

Division 11 --- TOILETS AND W.C. CUBICLES

This Division explains the requirements to enable persons with a disability, including wheelchair users to use the facilities provided in a toilet independently as far as possible. A typical toilet is shown in Figure 24. Different approaches for transferring the person from a wheelchair to a watercloset are shown in Figures B5, B6 and B7 in Appendix B.

MANDATORY SECTION

Performance Objectives

Sufficient, properly designed and located toilet and W.C. cubicles shall be available for use by everybody including people of either sex, people with babies and small children, persons with a disability, wheelchair users and the elderly and elderly with frailty, etc. with or without any assistance from others. Space requirements are set to enable a wheelchair user to manoeuvre into position for frontal, side or diagonal transfer to and from the W.C. seat.

Obligatory Design Requirements

46. Provision of Accessible W.C. Cubicle

There shall be at least one accessible W.C. cubicle on a floor, or in that part of a floor designed for access by the persons with a disability where the total number of W.C. cubicles provided on that floor or in that part of a floor is 20 or less, or 2 where the total number exceeds 20. This paragraph shall not apply to domestic buildings and the domestic parts of composite buildings or where there is no toilet provided on the particular floor.

Where the accessible W.C. cubicles are within a toilet with multiple cubicles, the minimum number of such accessible W.C. cubicles to be provided for each sex shall be based on the total number of W.C. cubicles for each sex on that floor or in that part of a floor designed for access by persons with a disability.

The W.C. cubicles required by this Manual shall be deemed to be included in the number of soil fitments required under the Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations (Cap. 123 sub. leg.) and Part VII of the Education Regulations (Cap. 279 sub. leg.)

Obligatory Design Requirements (Cont'd)

47. Accessible Unisex Toilet

Where toilet is provided on a floor, at least one shall be designed as an accessible unisex sanitary facility for use by persons of both sexes and access to which does not necessitate traversing an area reserved for one sex only. It shall be designed for general use and include adequate circulation space for wheelchair users in accordance with the obligatory requirements as set out in this Division.

48. Location of Accessible W.C. Cubicle

W.C. cubicles shall be accessible –

- (i) directly from a public corridor; and
- (ii) where situated within a toilet containing other W.C. cubicles, through a clear space not less than 1500 mm x 1500 mm immediately in front of the compartment to allow manoeuvrability or by direct approach where no turning of the wheelchair is necessary.

49. Design of Accessible W.C. Cubicle

The accessible W.C. cubicle shall not be less than 1500 mm x 1750 mm in area and the clear manoeuvring space within the cubicle shall not be less than 1500 mm x 1500 mm measured at 350 mm above finished floor level and the cubicle shall have in it a watercloset at a height not less than 380 mm and not more than 450 mm, measured to the top of the toilet seat. Waterclosets shall be equipped with a back support such as a seat lid and seats shall not be spring-actuated.

50. Flushing Controls

Flushing control shall be mounted on the wide side of the cubicle at a height between 600 mm to 1050 mm above the finished floor level and shall be hand-operated or automatic. Hand-operated controls shall be capable of being operated with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required shall not be greater than 22 N.

51. Wash Basins

The toilet shall be provided with a wash basin mounted with the rim not higher than 750 mm above the finished floor level. A clearance of 550 mm shall be maintained from the finished floor level to the bottom of the apron.

Tap for wash basin shall be automatic or of lever control type without spring loading, subject to the approval of the Water Supplies Department. Tap shall not require tight grasping, pinching or twisting of the wrist. The operating force required shall not be greater than 22 N.

Obligatory Design Requirements (Cont'd)

52. Toilet / Cubicle Doors

Door shall be installed with push-type or lever-type handles and capable of being easily opened/closed by one hand. Any door fastening shall be capable of being released from the outside in the event of an emergency.

No coin box shall be affixed to the door of the cubicle.

53. Grab Rails

There shall be at least two grab rails which shall not be less than 32 mm and not more than 40 mm in external diameter and shall be fixed on the wall leaving a grip space of not less than 30 mm clear of the mounting wall. The two grab rails constructed in one continuous piece is acceptable. The length of grab rail shall not be less than 600 mm.

