

उत्तर प्रदेश राज्य औद्योगिक
विकास प्राधिकरण



यूपीएसआईडीसी कामप्लेक्स
A-1/4ए लखनपुर
कानपुर - 208024
दूरभाष : 0512- 582851-53
फैक्स : 0512-2580797
वेबसाइट: www.upsidc.com
CIN-U26961SGC002834

संदर्भ संख्या

/सीडा/एटीपी/विनियमन

दिनांक

कार्यालय आदेश

यूपीसीडा के अधिसूचित औद्योगिक विकास क्षेत्रों में लागू यूपीसीडा के भूमि विकास एवं भवन विनियमन, 2018 के मानकों तथा अन्य सम्बन्धित शासनादेश के अनुरूप भवन मानचित्र स्वीकृति/कार्यपूर्ति प्रमाणपत्र जारी करने से पूर्व विनियमन, 2018 के अध्याय-14 के प्रस्तर-14.9 के अन्तर्गत नेशनल बिल्डिंग कोड में उल्लेखित भाग-3 परिशिष्ट-डी (छायाप्रति संलग्न) के अनुसार द्विव्यांग हेतु निर्धारित मानक यथा-रैम्प की ढाल, हैण्ड रेलिंग, प्रसाधन इत्यादि का निर्धारण किया जाना सुनिश्चित करें।

संलग्नक: यथोक्त।

(अस्मिता लाल)
अपर मुख्य कार्यपालक अधिकारी

संदर्भ संख्या 242-248 /यथोक्त।

दिनांक 11-05-2022.

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित:-

1. मुख्य कार्यपालक अधिकारी महोदय, उ0प्र0रा0औ0वि0प्रा0, मुख्यालय को सादर सूचनार्थ।
2. समस्त विभागाध्यक्ष, उ0प्र0रा0औ0वि0प्रा0, मुख्यालय, कानपुर।
3. वरिष्ठ प्रबन्धक(वा0/नि0)/प्रभारी-एटीपी को उपरोक्तानुसार आवश्यक कार्यवाही हेतु प्रेषित।
4. समस्त क्षेत्रीय प्रबन्धक/परियोजना अधिकारी, उ0प्र0रा0औ0वि0प्रा0.....।
5. समस्त वरिष्ठ प्रबन्धक(सिविल/विद्युत), उ0प्र0रा0औ0वि0प्रा0.....।
6. प्रभारी (कम्प्यूटर), उ0प्र0रा0औ0वि0प्रा0, मुख्यालय को इस आंशय से प्रेषित कि वे सूचनायें वेबसाइट पर अपलोड कराना सुनिश्चित करें।
7. समस्त सहा0प्रबन्धक/प्र0सहा0प्रबन्धक(वा0/नियो0)/मानचित्रक, एटीपी अनुभाग, मुख्यालय को आवश्यक कार्यवाही हेतु प्रेषित।

(अस्मिता लाल)
अपर मुख्य कार्यपालक अधिकारी

D-3 BUILDINGS

D-3.1 Ramps with Gradients

Where ramps with gradients are necessary or desired, they shall conform to the following requirements (see Fig. 10).

D-3.1.1 A ramp when provided should not have a slope greater than 1 in 20 or maximum of 1 in 12 for short distance up to 9 000 mm.

D-3.1.2 A ramp shall have handrails on at least one side, and preferably two sides, that are 900 mm high, measured from the surface of the ramp, that are smooth, and that extend 300 mm beyond the top and bottom of the ramp. Where major traffic is predominantly children, the handrails should be placed 760 mm high.

NOTES

1 Where handrails are specified to be of heights other than 80 cm, it is recommended that two sets of handrails be installed to serve all people. Where major traffic is predominantly children, particularly physically disabled children, extra care should be exercised in the placement of handrails, in accordance with the nature of the facility and the age group or groups being serviced (see also D-3).

2 Care should be taken that the extension of the handrails is not in itself a hazard. Extension up to 300 mm may be made on the side of a continuing wall.

D-3.1.3 A ramp shall have a surface that is non-slip surface and if length is 3 500 mm, the minimum width shall be 1 500 mm.

D-3.1.3.1 The provision of non-slip surfaces on ramps

greatly assists the challenged persons with semi-ambulatory and ambulatory disabilities. Non-slip surfaces are provided by many finishes and materials. The surfaces of the concrete ramps can be made non-skid by brooming the surface or by finishing with an indenting roller.

D-3.1.4 A ramp shall have a level platform at the top which is at least 1 800 mm long, if a door swings out onto the platform or toward the ramp. This platform shall extend at least 300 mm beyond each side of the doorway (see Fig. 11).

D-3.1.5 Each ramp shall have at least 1 800 mm of straight clearance at the bottom.

