10. REST ROOMS

1. PROBLEM IDENTIFICATION

Insufficient space inside a rest room.

Poor design and positioning of fixtures and fittings.

Taps that are difficult to grip.

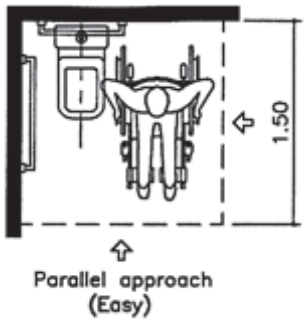

Fig. 1

2. PLANNING PRINCIPLE

To provide sufficient accessible space inside rest rooms, with all fixtures and fittings being within easy reach.

3. DESIGN CONSIDERATIONS

3.1 General

- Turning circles of 1.50 m diameter are recommended inside the rest room to allow for full-turn manoeuvring of a wheelchair.

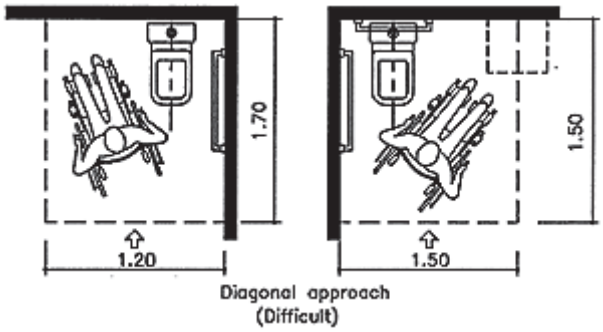

Fig. 2

- The ease of transferring from a wheelchair to a toilet seat or bidet depends on the approach. In general there are four different approaches:

(a) The parallel approach, which is the easiest (fig. 1);

(b) The diagonal approach, which is difficult (fig. 2);

(c) The perpendicular approach, which is also difficult (fig. 3);

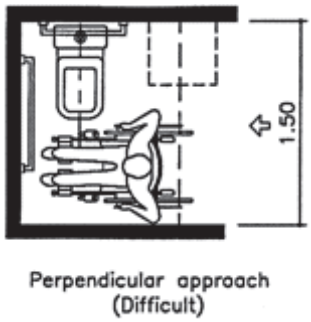

Fig. 3

(d) The frontal approach which is the most difficult and needs particular care (fig. 4).

3.2 Public rest rooms

- In any public rest room, at least one compartment for each sex should be accessible to an ambulant disabled person.

- In any public rest room at least one unisex compartment should be accessible to a wheelchair user.

- Accessible rest rooms should be marked with the international symbol of accessibility. No indication is needed if all rest rooms are accessible.

- Pivoted doors should open outward unless sufficient space is provided within the toilet stall.

3.3 Special public rest rooms

- Installation of a separate unisex unit is always desirable in public buildings, even when all rest rooms are accessible, so as to allow a disabled person to be assisted by an attendant of the opposite sex.

- Special rest rooms should be marked with the international symbol of accessibility but should not be the only accessible rest rooms.