There shall be one grab rail fixed on each of both the inner and outer surfaces of the cubicle door; which shall not be less than 32 mm and not more than 40 mm in external diameter. The grab rail shall have a grip space of not less than 30 mm clear of each door surface.

There shall be one folding grab rail on the wide side of the cubicle adjacent to the watercloset at a height between 725mm to 750mm above the finished floor level when lowered from the wall. Simple instructions in English, Chinese and Braille on how to unfold the rail should be affixed to the wall. The grab rail, folding grab rail and wash basin shall be capable of carrying a static load of 150 kg.

The grab rail shall not rotate within its fixing fittings.

54. Emergency Call Bell

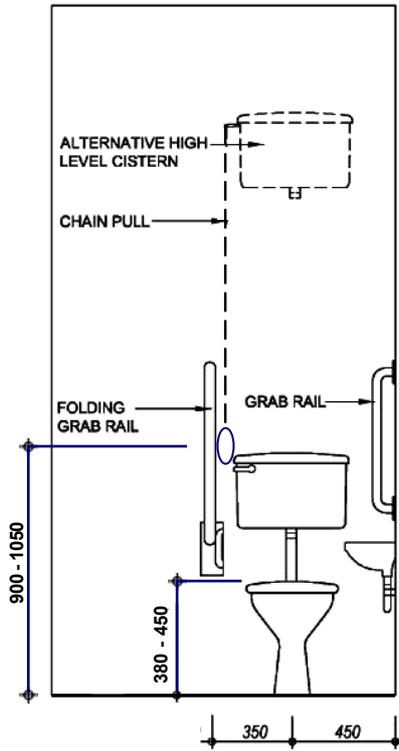
An emergency call bell complying with Division 17 shall be provided in an accessible W.C. cubicle.

Obligatory Design Requirements (Cont'd)