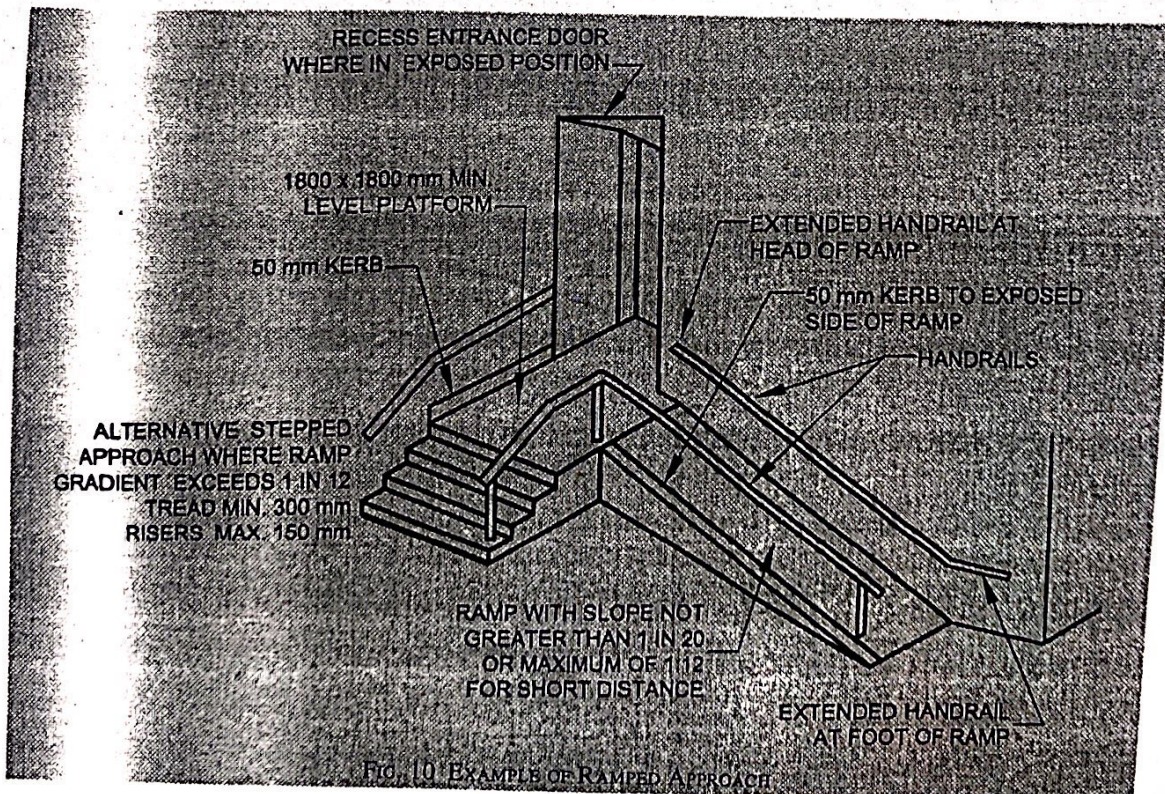
D-3.1.6 Ramps shall have level platforms at 10 m to 12 m intervals for purposes of rest and safety, and shall have platforms minimum 1.5 m length wherever they turn.

D-3.1.7 For visually impaired people, ramps may be colour contrasted with landing.

D-3.1.8 To minimize rise to wheelchair users, ramps should be equipped with herbs approximately 50 mm high at exposed sides.

D-3.2 Entrances

D-3.2.1 At least one primary entrance to each building shall be usable by individuals in wheelchairs (see Fig. 12A) and shall be indicated by a sign (see Fig. 12B).



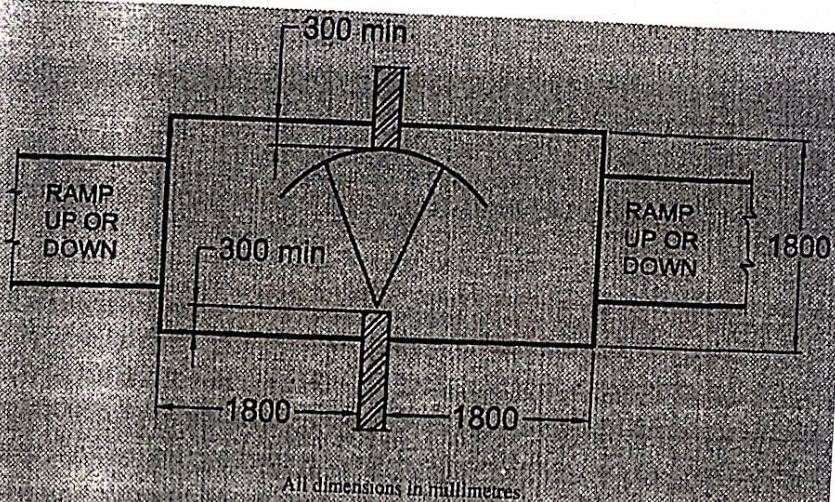
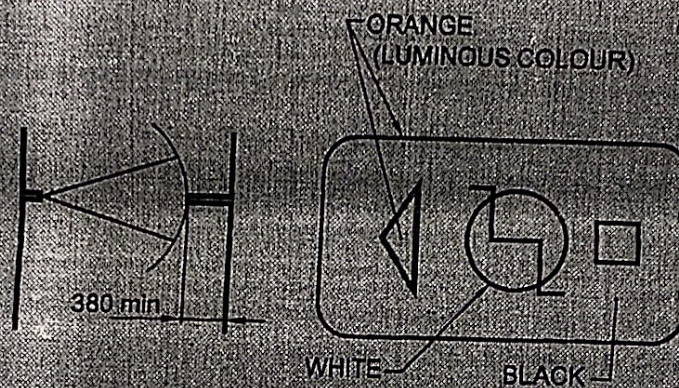


FIG. 11. LEVEL AREAS REQUIRED AT END OF RAMPS LEADING TO DOORWAYS



12A PLAN OF DOORS SUITABLE FOR THE WHEELCHAIR BOUND

12B SIGN FOR USE AT THE ENTRANCE

FIG. 12. ENTRANCES

D-3.2.2 At least one entrance usable by individuals in wheelchairs shall be on a level that would make the elevators accessible.

D-3.3 Doors and Doorways

D-3.3.1 Doorwidth

To enable wheelchair users to pass through doors, the minimum clear width should be 900 mm and shall be operable by a single effort. In certain cases the clear width should be 900 mm to 1 000 mm; for example, if the wheelchair has to be turned in the doorway, where there is a door-closer or at entrance doors to public buildings and in other situations where there is considerable traffic.

D-3.3.1.1 Two-leaf doors are not usable by those with disabilities defined in D-1.2.1, D-1.2.2 and D-1.2.5 unless they operate by a single effort, or unless one of the two leaves meets the requirements of D-3.3.1.

