SUPPLEMENT No. 5
to the NATIONAL BUILDING CODE of CANADA

BUILDING STANDARDS FOR THE HANDICAPPED 1970

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THE ASSOCIATE COMMITTEE on the NATIONAL BUILDING CODE
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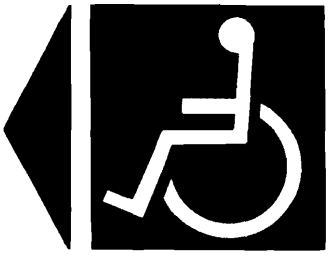
INTERNATIONAL SYMBOL OF

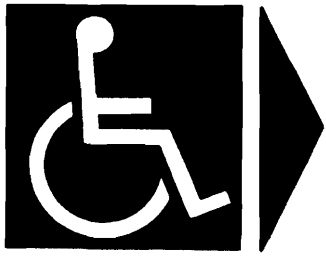
ACCESSIBILITY FOR HANDICAPPED

PERSONS .....

adopted in 1969 by the International Society for the Rehabilitation of the Disabled to indicate that building services are accessible to the physically disabled.

This symbol, displayed on a building, indicates to handicapped persons that they will have reasonable freedom of movement within that building. An arrowhead can be added to either side of the symbol to indicate direction or the location of an accessible ground level entrance.

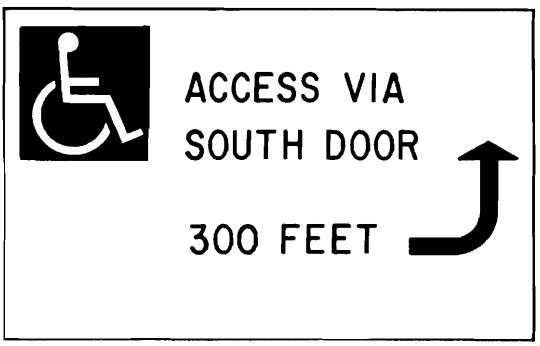




This symbol can also be used to notify handicapped persons that restroom and other

facilities that are so marked have been made accessible to them and to indicate their location.

The background (shown here as black) is blue in the actual symbol. Where the blue colour will not be clear when the sign is in position, because of lighting conditions, for example, the sign can be centered on a white background made from self-adhesive decorator vinyl covering which adheres to glass and is waterproof.



Additional information on the availability and use of this international symbol can be obtained from: The Canadian Rehabilitation Council for the Disabled, 242 St. George Street, Toronto 5, Ontario

Those who wish to make their premises accessible to the physically handicapped are referred to "Building Standards for the Handicapped 1970" issued by the Associate Committee on the National Building Code of Canada. Copies can be ordered from the Secretary of the Committee; Order No. NRCC 11430; Price 25 cents.

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FOREWORD

One in every seven Canadians has a permanent physical disability or an infirmity associated with aging

Stairs, narrow doors and corridors are frequently barriers that prevent handicapped persons from participating fully in family and community life. Building Standards for the Handicapped, a Supplement to the National Building Code of Canada, is designed to minimize such barriers and thus to assist the handicapped to make their rightful contribution to the nation's activities and economy.

This document was first published in 1965. It was the outcome of representations made to the National Research Council by individuals, organizations and Government departments concerned with problems of the handicapped. The National Research Council assigned the task of preparing an advisory document to the Division of Building Research. In 1963 its Associate Committee on the National Building Code appointed the Committee on Building Standards for the Handicapped to identify the problems, study their import and prepare acceptable recommendations. Results of extensive research published by the American National Standards Institute greatly assisted the Committee in preparation of these Standards. The 1970 edition provides up-to-date material and includes a new chapter "Housing."

This supplement to the National Building Code of Canada is written as a guide for those interested in the design, construction or alteration of buildings with provisions for making them usable by the physically handicapped. It has no legal standing unless appropriate parts are adopted by a provincial government or municipal administration.

The words "shall" and "should" are used to differentiate between the essential and desirable requirements in these Standards. The word "shall" is used to indicate those requirements suitable for inclusion in legislation.

The recommendations contained herein are based on average needs and acceptable norms. Where particular disability problems are concerned, this document can be used only as a guide to the general problem. As an additional aid designers may refer to "A Check List of Building Use by the Handicapped" (NRC 10431), published by the Division of Building Research of the National Research Council.

The implementation of the Standards will not detract from the normal use of buildings by those who are not handicapped but will make buildings more accessible and safer for all who use them while ensuring for the handicapped and the aged a happier, fuller and more productive life.