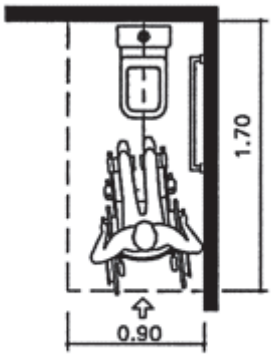

Fig. 4

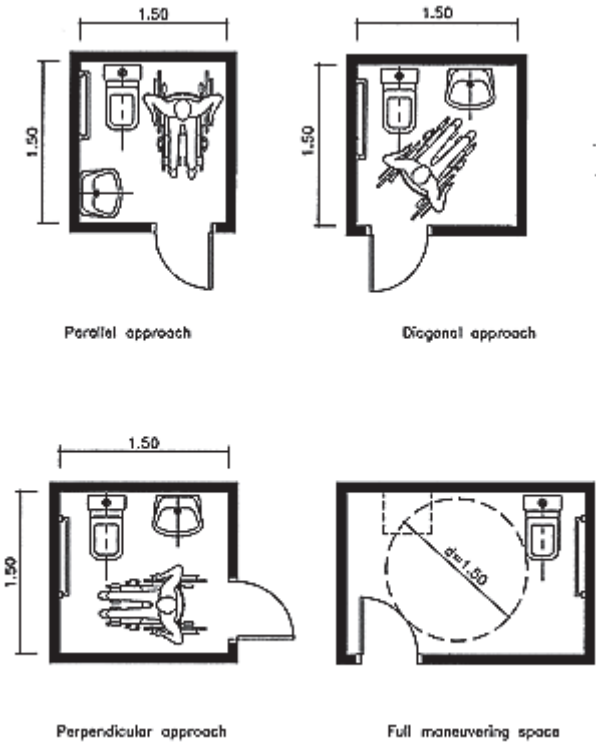

Fig. 5

- A water-closet and a lavatory should be provided within special rest rooms.

- The size and layout of special rest rooms should comply with the minimum requirements (fig. 5).

3.4 Residential rest rooms

- Residential rest rooms include those in private residences, health facilities, dormitories and other residential institutional settings.

- Residential bathrooms are usually equipped with a toilet, a bidet, a wash-basin and a bath-tub or shower.

- In multiple-rest-room arrangements (such as dormitories):

(a) Only one wash-basin per rest room needs to be accessible; (b) At least one shower stall and one toilet stall should be designed for a wheelchair user.

- To save space in private occupancies:

(a) The tiled floor area adjacent to the tub can be used as a shower space; (b) The wash-basin seat might be used as a seat during the use of the wash-basin or the hand shower.

- The size and layout of residential rest rooms should comply with the minimum requirements (fig. 6).

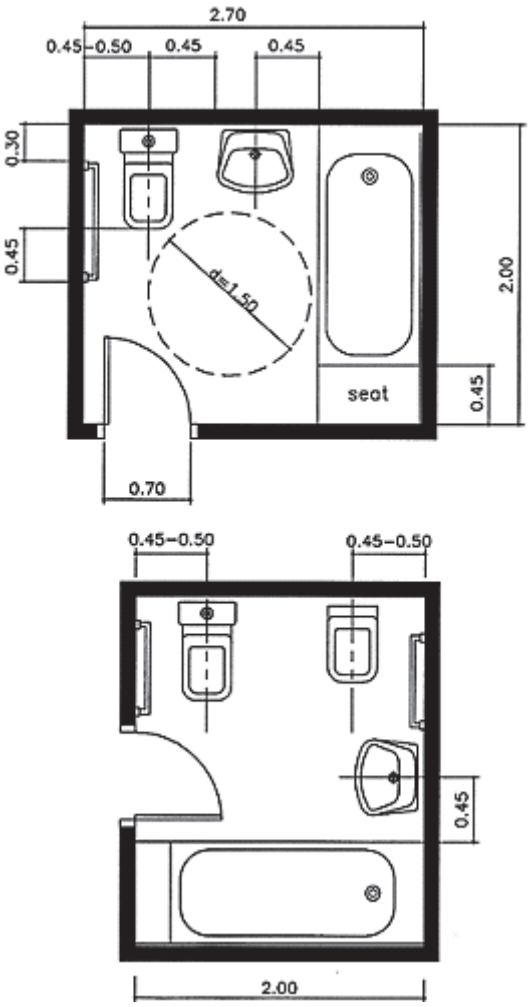

Fig 6.

3.5 Rest room fixtures

1) Water closets:

- The size and layout of water-closets and toilet stalls should comply with the minimum requirement (fig. 7) (fig. 8).

- The height of the toilet seat should be between 0.45 m and 0.50 m from the finished floor level. (1)

- The distance between the centre line of the toilet seat and the adjacent wall, if provided with a grip bar, should be between 0.45 m and 0.50 m.