D-3.3.1.2 Side-hung doors

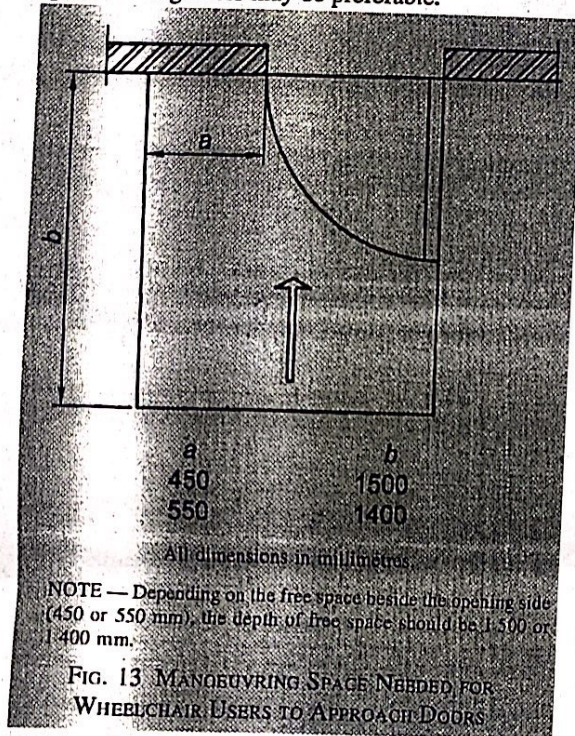
To facilitate wheelchair manoeuvre, doors should be hung with the hinges in room corners. Doors opening out into corridors or circulation spaces should be avoided as far as possible.

D-3.3.1.3 It is recommended that all doors have kick plates extending from the bottom of the door to at least 400 mm from the floor, or be made of a material and finish that would safely withstand the abuse they might

receive from canes, crutches, wheelchair foot-platforms, or wheelchair wheels.

D-3.3.2 Wheelchair Manoeuvring Space

To enable wheelchair users to approach doors manoeuvring space is needed as shown in the Fig. 13. A corridor should have a width of at least 1 200 mm to allow a 90° turn to be made through a door. In narrow spaces sliding doors may be preferable.



D-3.3.3 Thresholds

Raised thresholds should be avoided, but where this is not possible, their height should not exceed 25 mm. Rubber thresholds are advantageous for wheelchair users.

D-3.3.3.1 Care should be taken in the selection, placement and setting of door closers so that they do not prevent the use of doors by the physically disabled. Time-delay door closers are recommended.

D-3.3.3.2 Self-closing doors

Wheelchair users and other with impaired mobility have difficulty in using self-closing doors. The force required to open them should be reduced as far as possible. Public buildings should preferably have sliding automatic doors.

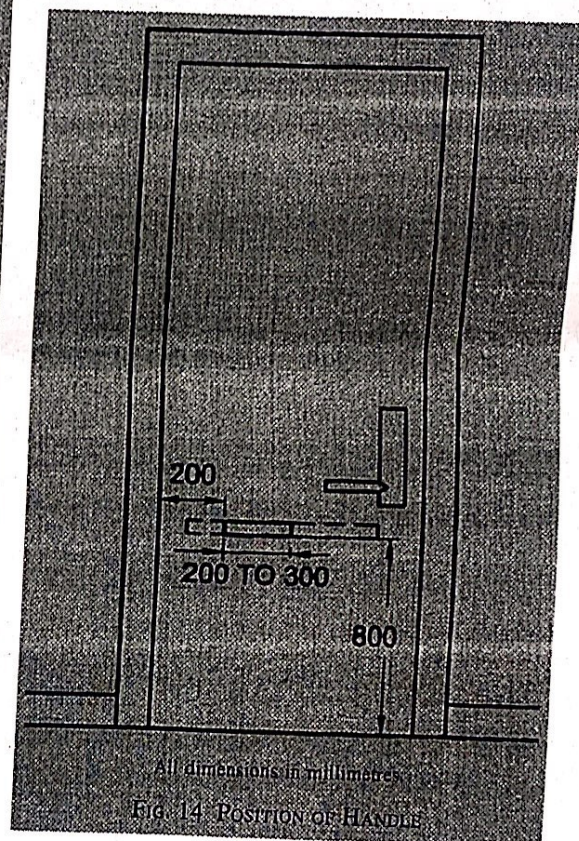
D-3.3.4 Door Identification

To help people with impaired vision to see doors, the door and frame should be in a colour which contrasts with the adjoining wall. Glass or glazed doors should

be marked with a coloured band or frame, a little below eye-level.

D-3.3.5 Handles

Door handles and locks should be easy to manipulate. To facilitate the closing of a door by wheelchair users (for example, a water-closet compartment), the door should have a horizontal handle approximately 800 mm from the floor. Self-closing doors should be equipped with an easy gripped vertical pull-handle with a length of at least 300 mm, and with the lower end approximately 800 mm above floor. For many people and specially those with impaired vision, it is helpful to make clear whether doors are to be pulled or pushed (see Fig. 14).



D-3.4 Windows

Windows should be designed to avoid the glare which is a particular problem for people with impaired vision. Large glass areas close to circulation spaces should be marked a little below eye-level with a coloured band or frame. To enable wheelchair users to see through a window comfortably, the sill should be not higher than 800 mm from the floor. Windows should be easy to open and close. Their controls should be placed in the zone 900 to 1 200 mm from the floor (see Fig. 15).