The insignia shown on the front cover was adopted in 1969 by the International Society for the Rehabilitation of the Disabled as the symbol to be used to indicate buildings where services are available to the handicapped.

As it is desirable to have a common, world-wide symbol the use of this symbol is recommended by the Committee on Building Standards for the Handicapped.

CONTENTS

Chapter 1—Purpose and Scope

1.1. Purpose

1.1.1. The purpose of the provisions in this supplement to the National Building Code of Canada is to allow handicapped persons to enter and use buildings without assistance. The application of these Standards in the construction or alteration of buildings used by the public will help the physically handicapped to participate in many additional community activities.

1.2. Scope

1.2.1. These Standards are concerned with the use of buildings by persons with nonambulatory and semiambulatory disabilities and those with disabilities of sight, hearing, coordination or aging.

1.2.2. Chapters 1 to 5 apply to all buildings and facilities used by the public. They are also of significance in the design of buildings for industry. The requirements in Chapters 1 to 5 may be made mandatory by the authority having jurisdiction where it is deemed desirable to ensure that buildings are fully accessible to the handicapped.

1.2.3. Chapter 6 applies specifically to housing and provides practical guidelines to the design of homes for families that include a handicapped person.

Chapter 2—Definitions

2.1. Definitions of Words and Phrases

Nonambulatory disabilities: Impairments that, for all practical purposes, confine persons to wheelchairs.

Semiambulatory disabilities: Impairments that cause persons to walk insecurely or with difficulty.

Sight disabilities: Total blindness or impairments that affect sight to the extent that a person feels insecure or is liable to injury.

Hearing disabilities: Total deafness or impairments affecting hearing to the extent that the person feels insecure or is liable to injury.

Coordination disabilities: Impairment of muscle control in the limbs, to the extent that the person feels insecure or is liable to injury.

Disabilities of aging: Those manifestations of the aging process that significantly reduce mobility, flexibility, coordination and perceptiveness, but are not accounted for in other disabilities.

Chapter 3—General Design Information

3.1. Designing for Children

The dimensions given in these Standards 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, according to the age group.

3.2. Wheelchair Dimensions

The dimensions of standard models of wheelchairs vary as follows:

Length	38½ to 41½ in.
Width when open:	24 to 27¾ in.
Width when collapsed:	9½ to 12 in.
Height of seat from floor:	19¼ to 20½ in.
Height of armrest from floor:	28 to 30 in.
Height of rear pusher handles from floor:	35 to 37½ in.

3.3. The Functioning of a Wheelchair

3.3.1. The average space required for turning through 180 deg is 5 ft by 5 ft.

3.3.2. A minimum width of 5 ft is required for two wheelchairs to pass each other.

3.4. Functioning of an Adult in a Wheelchair

3.4.1. The upward reach with one arm from the floor ranges from 54 in. to 78 in.; the average reach is 60 in.

3.4.2. The average horizontal working reach at a bench or table is 18 in. beyond the front of the working surface.

3.4.3. The horizontal reach, both arms extended to each side, shoulder high, ranges from 54 in. to 71 in.; the average reach is 64.5 in.

3.4.4. In reaching forward diagonally, as when using a wall-mounted dial telephone, a person can reach an average distance of 48 in. from the floor.

3.5. Functioning of a Person on Crutches

When walking with a normal gait, the distance between crutch tips ranges from 30 to 33 in. depending on the height of the person.

In addition to the design information contained in Chapter 3, supplementary information to assist the designer is printed in italics throughout the standards.

Chapter 4—Site Development

Almost any building can be made accessible to handicapped persons by planning the site so that terraces, retaining walls and winding walks are used effectively.

