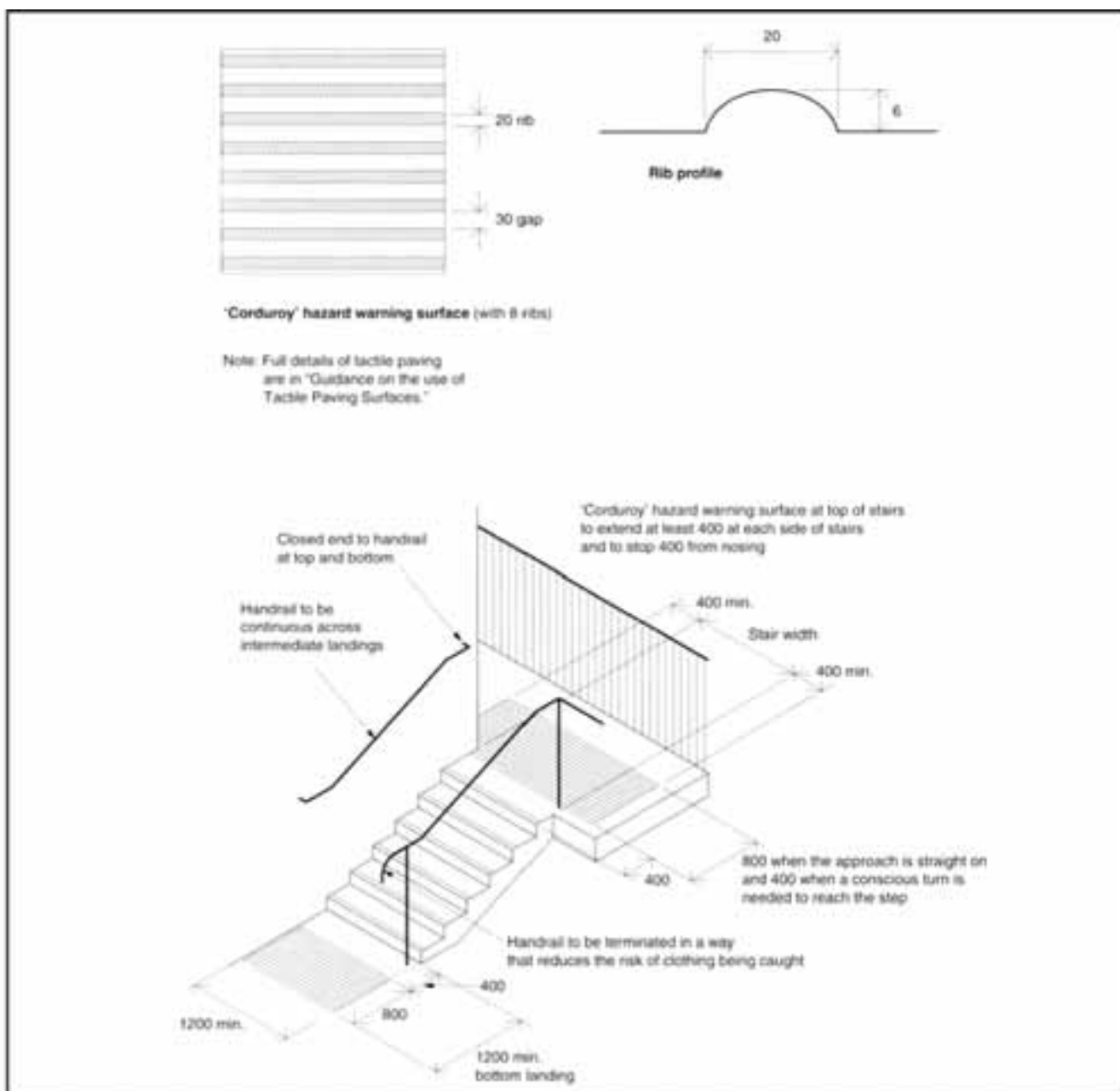
For further details refer to Approved Document M to the Building Regulations

Stepped Access

- A corduroy hazard warning surface should be provided at top and bottom landings of a series of flights to give advance warning of a change in level.
- Rise of each step should be between 150mm and 170mm.
- Going of each step should be between 280mm and 425mm.
- Rise and going of each step should be consistent throughout the flight.
- Width of the flight should not be less than 1.2m.