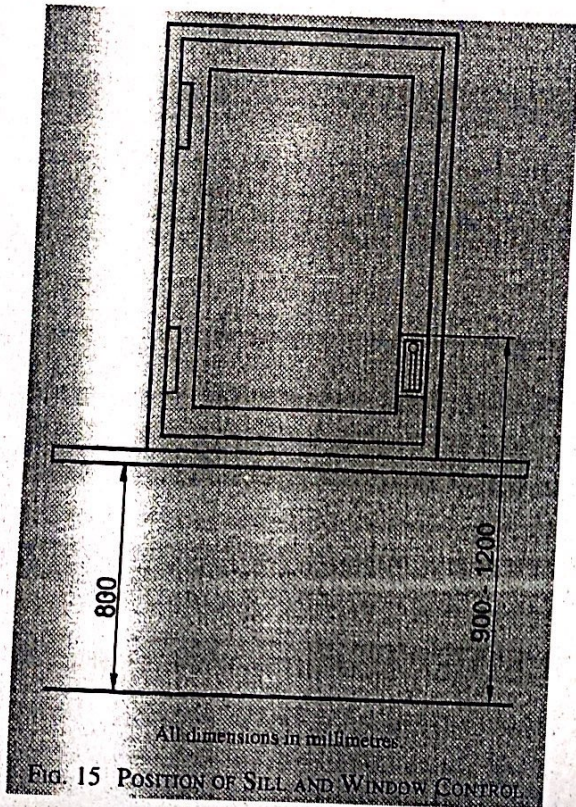


FIG. 15 POSITION OF SILL AND WINDOW CONTROL

D-3.5 Stairs

Stairs should not be the only means of moving between floors. They should be supplemented by lifts or ramps.

D-3.5.1 Straight flights of steps are preferred by ambulant disabled people. Treads should be approximately 300 mm deep and risers not higher than 150 mm. Steps should be of a consistent height and depth throughout the stair. Projecting nosings and open

stairs should be avoided to minimize the risk of stumbling.

D-3.5.2 Handrails should be provided to both sides of any stairway. They should be continuous and extend not less than 300 mm beyond the top and bottom step (otherwise it is difficult for the disabled to use the rail at the first and last step; see Fig. 16).

D-3.5.3 For people with impaired vision, there should be a colour contrast between landings, and top and bottom steps of a flight of steps, or the front edge of each step should have a contrasting colour.

D-3.6 Floors

D-3.6.1 Floors shall have a non-slip surface.

D-3.6.2 Floors on a given storey shall be of a common level through out or be connected by a ramp in accordance with D-3.1.1 to D-3.1.8.

D-3.6.2.1 A gentle slope up to 10 mm may be given between the level of the floor of the corridor and the level of the floor of the toilet rooms.

D-3.6.2.2 There should not be a difference between the level of the floor of a corridor and the level of a meeting room, dining room, or any other room, unless proper ramps are provided.

D-3.7 Sanitary Facilities

It is essential that sanitary facilities, in accordance with the nature and use of a specific building or facility, be made accessible to, and usable by, the physically challenged.

D-3.7.1 Sanitary facilities shall have space to allow traffic of individuals in wheelchairs (see Fig. 17 and 18).