4.1. Walks

4.1.1. Walks should be at least 5 ft wide with a maximum gradient of one in twenty.

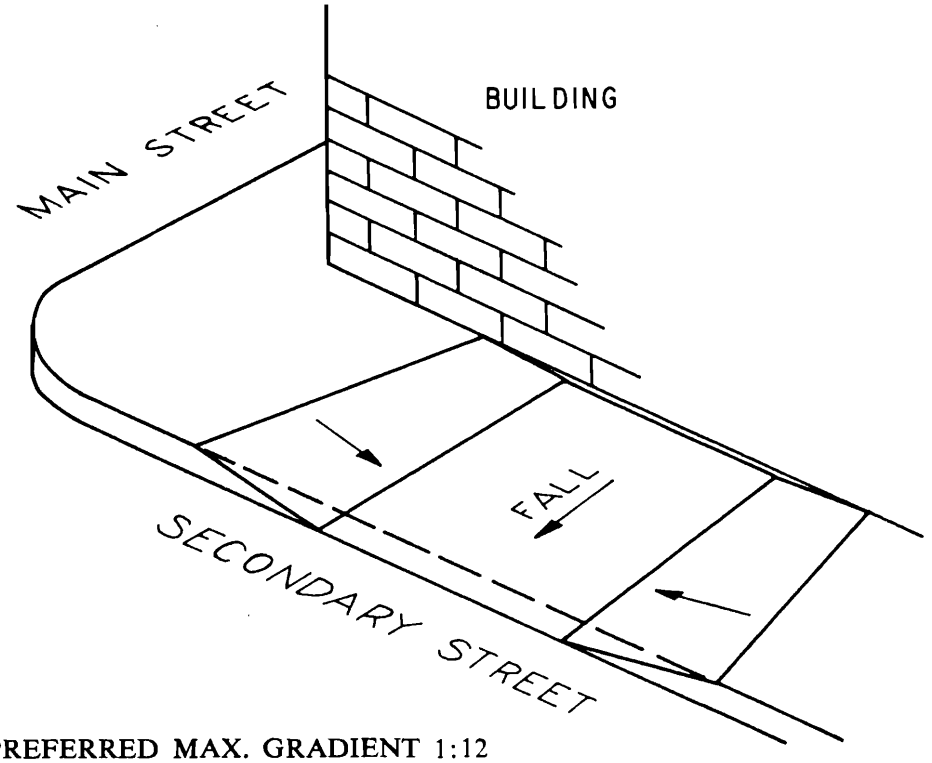
It is essential that the gradient of walks be less than that prescribed for ramps, as walks are normally without handrails or curbs and are considerably longer and more vulnerable to the elements.

4.1.2. Walks should not be interrupted by steps or abrupt changes in level.

4.1.3. Where walks cross other walks, driveways or parking lots they should be at the same level.

4.1.4. Where walks cross a curb, the curb should be cut and a ramp provided in the walk to meet the road level at the curb.

Where ramped walks are provided in accordance with Subsection 4.1.4 they should lead onto roads carrying the lesser amount of vehicular traffic. The sidewalk should be cut down, rather than building up the street pavement.



PREFERRED MAX. GRADIENT 1:12
1:7 MAY BE USED FOR SHORT
RAMPS WHERE NECESSARY.

FIGURE 1

RAMPING OF SIDEWALKS

4.1.5. For manoeuvrability by handicapped persons walks of near maximum grade and of considerable length should have level areas at intervals for purposes of rest and safety.

4.1.6. Walks should have nonslip surfaces.

The provision of nonslip surfaces on steps, walks and floors greatly assists handicapped persons with semiambulatory disabilities. Nonslip surfaces are provided by many standard finishes and materials. The surface of concrete walks can be made non-skid by brooming the surface or by finishing with an indenting roller.

4.1.7. Where the gradient of a walk must exceed one in twenty, it should be considered a ramp and the requirements of Subsections 5.3.1. and 5.3.3. should apply.

4.2. Parking Lots

4.2.1. Parking spaces close to entrance ways should be reserved and identified for use by persons with physical disabilities.

4.2.2. Where possible, walkways from such parking spaces should be located so that persons with semiambulatory or nonambulatory disabilities do not pass behind parked cars.

4.2.3. Parking spaces for the handicapped should be 12 ft wide, situated on level ground and preferably be paved.

Chapter 5—Buildings

5.1. Entrances

5.1.1. At least one primary entrance to each building shall be usable by persons in wheelchairs.

5.1.2. When the main entrance of a building is not usable by persons in wheelchairs a sign should be installed in front of the building to indicate clearly the location of the ground level entrance that is usable by such persons.

FIGURE 2

INTERNATIONAL SYMBOL OF ACCESSIBILITY FOR HANDICAPPED PERSONS (ARROW-HEAD CAN BE ADDED TO ANY SIDE OF THE SIGN TO INDICATE DIRECTION).

5.2. Doors and Doorways

5.2.1. Doorways shall have a clear opening free of protruding hardware of at least 2 ft 6 in. when the door is open. Doors shall be at least 2 ft 8 in. wide.

5.2.2. In a two-leaf door, one of the leaves shall meet the requirement of Subsection 5.2.1. except where both leaves operate by a single effort.

