Internal circulation

Design Note 2

- Lighting should be adequate. Special attention should be paid to possible danger areas such as the top and bottom of stairs and ramps. High levels of concentrated light, such as spotlights and highly reflective surfaces should be avoided as they can cause glare.
- Surfaces of walls, ceilings, floors, doors, door furniture and handrails should contrast visually with their surroundings, which will greatly assist people with visual impairments.
- Signs should be effective, informative and placed approximately 1400mm to 1700mm above floor level. Audible information and tactile signs should be provided where possible (see Design Note No 4 Signs for further guidance).
- Floor surfaces should be non-slip when wet or dry, and should be chosen so as to not easily be mistaken for steps. Changes in floor materials e.g. from carpet to lino, at set points throughout the building, can provide clues to location for people with a visual handicap.
- Fire alarm systems should provide visual and audible warning (see Design Note No 13 Means of escape, for further guidance).
- Light switches, ventilation controls and the like should be located at a height of between 900mm and 1100mm above floor level.
- There should ideally be no projections into circulation spaces, but any that are unavoidable should visually contrast with their surroundings or be provided with visually contrasting guards.
- Doors should not swing into circulation spaces.
- Effective visual warnings (manifestation) in fully glazed doors and side panels should be provided both between 850mm and 1000mm, and between 1400mm and 1600mm, from the floor.
- 2000mm headroom should be provided throughout the building, or areas where this cannot be achieved (for example under a stairway) should be provided with guarding.

Reception Areas

- Should be easy to locate, but away from the entrance if external noise may be a problem.
- In order to accommodate both standing and seated visitors, there should be at least 1200mm deep by 1800mm wide clear space in front of the desk, and at least one section of the counter at least 1500mm wide with surface no higher than 760mm and knee recess not less than 700mm high and 500mm deep. If this knee recess cannot be achieved, the clear space in front of the desk should be increased to 1400mm deep and 2200mm wide.
- Audible and visual signalling should be used in waiting areas to call people for interview.

Access For All

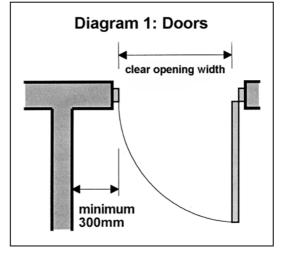
 An induction loop system for hearing aid users should be considered, particularly where a glazed screen to separate customers from staff is necessary, or where ambient noise levels are likely to be high.

Doors

• Single doors should have minimum clear opening width as follows: -

Direction and width of approach	New buildings	Existing buildings
Straight-on (without a turn, or oblique	800mm	750mm
approach)		
At right angles to an access route at	800mm	750mm
least 1500mm wide		
At right angles to an access route at	825mm	775mm
least 1200mm wide		

- In appropriate locations, automatic sliding doors are ideal. Automatic hinged swing doors are potentially hazardous.
- Vision panels should be provided in opaque doors, to extend both between 500mm and 800mm, and between 1150mm and 1500mm, from the floor.
- Door handles should contrast visually with the door.
- Door furniture should allow the door to be opened with a closed fist; therefore lever style door handles are preferable.
- Door frames should contrast visually with the adjacent walling.
- A space at least 300mm clear of the leading edge of a manually opened door should be provided (see Diagram 1).
- Manually opened doors should not require more than 20N (2Kg) pressure at the leading edge of the door to open them.
- Self-closing fire resisting doors should have hold-open devices (e.g. in corridors) or swing-free devices (e.g room doors), linked to the fire alarm.
- Leading edges of doors should be guarded or contrast visually, if they can be held open.
- Doors that form part of a glazed screen should be readily identifiable.



Corridors and passageways

- Should be at least 1200mm wide. Consideration should be given to providing 1800mm x 1800mm passing spaces at intervals in long corridors.
- Consecutive double doors should have their wider leaves on the same side.

Internal Lobbies

• Automatic doors should be used where practicable.

- Entrance lobbies should be sized to allow a wheelchair user and a helper together sufficient space to move clear of one door before having to open the next door. This can be achieved if the lobby contains an area 1570mm long and at least as wide as the wider of the doors serving the lobby, free of all door swings and other obstructions.
- Vision panels should be incorporated in doors and walls of lobbies so that people approaching the lobby can see someone else on their way through.

Vertical circulation

- Unnecessary changes of floor level within a storey should be avoided.
- Where changes of level are necessary within a floor level, a ramp or a small internal flight of stairs with a platform lift or stairlift should be provided (see Design Note No I - Entrances and Design Note No 3 - Lifts).
- Where the rise is 300mm or greater, a ramp plus stepped alternative should be provided. Where the rise is less than 300mm, a ramp should be provided.

Internal stairways

- Single steps should be avoided.
- Stairways should have a surface width of at least 1200mm.
- Flights should have no more than 12 risers (16 in small premises).
- Rises should be uniform and between 150mm and 170mm. Goings should be uniform and at least 250mm.
- Nosings should contrast with the treads and risers, and be durable.
- Risers should be closed.
- Treads should not overhang risers by more than 25mm.
- Where treads overhang risers, the risers and the underside of the treads should be radiused and chamfered so as to avoid a trip hazard.
- There should be continuous handrails on both sides (to give assistance to those people who have greater strength in one arm than the other).
- Landings should be level and have at least 1200mm going.

Internal ramps

- Ramps should have a surface width of at least 1500mm.
- Where there would otherwise be a drop at the edge of a ramp or landing, a kerb should be provided at a minimum height of 100mm.
- Ramps should have non-slip surfaces, and handrails both sides.
- Landings at each end of ramps should have at least 1200mm going, to allow sufficient room for wheelchair manoeuvre. Where landings are necessary between ramps they should have at least 1500mm going.
- Ramp flights should not exceed the following gradients: -

Maximum	Maximum	Maximum	Maximum	Maximum	Maximum

gradient	going	gradient	going	gradient	going
1:20	10m	1:17	7m	1:14	4m
1:19	9m	1:16	6m	1:13	3m
1:18	8m	1:15	5m	1:12	2m

Handrails to internal stairways and ramps

- Handrails should be between 900mm and 1000mm above steps (measured from an imaginary line joining the nosings) and ramps.
- Handrails should be between 900mm and 1100mm above landings.
- Handrails should not project into a route of travel.
- Handrails should be easy to grip. A tubular style with an outside diameter of 40mm to 45mm, at least 60mm clear of any walling, is preferable.
- Handrails should continue 300mm beyond the top and bottom of steps and ramps, and continue through intermediate landings.
- Handrails should contrast visually with their surroundings.

Switches, controls and sockets

Switches and controls

Front plates should visually contrast with their surroundings.

Switches for appliances should be 400-1200mm above the floor.

Switches and controls requiring precise hand movement should be 750-1200mm above the floor.

Controls that need close vision should be 1200-1400mm above the floor.

Emergency alarm pull-cords should be red, close to a wall, and have two 50mm diameter bangles 100mm and 800-1000mm above the floor.

Light switches for public use should have large push pads at the level of door handles 900-1100mm above the floor.

Mains and circuit indicator switches should clearly indicate whether they are on or off.

Sockets

Sockets, telephone points and TV sockets should be 400-1000mm above the floor, minimum 350mm from room corners, and should clearly indicate whether they are on or off.

This guide is produced by the Access Officers of Brighton & Hove City Council, Eastbourne BC, Hastings BC, Lewes DC, Rother DC and Wealden DC