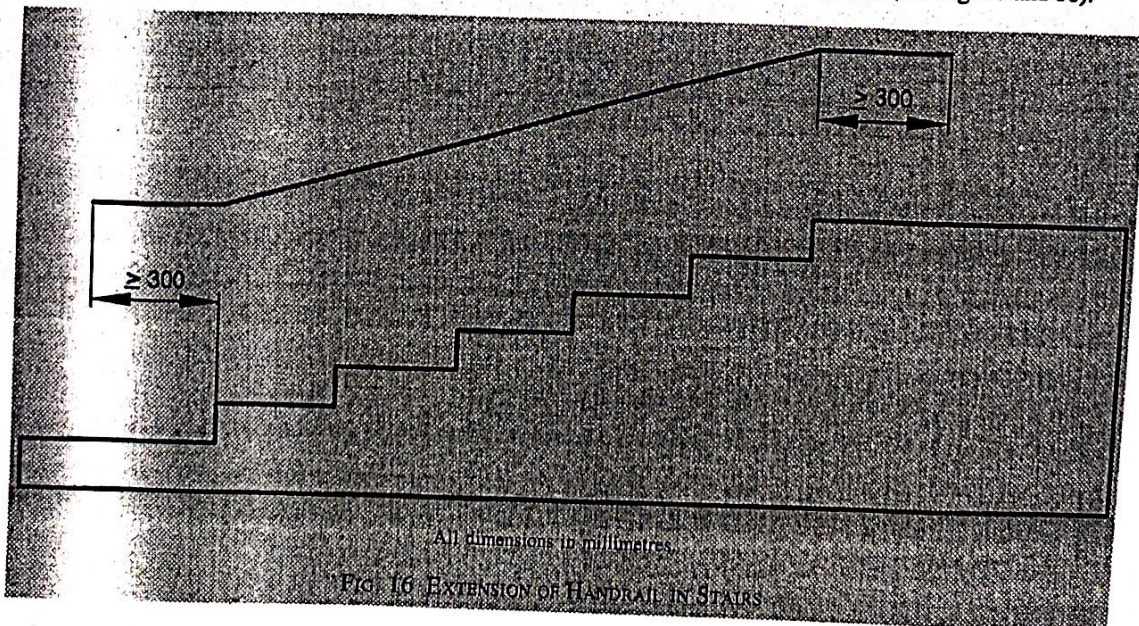
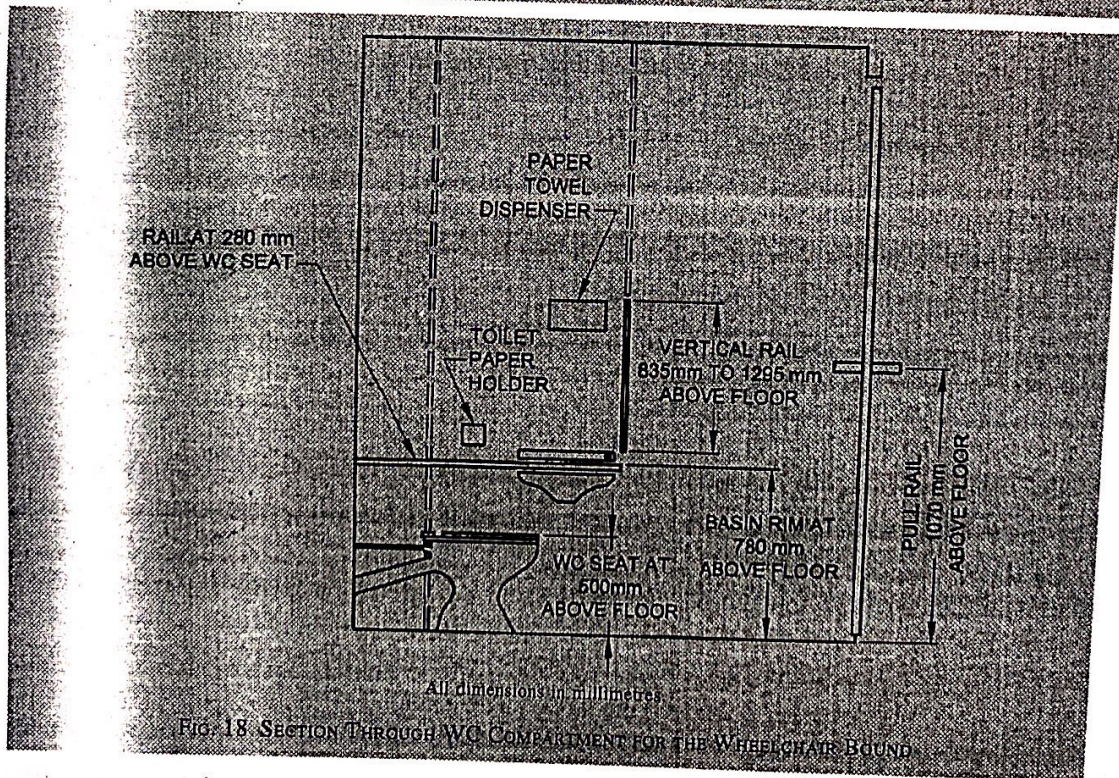
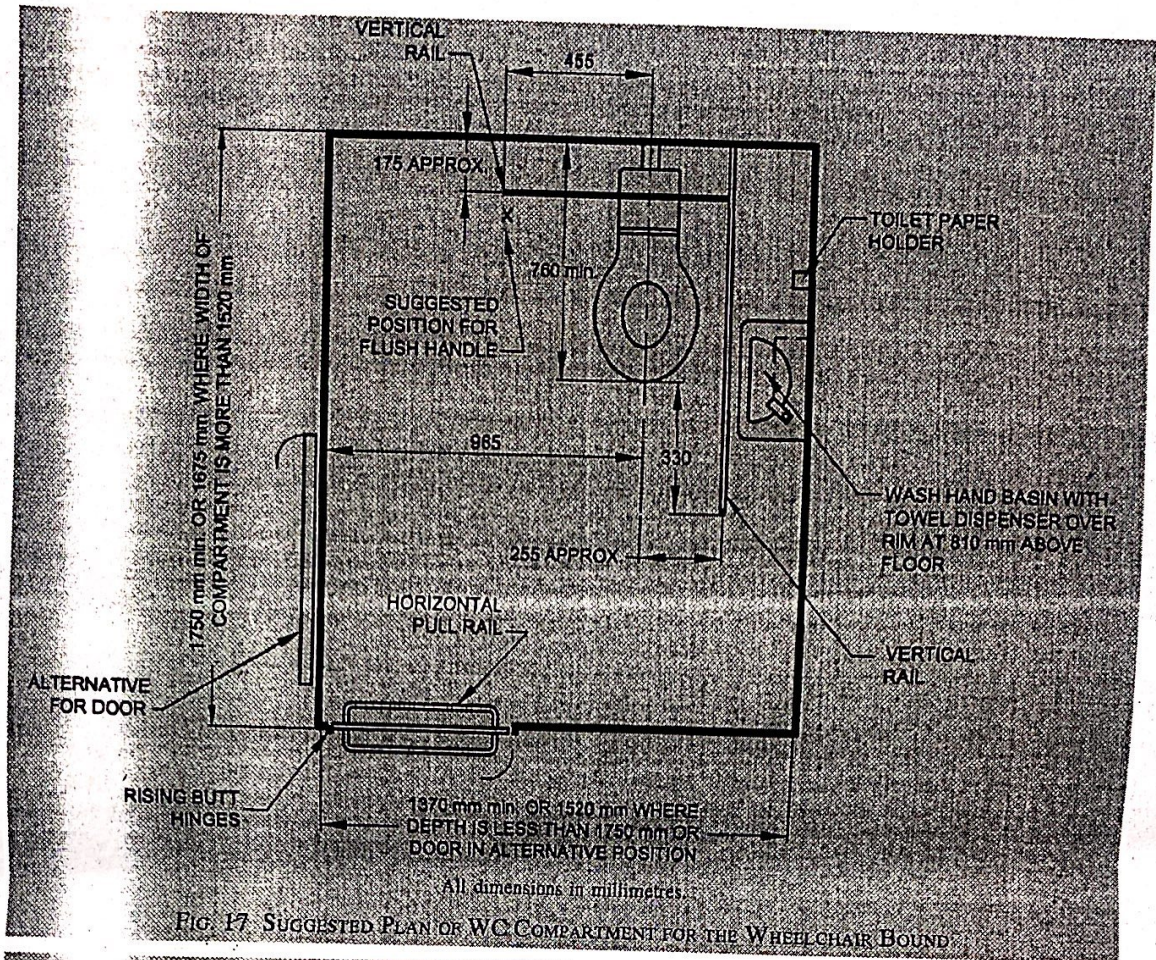


FIG. 16 EXTENSION OF HANDRAIL IN STAIRS



D-3.7.2 Sanitary facilities shall have at least one water-closet cubical for the ambulant disabled (*see* Fig. 19 and 20). that:

- a) is 900 mm wide;
- b) is at least 1 500 mm, preferably 1 600 mm deep;
- c) has a door (where doors are used), that is, 800 mm wide and swings out;
- d) has handrails on each side, 780 mm high and parallel to the floor, 40 mm clearance between rail and wall, and fastened securely at ends and centre; and
- e) has a water-closet with the seat 500 mm from the floor.