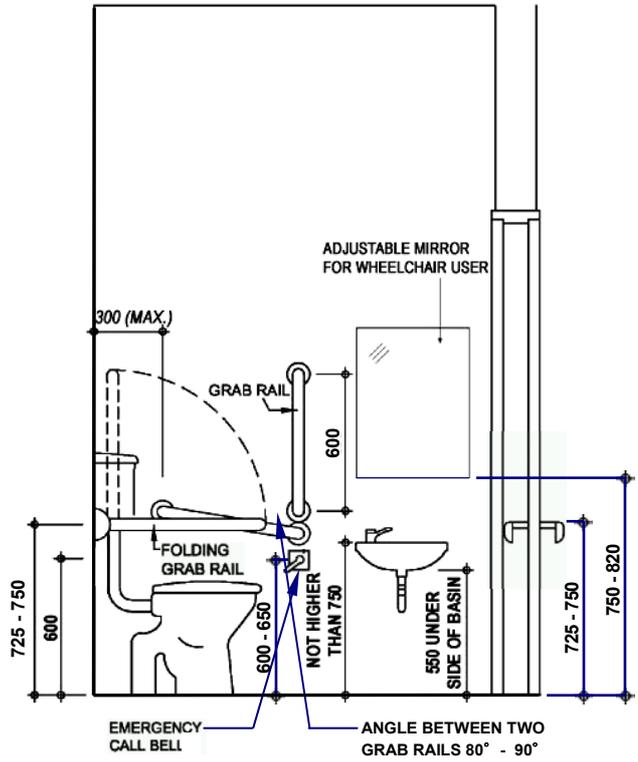
55. Urinals

If more than one urinal is provided, at least one urinal shall

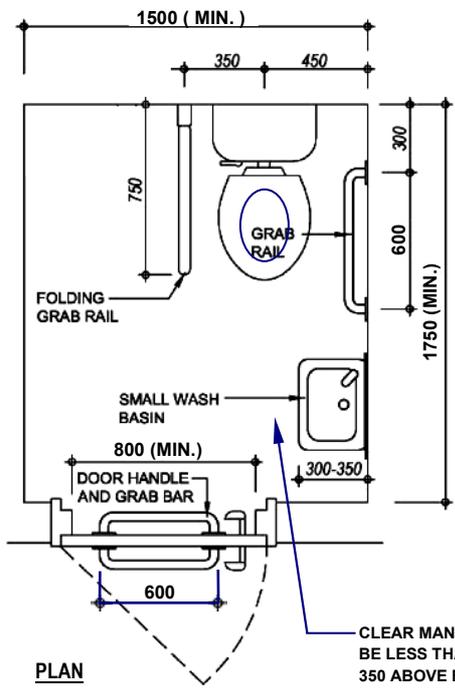
- (i) have a clear levelled space of not less than 800 mm wide x 1500 mm deep in front; and
- (ii) be wall hung urinal with a front rim not higher than 400 mm, and have vertical grab rails of not less than 32 mm and not more than 40mm in external diameter and of 600 mm length on both sides at a height of 1200 mm above the finished floor level for use by persons with ambulant disabilities. (see Figure 25)



FRONT ELEVATION



SIDE ELEVATION



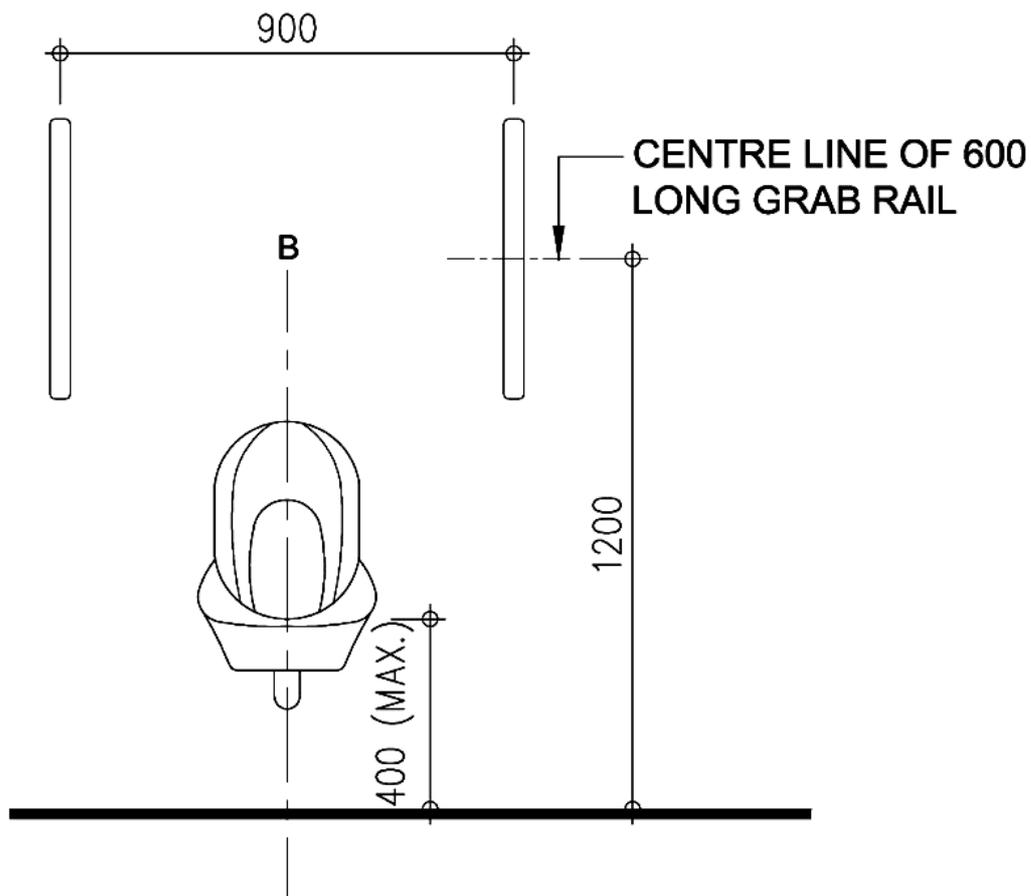
PLAN

CLEAR MANOEUVRING SPACE SHALL NOT BE LESS THAN 1500x1500 MEASURED AT 350 ABOVE FINISHED FLOOR LEVEL

*ALL DIMENSIONS ARE IN mm
 DIMENSIONS PRINTED IN BOLD FORM DENOTE OBLIGATORY REQUIREMENT
 DIMENSIONS PRINTED IN ITALIC FORM DENOTE RECOMMENDED REQUIREMENT