For schools the preferred dimensions are 150mm rise and 280mm going

Fig.11 Stepped access – key dimensions and use of hazard warning surface



Stepped Access

Fig. 12 External steps and stairs - key dimensions

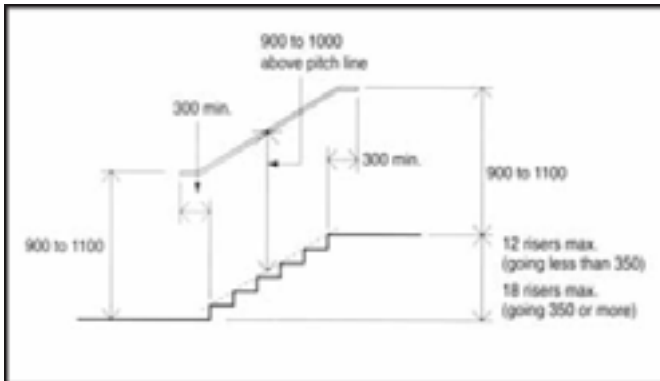
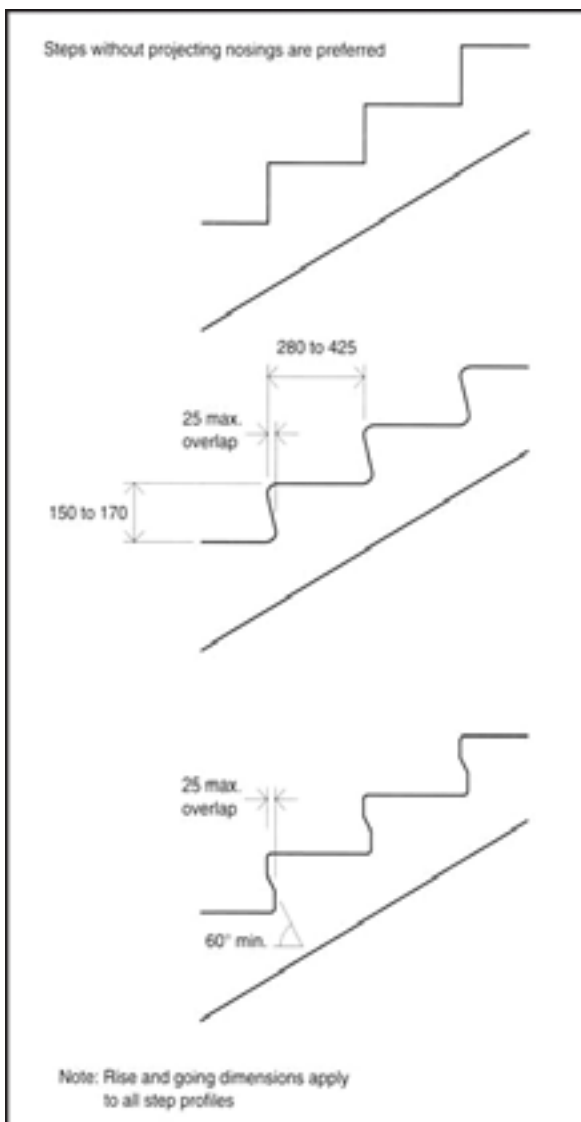


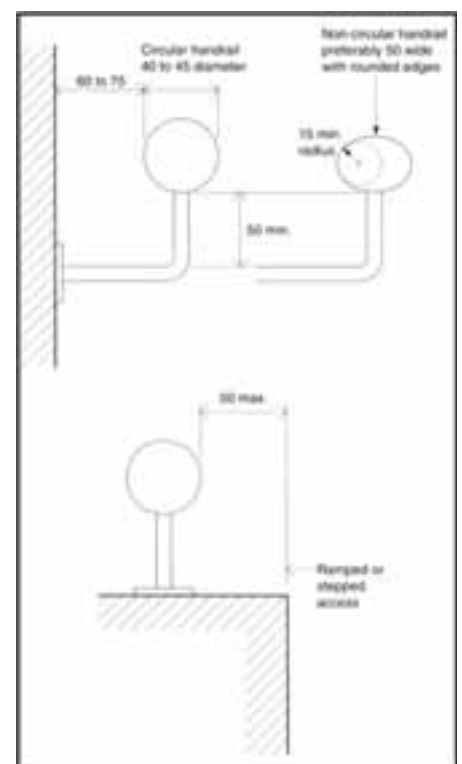
Fig. 13 Examples of acceptable step profiles and key dimensions for external stairs