5.2.3. Interior thresholds should be flush with the floor; exterior thresholds should not exceed ½ in. in height.

5.2.4. Door closers, if required, should be of a type that permits opening of the door with minimum effort and slow closing to allow uninterrupted passage of a wheelchair. They should be placed so they do not interfere with the passage of persons on crutches or in wheelchairs.

When automatic door closers are not used, an auxiliary handle should be located on the push side, 7 in. from the hinged edge of the door, so the door may be closed by a person in a wheelchair. Lever type door handles are preferred so that persons with impaired grip can operate them.

5.2.5. Vestibules shall be designed to allow free movement of a wheelchair between the doors.

5.2.6. If revolving doors are used, an auxiliary side-hung door shall be provided as required in Subsection 5.2.1.

5.3. Ramps and Stairs

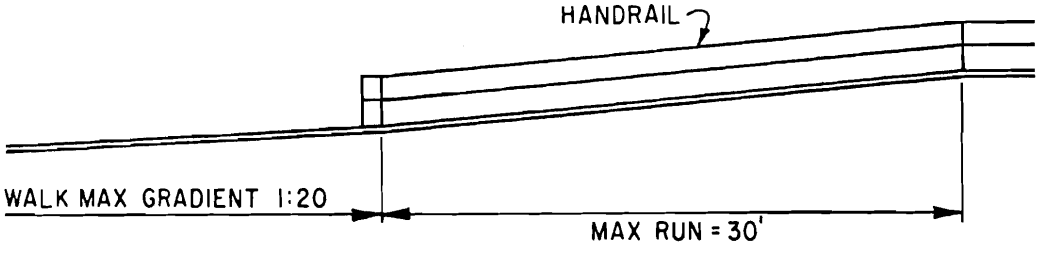
5.3.1. Ramps

5.3.1.1. Ramps should have a maximum gradient of one in twelve.

5.3.1.2. Ramps shall have a nonslip surface.

5.3.1.3. Ramps shall have a minimum width of 3 ft.

5.3.1.4. On any ramp leading to or from a door, a level area 5 ft square shall be provided at the top of the ramp with the extra width projecting beyond the latch edge of the door. In special cases, where the door opens inwards, the depth of the level area may be reduced to 3 ft.



RAMP: PREFERRED MAX. GRADIENT 1:12
1:7 GRADIENT MAY BE USED WHERE
TWO HANDRAILS ARE PROVIDED.

FIGURE 3

GRADIENT OF RAMPS

5.3.1.5. Ramps shall have level platforms 4 ft long and the same width as the ramp, at 30 ft intervals and at each turning point.

5.3.1.6. Ramps shall have a level area at least 6 ft long at the bottom.

5.3.1.7. Where steeper gradients are unavoidable, ramps for wheelchair use may have a maximum slope of one in seven, provided there are two handrails spaced 2 ft 10 in. apart. Such ramps shall be marked "Wheelchairs Only".

If possible, the use of ramps should be restricted to the interior of a building. When it is necessary to locate them outside, they should be protected from snow and ice accumulation. This can be accomplished by providing a roof over the ramps or by installing snow-melting devices.