(Opposite - Handed Layout is Acceptable)

Figure 24 – Accessible Toilet



*ALL DIMENSIONS ARE IN mm

Figure 25 – Accessible Urinal

BEST PRACTICE SECTION

A. Design Considerations

- (a) Adequate and convenient provision of toileting facilities commensurate with the anticipated use by all users either with or without assistance from others.
- (b) Appropriate sanitary accommodation should be available to all, including persons with ambulant disabilities, wheelchair users, the elderly and people of either sex with babies and small children.
- (c) Provision of a safe environment capable of accommodating the toileting needs and requirements of persons with a disability or the elderly.

Design Considerations (Cont'd)

- (d) If there is adequate space inside the toilet or cubicle units, double swing door open both inwards and outwards or sliding door may be provided to enable assistance during emergency situations.
- (e) Urinals should be accessible and can be easily found by persons with visual impairment. The grab rails for aiding the elderly and tactile surface materials for aiding persons with visual impairment should be provided.
- (f) Accessible unisex toilet facilities can serve both sexes, those with or without assistance, and accommodate a greater number of users. It is more easily identified than a facility in a separate-sex toilet and more likely to be available when required, particularly as the elderly and some persons with a disability need to use toilets more frequently than others. In addition, a unisex facility enables assistants of either sex to assist the user.
- (g) There is a tendency for the specification of sanitary fittings and fixtures to be in white colour to make cleanliness easily observable. Often the fittings are set against light or white coloured tiling which makes clear identification difficult for the persons with visual impairment. Sanitary fittings should have luminous contrast or colour contrast against the background finishes.

B. Recommended Design Requirements

Unisex Facilities

- (a) W.C. cubicles should, where possible, be unisex and accessible from a corridor so that they can be used by either sex with assistance from members of the opposite sex, if necessary.
- (b) If two or more accessible unisex facilities are provided, at least one should be of opposite handed layout to the other(s).

W.C. Cubicles

- (c) The clear distance between the watercloset and the wash basin should not be more than 600 mm for the users' convenience after toileting. The clear manoeuvring space within the cubicle shall not be less than 1500 mm x 1950 mm.
- (d) The angle between the two grab rails should be within the range of 80° to 90°.