- Grab bars should be mounted on the wall behind the water closet, if it is of the tank-less type, and on the side wall closest to the water closet, or mounted on the floor at the edges of the seat.

- Grab bars should be mounted at a height between 0.85 m and 0.95 m from the floor. As an alternative, the grab bar could be placed at a slant.

- Flushing arrangements and toilet paper should be placed within reach at a height between 0.50 m and 1.20 m. It is also recommended to respect a distance of 50 cm from the corner.

- Accessible hand-operated flushing controls, located on the open side of the water-closet, are recommended.

- Wall mounted ...

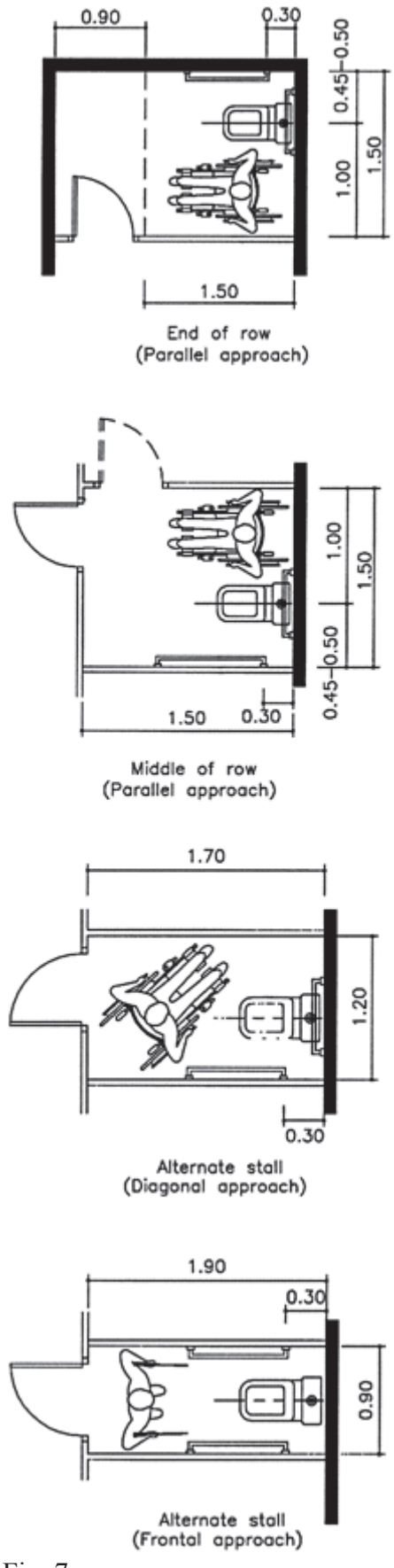

Fig. 7

closets are recommended.

2) Lavatories:

- The dimensions of lavatories should comply with the minimum requirements (fig. 9).

- The height of a wash basin should be between 0.80 m and 0.85 m above the finished floor level. A 70 cm free space under the wash basis should be respected.

- The distance between the centre line of the wash-basin and the adjacent side wall should at least be 0.45 m.

- The wash-basin may be drawn forward from the wall a distance between 0.15 m and 0.20 m.

- No shelves must be located above the wash-basin.