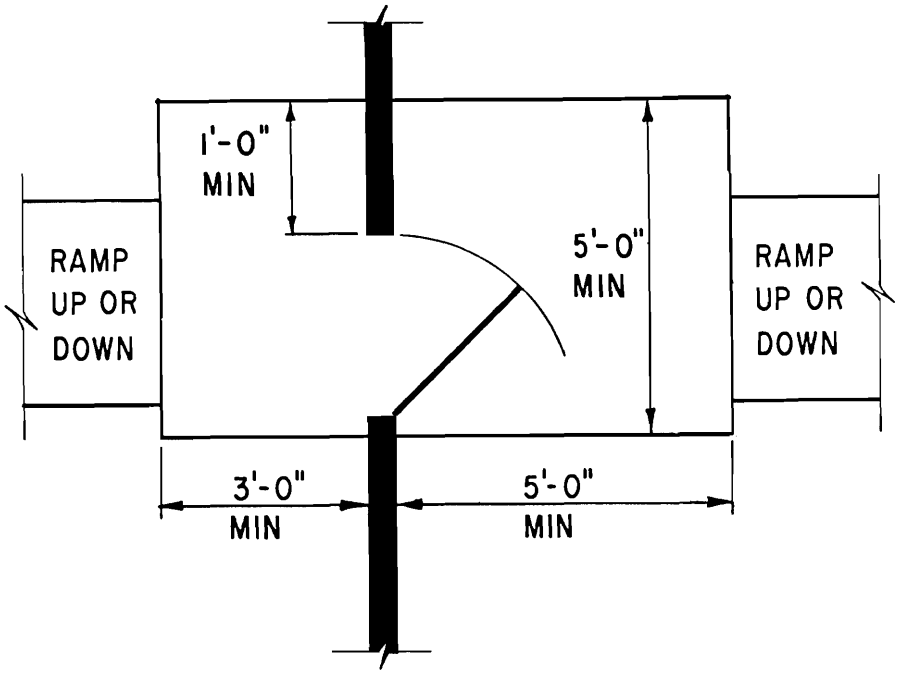


FIGURE 4

LEVEL AREAS AT END OF RAMPS LEADING TO DOORWAYS.

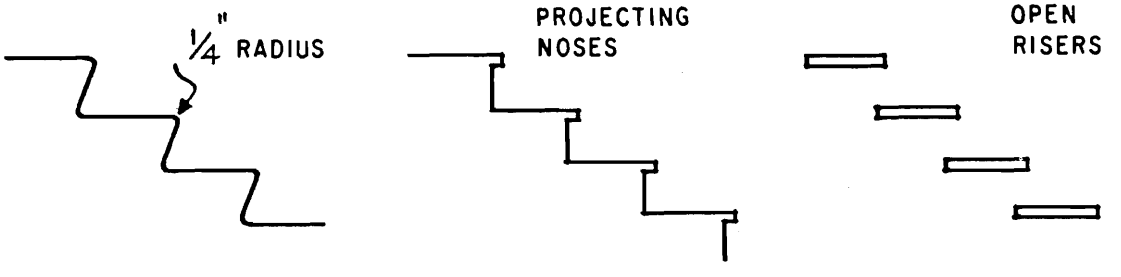
5.3.2. Stairs

5.3.2.1. The ratio of rise-to-run dimensions of stairs should conform to Subsection 9.8.3 of the National Building Code of Canada.

5.3.2.2. Stairs should have plain faces. Open risers, or edges projecting out over the face of closed risers are not recommended.

5.3.2.3. Stairs should have nonslip surfaces.

Terrazzo stairs can be finished with aluminum oxide abrasive to make them nonslip; stairs of wood or steel may be covered with premoulded treads or carpeting material.



1. RECOMMENDED 2. NOT RECOMMENDED 3. NOT RECOMMENDED

FIGURE 5

STAIRS

5.3.3. Handrails

5.3.3.1.(1) Ramps shall have handrails on at least one side, and preferably on both sides, 2 ft 8 in. in height, measured vertically from the surface of the ramp. One handrail shall extend one foot beyond the top and bottom of the ramp.

(2) Stairs shall have handrails on at least one side and preferably on both sides, 2 ft 8 in. in height measured vertically from the nose of the tread. One handrail shall extend 1 ft 6 in. beyond the top and bottom steps.

The handrail extension should be on the side of a continuing wall, or otherwise designed so that it does not constitute a hazard.

5.4. Vertical Transportation

5.4.1. Elevators should be provided in buildings of more than two storeys.

5.4.2. When elevators are provided, they shall be accessible to and usable by the handicapped, including those in wheelchairs, at the entrance level and at all levels normally used by the public.

Automatic elevators should have slow-acting doors. The uppermost button on the control panel should be located not more than 5 ft above floor level.

5.4.3. Handrails should be provided on three sides of the elevator car.

5.4.4. In two-storey buildings, where elevators or ramps are not provided, all public space should be located on the ground floor, or interview or reception space for upper floor offices should be provided on the ground floor.

5.5. Floors

5.5.1. Floors on a given storey shall be at the same level throughout the building or connected by a ramp in accordance with Section 5.3. This condition cannot always be achieved in auditoriums. In such cases a proportion of the seating should be removable to make space available to the handicapped.

5.5.2. At entrances intended for use by the handicapped, the floor on the inside and outside of a doorway shall be level. This level area shall extend at least 1 ft beyond the latch edge of the doorway, 5 ft in the direction that the door swings and 3 ft in the opposite direction.

It is essential that the finish of all floors should have nonslip qualities, even when standard flooring materials are used. Highly polished finishes should be avoided. Particular attention should be given to the selection of materials used on vestibule and entrance hallway floors as these may become dangerous when wet. A minimum of wax should be used in the maintenance of floors to prevent surplus amounts being transferred to the soles of shoes. Nonslip waxes, containing fine abrasive particles are recommended. Any temporary floor or stair covering material shall be such that it does not constitute a tripping hazard.