NOTE — The design and mounting of the water-closet is of considerable importance. A wall-mounted water-closet with a narrow understructure that recedes sharply is most desirable. If a floor mounted water-closet must be used, it should not have a front that is wide and perpendicular to the floor at the front of the seat. The bowl should be shallow at the front of the seat and turn backwards more than downwards to allow the individual in a wheelchair to get close to the water-closet with the seat of the wheelchair.

D-3.7.3 Sanitary facilities shall have wash basins with narrow aprons, which when mounted at standard height are usable by individuals in wheelchairs; or they shall have wash basins mounted higher, when particular

designs demand, so that they are usable by individuals in wheelchairs.

D-3.7.3.1 The drain pipes and hot-water pipes under a sanitary appliance shall be covered or insulated so that a wheelchair individual do not find it inconvenient.

D-3.7.4 Some mirrors and shelves shall be provided above the wash basins at a height as low as possible and not higher than 1 m above the floor, measured from the top of the shelf and the bottom of the mirror.

D-3.7.5 Sanitary facilities for men shall have wall-mounted urinals with the opening of the basin 460 mm from the floor, or shall have floor-mounted urinals that are on level with the main floor of the toilet room.

D-3.7.6 Toilet rooms shall have an appropriate number of towel racks, towel dispensers, and other dispensers and disposal units mounted not higher than 910 mm from the floor.

D-3.8 Drinking Fountains

An appropriate number of drinking fountains or other water-dispensing means shall be accessible to and usable by the physically disabled.

D-3.8.1 Drinking water fountains or water coolers shall have up front spouts and control.