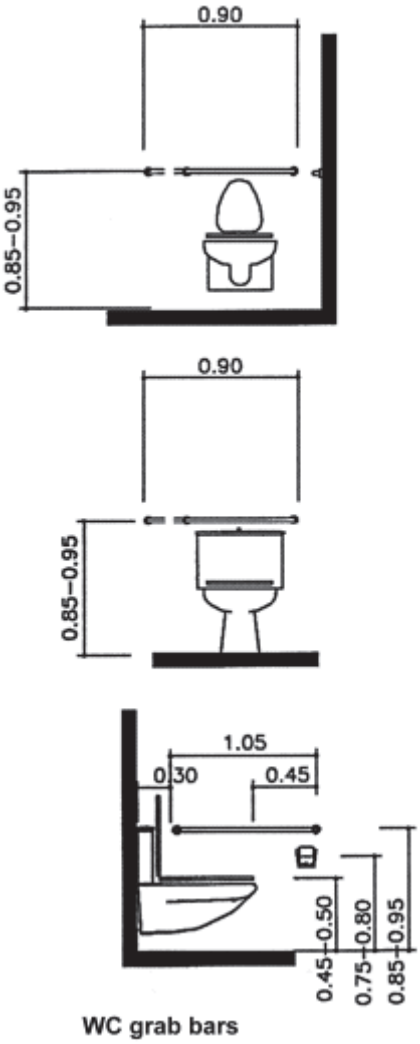

Fig. 8

3) Bath-tubs:

- In general bath-tubs are difficult to use by those confined to a wheelchair without the help of an attendant.

- The dimensions of bath-tubs should comply with the minimum requirements (fig. 10).

- The minimum dimensions of the bath-tub should be 1.60 m x 0.70 m.

- The height of the tub

and 0.50 m from finished floor level.

- An in-tub seat or a seat at the same height of the tub should be provided at the head side of the tub. (1) In some cases, itt might be useful to provide a small wall at the open side of the bath tube, allowing people to sit on this before entering (more easily) the bath tube.

- A grab bar should be mounted on the wall between 0.85 m and 0.95 m from the finished floor level. (2)

- Tubs with a toe recess are recommended.

4) Showers:

- The dimensions of showers should comply with the minimum requirements (fig. 11) (fig. 12).

- The shower should have a seat conveniently positioned for the shower head at a height of 0.45 m and 0.50 m. (1)

- The shower seat should be of the hinged pull-down or removable type, not spring-loaded.

- A grab bar should be placed on the wall opposite the seat and around the back wall, mounted at a height between 0.85 m and 0.95 m.

- Slip resistant floors are the best solution; however, rubber mats could provide a valid alternative. In this case, drain openings

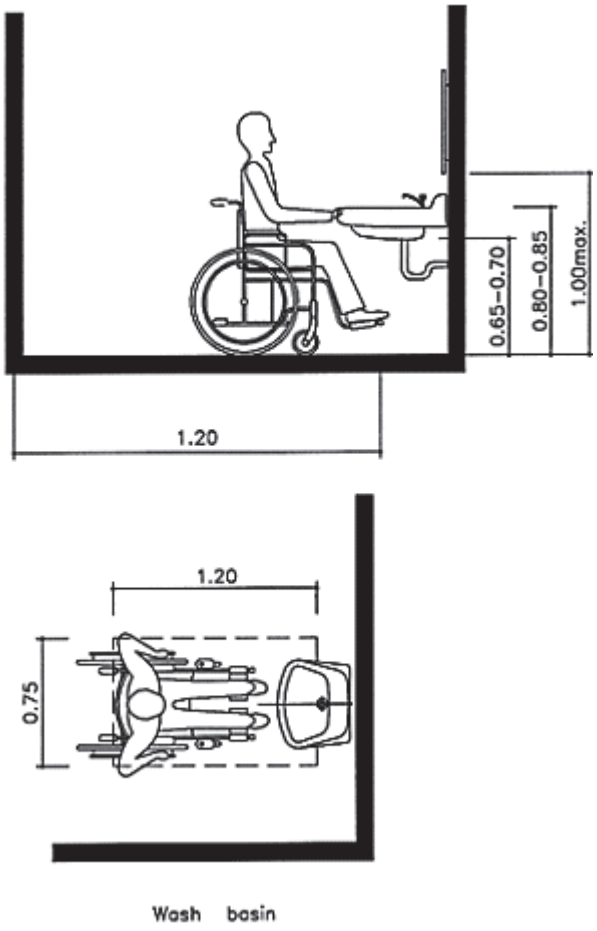

Fig. 9

corner of the stall.

- The floor of the shower stall should not be more than 20 mm below the level of the surrounding floor area.

- The shower stall should have a levelled threshold not exceeding 13 mm above the finished floor.