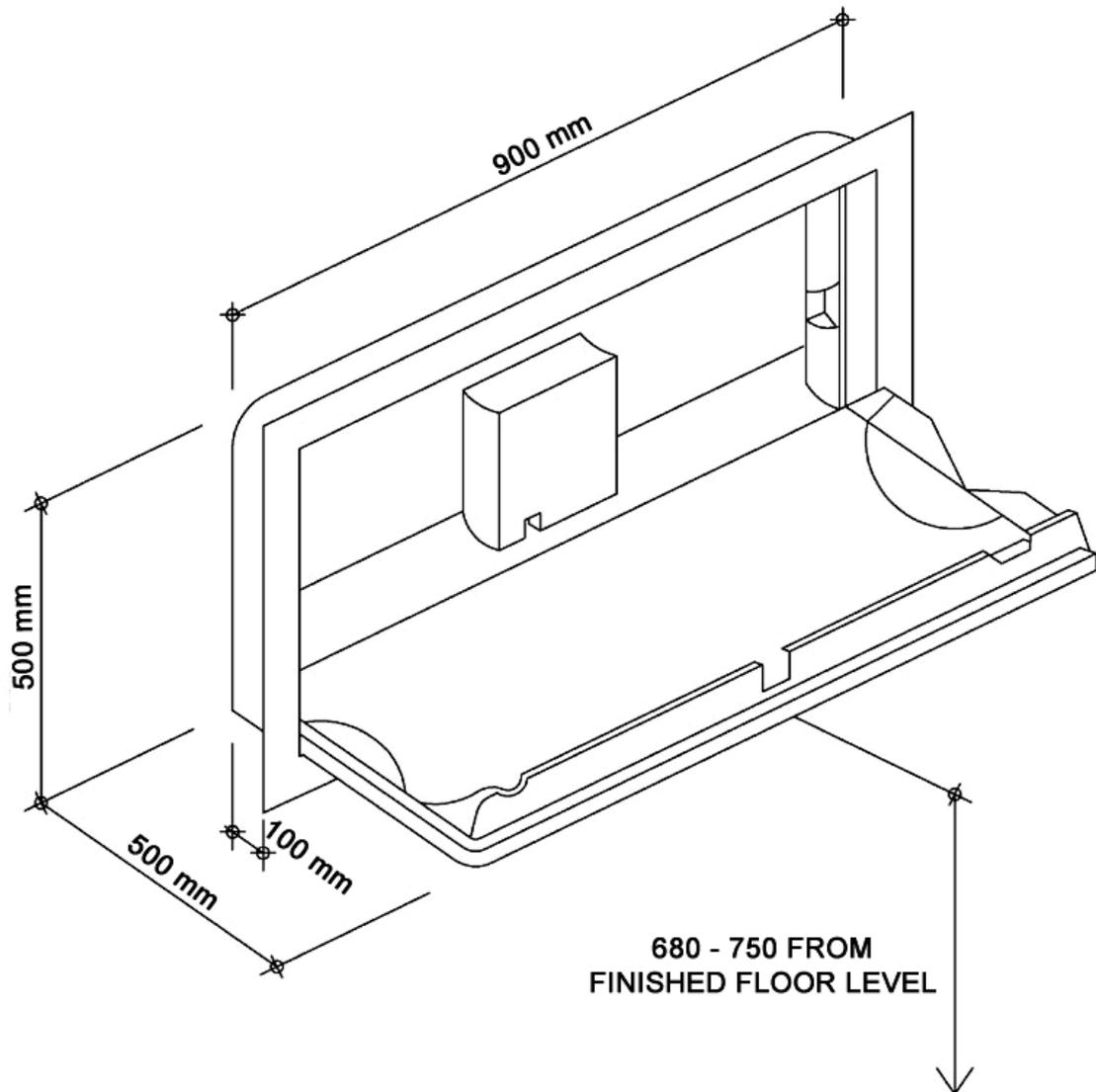
Toilet / Compartment Doors

- (e) Double swing doors which open both inwards and outwards may be provided in any toilets or cubicles. Sliding door is equally acceptable provided that it is not heavy or awkward to use.

Recommended Design Requirements (Cont'd)

Diaper-changing Facilities

- (f) Diaper-changing facilities should be provided in all toilets unless there is absolutely no sufficient space (see Figure 26).



*ALL DIMENSIONS ARE IN mm

Figure 26 – Flap-type Diaper Changing Station

Recommended Design Requirements (Cont'd)

Bathroom / Shower Compartment

- (g) The floor of the bathroom and the shower compartment should be slip-resistant with a minimum “static coefficient of friction” of “Good” grading (see Appendix C) and self-draining.

Luminous Contrast

- (h) Wall tiling should have a minimum luminous contrast of 30% with sanitary appliances and fittings, grab rails and toilet roll holders, etc.

Avoidance of Obstruction

- (i) Waste pipe, disposal bins and other fittings within the toilet should be located to avoid any obstruction or creating a tripping hazard including those under the wash basin.
- (j) Toilets and W.C. cubicles for use by persons with a disability should be located to avoid proximity to or obstruction by exit doors to the staircase.

Emergency Call Bell

- (k) An additional emergency call bell near the toilet seat should be provided, if practicable.

Large Size Symbols

- (l) Large size symbols with luminous contrast for male and female toilets should be used.