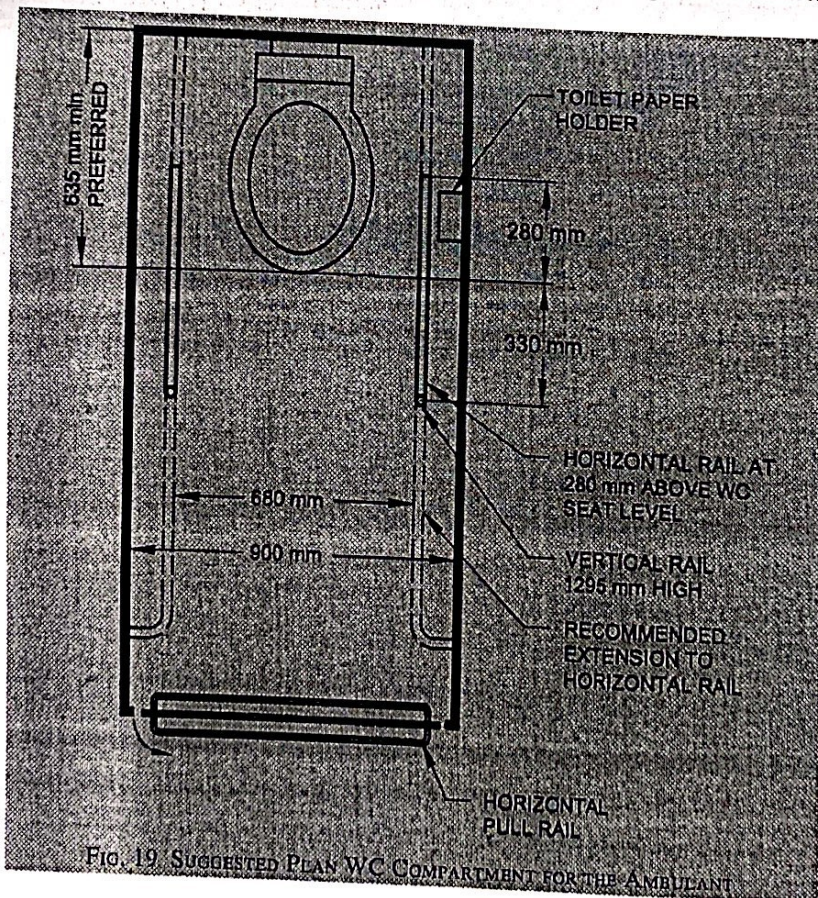


FIG. 19 SUGGESTED PLAN WC COMPARTMENT FOR THE AMBULANT

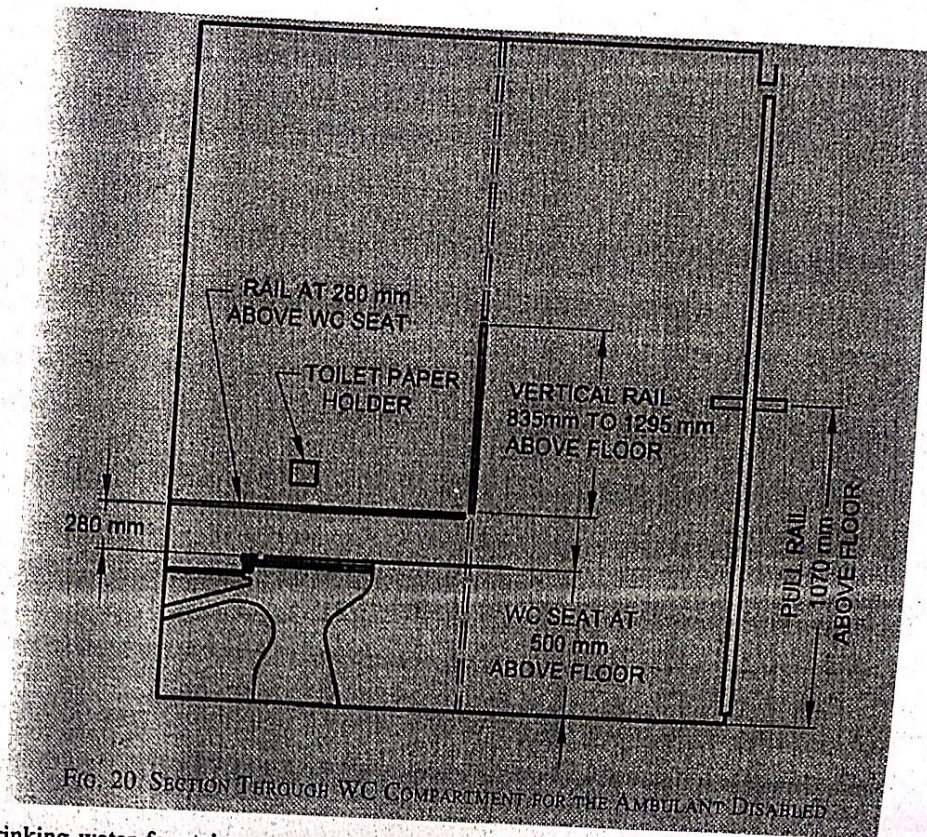


FIG. 20 SECTION THROUGH WC COMPARTMENT FOR THE AMBULANT DISABLED

D-3.8.2 Drinking water fountains or water coolers shall be hand-operated or hand and foot-operated.

D-3.8.2.1 Conventional floormounted water coolers may be convenient to individuals in wheelchairs if a small fountain is mounted on the side of the cooler 800 mm above the floor.

D-3.8.2.2 Fully recessed drinking water fountains are not recommended.

D-3.8.2.3 Drinking water fountains should not be set into an alcove unless the alcove is wider than a wheelchair.

D-3.9 Public Telephones

An appropriate number of public telephones should be made accessible to and usable by the physically disabled.

NOTE — The conventional public telephone booth is not usable by most physically disabled individuals. There are many ways in which public telephones may be made accessible and usable. It is recommended that architects and builders confer with the telephone companies in the planning of the building or facility.

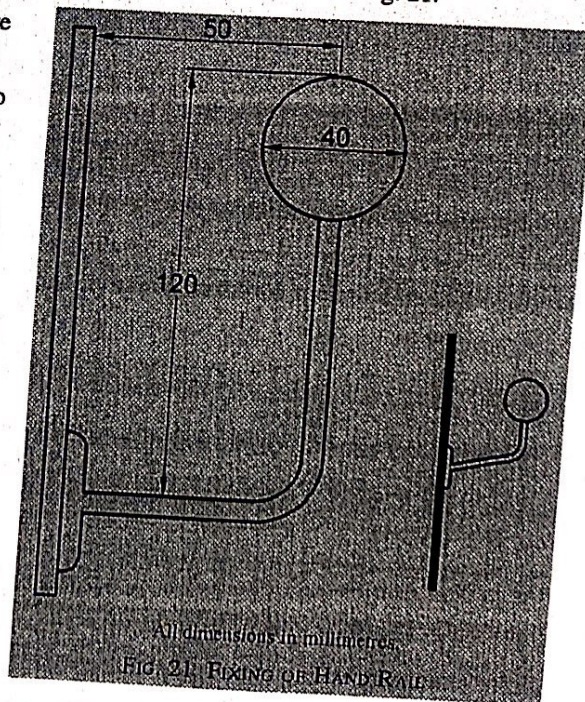
D-3.9.1 Such telephones should be kept so that the dial is placed at minimum 1 200 mm from floor and the handset may be reached by individuals in wheelchairs.

D-3.10 Handrails

Handrails are used as a locational and mobility aid by blind and visually impaired people, and as a support for people with mobility impairments. The handrail should

be securely fitted to the wall to withstand heavy pressure. Handrails should turn in towards the wall at either end.

D-3.10.1 Handrails should be approximately 900 mm from the floor. The rail should be easy to grip, having a circular section with a diameter of approximately 40 mm and fixed as shown in Fig. 21.



All dimensions in millimetres.
FIG. 21 FIXING OF HAND RAIL

D-3.10.2 To aid identification, the colour of the rail should contrast with the wall behind.

D-3.11 Elevators

In a multi-storey building, elevators are essential to the successful functioning of physically disabled individuals. They shall conform to the requirements given in **D-3.11.1** and **D-3.11.2**.

D-3.11.1 Elevators shall be accessible to, and usable by the physically disabled on the level that they use to enter the building, and at all levels normally used by the general public.

D-3.11.2 Elevators shall allow for traffic by wheelchairs (see also **D-3.3**).

D-3.12 Controls

It is advantageous for wheelchair users if controls are placed at low level. For visually impaired people, they should be at eye-level.

D-3.12.1 To enable wheelchair users to reach controls while not placing them too low for visually impaired people, controls should be in the zone 900 mm to 1 200 mm from the floor. It is advantageous if controls in, for example, lifts are placed at an angle of approximately 45° to the wall so that they are easier to read and operate. To cater for wheelchair users, controls should be placed not less than 400 mm from room corners. All the power and electric points should be placed at one metre above the floor level and should not project outside walls.

D-3.12.2 Again, to cater for visually impaired people, controls should be colour-contrasted with backgrounds. Information should preferably be in relief for tactile reading.

D-3.12.3 To aid operation for people with impaired co-ordination or impaired vision, switches, etc, should have large push plates.

D-3.12.4 Controls for powered door openers to hinged doors should be located so that the doors do not conflict with wheelchairs, sticks, walking aids, etc.

D-3.12.5 To facilitate operation for people with limited strength in arms and hands, handles should be easy to grip and turn.