5) Bidets:

- The dimensions of bidets should comply with the minimum requirements.

- The upper edge of the bidet should be between 0.45 m and 0.50 m from the finished floor level. (1)

- The distance between the centre line of the bidet and the adjacent wall should be at least 0.45 m.

- Wall mounted bidets are recommended.

6) Urinals: (fig. 13)

- At least one accessible urinal should be provided in public rest rooms.

- Urinals should have a clear space on both sides.

- A full-length urinal is the most accessible.

- Urinals with a protruding lip should be mounted at a height of 0.45 m from the finished floor level.

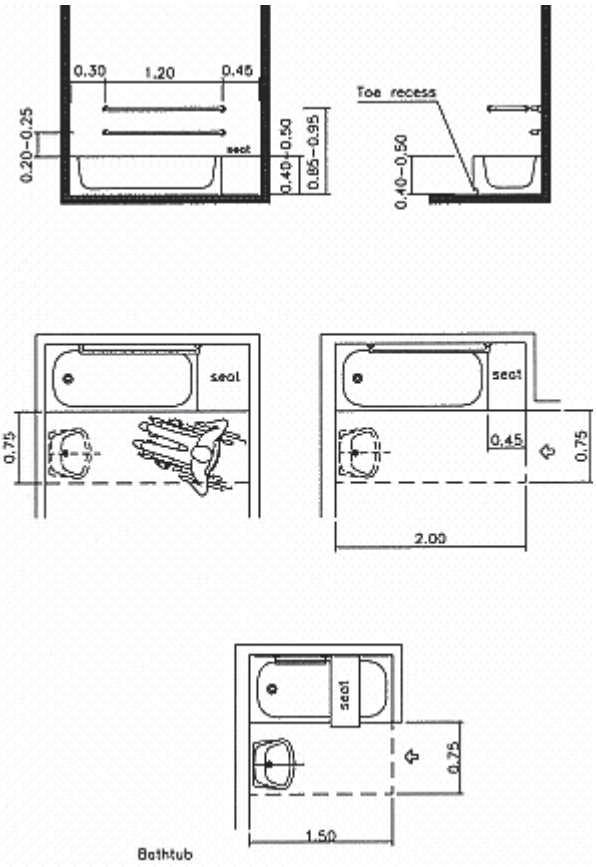

Fig. 10

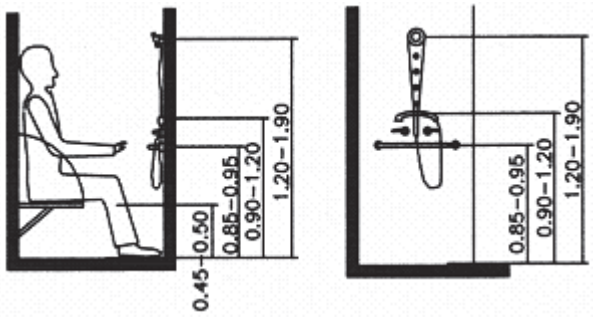

Fig. 11

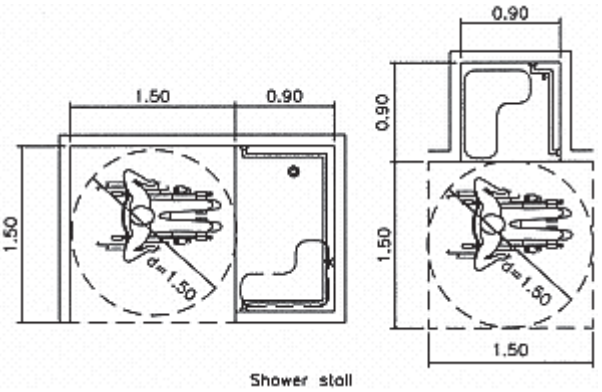

Fig. 12

3.6 Rest room door

- The clear door opening should be at least 0.75 m with the door in the open position.

- Doors should be lockable from inside and releasable from outside under emergency situations.