HANDRAILS

- Should be between 900mm and 1000mm above the surface of the ramp.
- Should be continuous along the flights and landings of steps and ramps.
- Should extend at least 300mm beyond the top and bottom of ramps and a flight or flights of steps whilst not projecting onto an access route.
- Should contrast visually from the background without being reflective.
- The surface should be slip resistant and not cold to the touch.
- The profile should be circular with a diameter of between 40mm and 45mm or oval, preferably with a diameter of 50mm.
- Should protrude no more than 100mm into the surface width of ramp or stairs where this would impinge on the stair width requirement of Approved Document B (Fire Safety).
- Should have a clearance of between 60mm and 75mm between the handrail and any adjacent wall surface.

Fig. 14 Handrail design



Accessible Entrances

ACCESSIBLE ENTRANCES

- Should be clearly signposted and should include the international symbol of access, from the edge of the site, and the principal entrance if this is not the accessible entrance. (Guidance on sign posting can be found in BS 8300).
- Any structural supports at the entrance should not be a hazard to the visually impaired.
- Should have a level landing at least 1500mm by 1500mm clear of any door swings immediately in front of the entrance and be of a material that does not impede wheelchair users.
- Door entry systems should be accessible to deaf and hard of hearing and people who cannot speak. (LED display) fitted between 750mm and 1000mm from floor level.
- The surface of any entrance matting should be level with the floor and should not impede wheelchair movement. Avoid coir matting, and changes in floor surfaces which are potential trip hazards.

DOORS TO ACCESSIBLE ENTRANCES

- Entrance doors can be manually operated, or power operated under manual or automatic control.
- Vision panels should comply with the minimum zone of visibility of between 500mm and 1500mm from floor level, if necessary interrupted between 800mm and 1150mm from floor level to accommodate a horizontal grab-rail.

Table 2 Minimum effective clear widths of doors

Direction and width of approach	New buildings (mm)	Existing buildings (mm)
Straight-on (without a turn or oblique approach)	800	750
At right angles to an access route at least 1500mm wide	800	750
At right angles to an access route at least 1200mm wide	825	775
External doors to buildings used by the general public	1000	775

Note:
The effective clear width is the width of the opening measured at right angles to the wall in which the door is situated from the outside of the door stop on the door closing side to any obstruction on the hinge side, whether this be projecting door opening furniture, a weather board, the door, or the door stop (see Fig. 15). For specific guidance on the effective clear widths of doors in sports accommodation, refer to 'Access for Disabled People'.

MANUALLY OPERATED NON POWERED ENTRANCE DOORS

- A non-powered door fitted with a self-closing device capable of closing the door against wind forces and the resistance of draught seals is unlikely to be openable by a wheelchair user or someone with limited strength.
- The opening force at the leading edge should be no greater than 20N.

It should be noted that double buggies are wider than wheelchairs and this should be borne in mind when designing certain types of buildings.

POWERED ENTRANCE DOORS

- Manual control for powered entrance doors should be clearly distinguishable from the background, and located between 750mm and 1000mm from the ground level (to include swipe cards etc).
- Where the doors swing towards people approaching them visual and audible warnings should be provided. They should incorporate a safety stop if someone is passing through and revert to manual control or stay open in a power failure.

GLASS ENTRANCE DOORS AND GLAZED SCREENS

- Should be clearly defined with manifestation on the glass at two levels 850mm to 1000mm and 1400mm to 1600mm. Manifestation is a sign or a logo at least 150mm high.

Fig. 15 Effective clear width and visibility requirements of doors