D-3.13 Identification

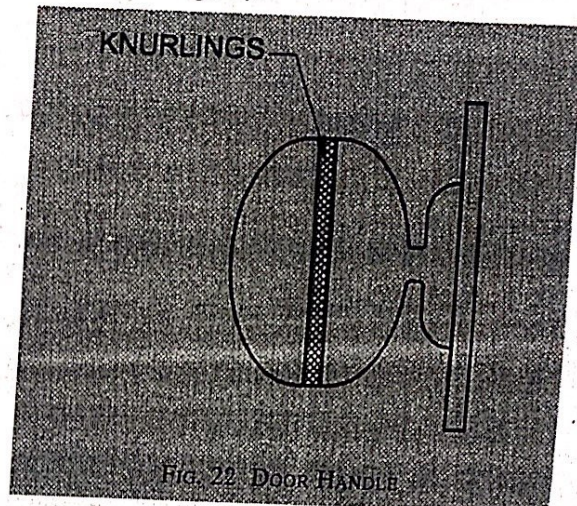
Appropriate identification of specific facilities within a building used by the public is particularly essential to the blind.

D-3.13.1 Raised letters or numbers shall be used to identify rooms or offices.

D-3.13.2 Such identification should be placed on the

wall, to left of the door, preferably at a height of 1 500 mm from the floor.

D-3.13.3 Doors that are not intended for normal use, and that might prove dangerous if a blind person were to exit or enter by them, should be made quickly identifiable to the touch by knurling the door handle or knob (see Fig. 22).



D-3.14 Warning Signals

D-3.14.1 Audible warning signals shall be accompanied by simultaneous visual signals for the benefit of those with hearing disabilities.

D-3.14.2 Visual signals shall be accompanied by simultaneous audible signals for the benefit of the blind. To assist blind people, lettering and symbols on signs should be in relief for tactile reading.

D-3.14.3 Signs should be designed and located so that they are easy to read. For visually impaired people, signs should preferably be at eye-level and it should be possible to approach them closely. Text and symbols should be colour-contrasted with the background. The letters should not be less than 12 mm high.

D-3.14.4 Signs should be well illuminated and surfaces should not cause mirroring or reflections. Signs should not be behind glass or similar materials.

D-3.14.5 Information based on colour codes only should be avoided; colourblind people may find them difficult to understand.

D-3.15 Work Bench

This should be at least 800 mm wide, 600 mm deep and 650 mm to 700 mm high. For wheelchair users, the convenient height of work tops is between 750 mm and 850 mm; flexible provision is preferred. Further, for wheelchair access to a work bench, wash basin or table, a clear space for knees and footrests is needed.

D-3.16 Hazards

Every effort shall be exercised to obviate hazards to individuals with physical disabilities.

D-3.16.1 Access panels or manholes in floors, walks, and walls may be extremely hazardous, particularly when in use, and should be avoided.

D-3.16.2 When manholes or access panels are open and in use, or when an open excavation exists on a site, particularly when it is in proximity of normal pedestrian traffic, barricades shall be placed on all open sides, at least 8.5 m from the hazard, and warning devices shall be installed in accordance with D-3.14.2.

D-3.16.3 Low-hanging door closers that remain within the opening of a doorway, when the door is open or that protrude hazardously into regular corridors or traffic ways when the door is closed, shall be avoided.

D-3.16.4 Low-hanging signs, ceiling lights, and similar objects or signs and fixtures that protrude into regular corridors or traffic way shall be avoided. A

minimum height of 2.1 m measured from the floor is recommended.

D-3.16.5 Ramps shall be adequately lighted.

D-3.16.6 Exit signs shall be in accordance with good practices [3(5)].

D-3.16.7 Equipment and materials causing allergic reactions should as far as possible be avoided in dwellings and buildings.

D-4 DESIGNING FOR CHILDREN

The dimensions given in this Annex are for adults of average stature. In designing buildings for use by children, it may be necessary to alter some dimensions, such as, height of handrails, in accordance with accepted standards [3(6)].

D-5 For additional information regarding other facilities and conveniences required in buildings meant for use of physically challenged, reference may be made to accepted standards [3(7)].

ANNEX E

(Clauses 12.22, C-2.3.1 and C-2.6)

SPECIAL REQUIREMENTS OF CLUSTER PLANNING FOR HOUSING

E-1 GENERAL

E-1.1 These guidelines cover planning and building requirements of housing developed as clusters. These requirements are applicable to all housing projects taken up by public, private or co-operative agencies.

E-2 PLANNING

E-2.1 Plot Size

The minimum plot size permissible shall be 15 m² with 100 percent ground coverage and an FSI of two. Hundred percent ground coverage and FSI of 2 will be applicable up to plot size of 25 m². For plot sizes beyond 25 m², provision in accordance with good practice [3(1)] shall be applicable.

E-2.2 Plot/Plinth Area for Slum Resettlement on Same Site

In case of slum resettlement on the same site, minimum area may be reduced to 12.5 m² with potential for adding another 12.5 m² on first floor with an internal staircase.

E-2.3 Group Housing

Group housing may be permitted within cluster housing

concept. However, dwelling units with plinth areas up to 20 m² should have scope for adding a habitable room. Group housing in a cluster should not be more than 15 m in height.

E-2.4 Size of Cluster

In ground and one storeyed structures not more than 20 houses should be grouped in a cluster. Clusters with more dwelling units may create problems relating to identity, encroachment and maintenance.

E-2.5 Size of Cluster Open Space

Minimum dimensions of open spaces shall be not less than 6 m or 3/4th of the height of buildings along the cluster open space, whichever is higher. The area of such cluster court shall not be less than 36 m². Group housing around a cluster open space should not be normally more than 15 m in height. Maximum cluster courtyard width and breadth shall be 13 m.

E-2.6 Setbacks

No setbacks are needed from the edges of cluster as pedestrian/vehicular access roads surrounding the cluster.