- Regardless of the door type, a handle should be placed on the door from the inside to facilitate closing. Another handle should be provided on the outside (see Doors).

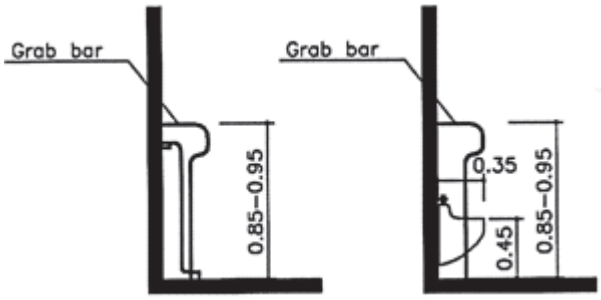

Fig. 13

3.7 Accessories

- All accessories, such as soap, towel and toilet paper dispensers, should be placed at a height between 0.50 m and 1.20 m from the finished floor level and 0,50 m from the corner.

3.8 Grab bars

- Grab bars should be installed in water-closets, bath-tubs and showers to assist disabled persons to use the facilities safely and easily. (2)

- Grab bars should have a diameter of 30 mm to 40 mm.

- Wall-mounted grab bars should extent between 35 mm and 45 mm from the wall.

- Grab bars should be firmly fixed with stand loads and should have non-slip

usually prevent slipping.

3.9 Mirrors

- Mirrors should be suitable for use by both standing and seated persons. Low mirrors or downward tilted mirrors can be used.

- The bottom edge of mirrors should be located at a maximum height of 1.00 m from the finished floor level (fig. 9).

3.10 Faucets

- Single-lever mixing-type faucets, which are easily operated by hand or elbow, are recommended. Faucets with push buttons are also convenient.

- The clearance between the grip of the tap and any adjacent vertical surface should not be less than 35 mm.

- The space between two taps should not be less than 0.20 m.

- The left tap should be connected to the hot water supply.

- Telephone fixtures with a cord at least 1.50 m long are recommended for use in showers and bath-tubs. These can be hand-held or fixed at an adjustable height between 1.20 m and 1.80 m from the floor to suit all users.

3.11 Flooring

- Rest rooms must not have doorsteps. The gradient of the floor should be as low as possible.

- Thresholds should be avoided. When inevitable, the maximum threshold height should be 20 mm (see Doors).

- Flooring materials should be skid-proof and easy to clean.

- The floor should be well-drained and provided with adequate waterproofing.

3.12 Alarms

- Rest rooms should be equipped with an alarm system.

3.13 Pipes

- All exposed hot water pipes should be insulated or covered.

- It is preferable that pipes be fitted in the wall.

4. EXISTING CONSTRUCTIONS

4.1 Public rest rooms

For accessible buildings, at least one accessible unisex rest room should be provided per facility.

4.2 Water-closets

To obtain an accessible toilet combine two adjacent

water-closet and the mutual partition, provided that the number of remaining fixtures is sufficient for the floor population.

4.3 Urinals

Existing high urinals need not be replaced if accessible toilet fixtures are available.

- One urinal per rest room can be lowered.

4.4 Rest room vestibules

- For narrow vestibules, replace doors with automatic door openers or use swing clear hinges.

- Doors that restrict manoeuvring space, should be removed so long as this does not inhibit privacy.

4.5 Grab bars

- If grab bars are not provided in the initial construction, walls should be reinforced to withstand loads.

4.6 Accessories

- Rest room accessories located at a maximum height of 1.40 m need not be modified if they are accessible.

4.7 Mirrors

- If existing mirrors are too high, they can be tilted or a full-length mirror can be installed on another wall.

Notes:

(1) Toilet seats, bidets, shower seats and bath-tub seats are required to be mounted at the same height of the wheelchair seat, i.e. between 0.45m and 0.50 m above floor level.

(2) Grab bars are manufactured in various dimensions and shapes. They can either be wall-mounted or floor-mounted. Retractable bars are also available.