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II. ARCHITECTURAL DESIGN CONSIDERATIONS

2. ELEVATORS

1. PROBLEM IDENTIFICATION

Inadequate space inside the elevator cab.

High position of switches, buttons and control panel.

Narrow entry doors.

Insufficient opening time interval.

2. PLANNING PRINCIPLE

To provide well-dimensioned elevators, that disabled people can use conveniently.

3. DESIGN CONSIDERATIONS

3.1 General

- The accessible elevator should serve all floors normally reached by the public.
- Key-operated elevators should be used only in private facilities or when an elevator operator is present.
- Wide elevator cabs are preferable to long ones.

3.2 Elevator cab

- The minimum internal elevator dimensions, allowing for one wheelchair passenger alone, are 1.00 m x 1.30 m (fig. 1).
- The door opening should not be less than 0.80 m.

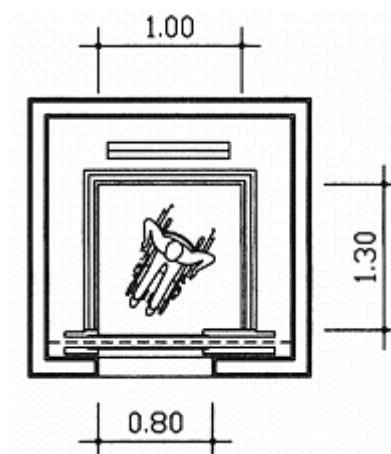


Fig. 1

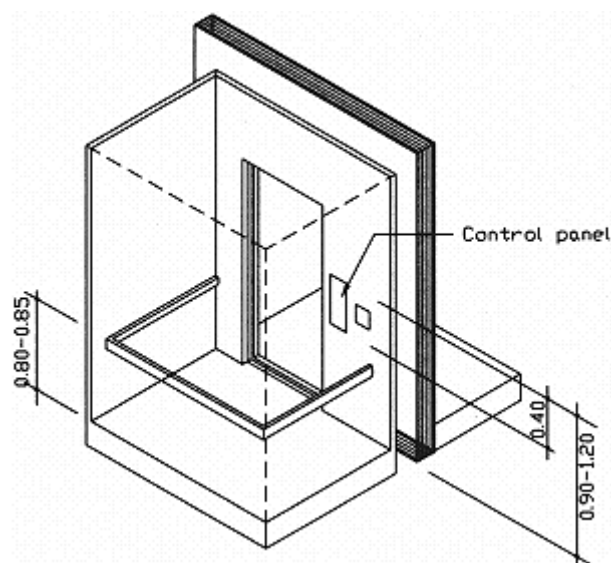
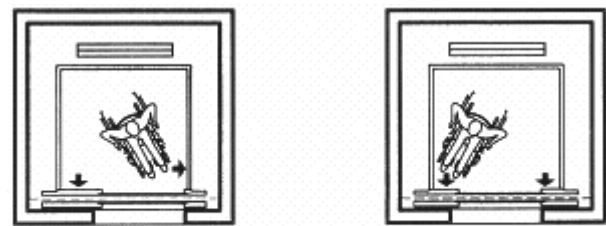


Fig. 2

- The inside of the elevator should have a handrail on three sides mounted 0.80 to 0.85 m from the floor (fig. 2).
- The maximum tolerance for stop precision should be 20 mm.

3.3 Control panel

- The control panel can be mounted at one of the alternative locations shown in figure 3.
- For ease of reach, the control panel should be mounted 0.90 m to 1.20 m from the floor (fig. 2).
- Control buttons should be in an accessible location and illuminated. Their diameter should be no smaller than 20 mm.
- The numerals on the floor selector buttons should be embossed so as to be easily identifiable by touch.



Alternative locations for control panel

Fig. 3

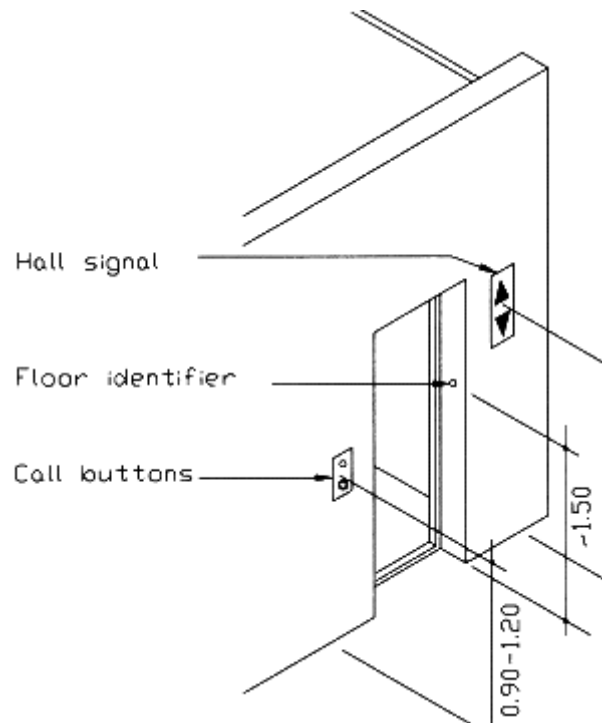


Fig. 4

3.4 Call buttons

- For ease of reach, call buttons should be mounted 0.90 m to 1.20 m from the floor (fig. 4).

3.5 Floor identifiers

- Tactile numerals should be placed on both sides of the door jambs at an approximate height of 1.50 m to help a lone sightless passenger to identify the floor reached (fig. 4).

3.6 Hall signal

- The elevator hall signal should be placed at an approximate height of 1.80 m (fig. 4).

3.7 Door re-opening activators

- The door opening interval should be no less than five seconds. Re-opening activators should be provided.

3.8 Audiovisual signals

- The elevator should signal arrival at each floor by means of a bell and a light to alert sightless and hearing-impaired passengers simultaneously.

3.9 Floor surface

- The floor of the elevator and the area in front of the elevator on each floor should have a non skid resilient surface or a low-pile fixed carpet.

3.10 Colour

- The colour of the elevator door should contrast with the surrounding surface so as to be easily distinguishable by persons with visual impairments.

4. EXISTING CONSTRUCTIONS

- The minimum acceptable size of an existing elevator cab, allowing for a single wheelchair passenger, is 0.95 m x 1.25 m. Smaller cabs should be replaced.
- The minimum acceptable width of an existing elevator door opening is 0.75 m.
- Call buttons and control panels mounted higher than the recommended height may be left in place if they are within 1.40 m of the floor, this being the maximum reach of a wheelchair user.
- Controls mounted higher than 1.40 m should be replaced.
- Where there are two identical control panels, only one need be replaced.

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