5.6. Toilet Rooms

5.6.1. Where toilet rooms are provided for the public, they shall be designed to allow passage of wheelchairs. At least one toilet room in the building shall be provided for each sex. They should preferably be located on or near the main floor and shall conform to the requirements of Subsection 5.6.2.

5.6.2. Toilet Stalls

5.6.2.1.(1) Toilet rooms shall have at least one toilet stall that is at least 4 ft 6 in. by 5 ft.

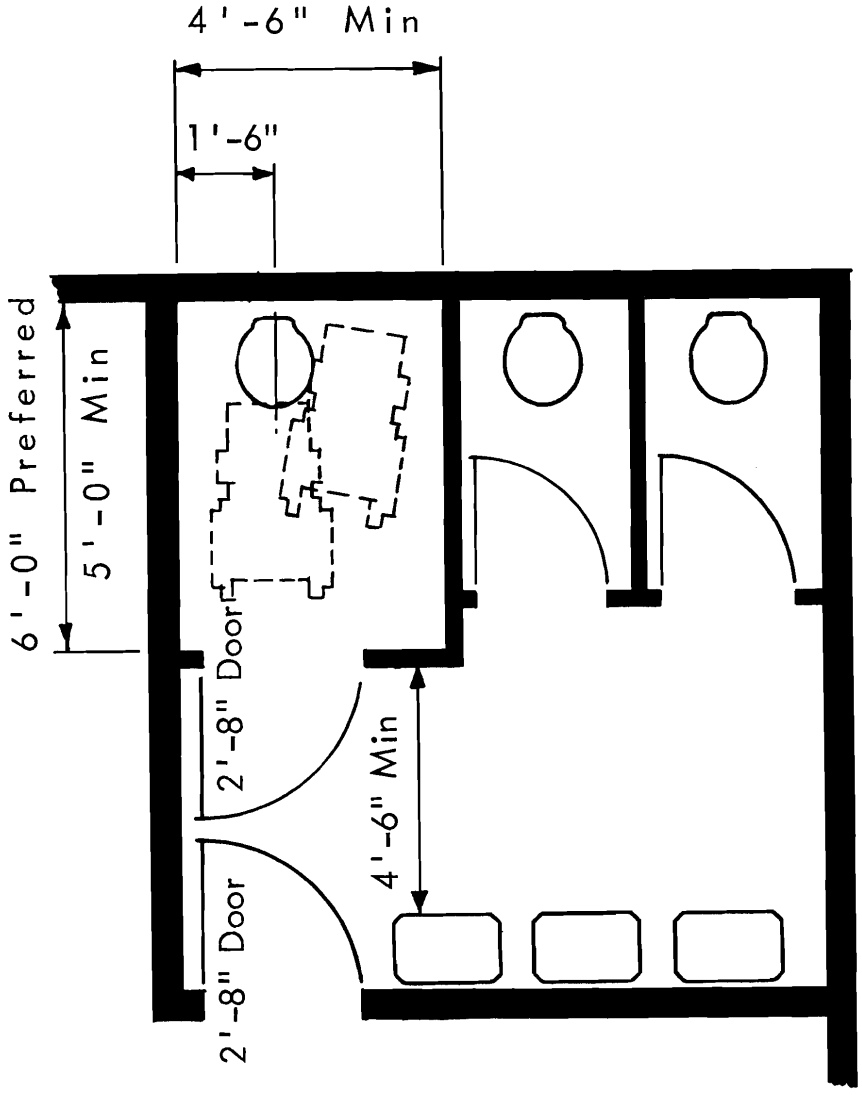


FIGURE 6

TOILET STALL FOR THE HANDICAPPED

(2) The toilet stall door should be at least 2 ft 8 in. wide and swing outwards, preferably against a side wall.

(3) The water closet should be located 1 ft 6 in. from the centre of the fixture to the side wall.

(4) The toilet stall should have two grab bars, one on a side wall and one on the back wall at least 2 ft in length of 1 in. to 1¼ in. tubular bar, with at least 1½ in. between bars and walls. The bar on the side wall should be mounted at a 50 deg. angle to the floor using the measurements shown in Figure 7. The bar on the rear wall should be centred on the centre line of the water closet and fixed at a level approximately 11 in. above the water closet seat. The setout distance from the wall will be dependent on the style of water closet used. The bar, however, should not interfere with the seat lid when it is in the up position, but it may be used as a seat lid rest as shown in Figure 7.

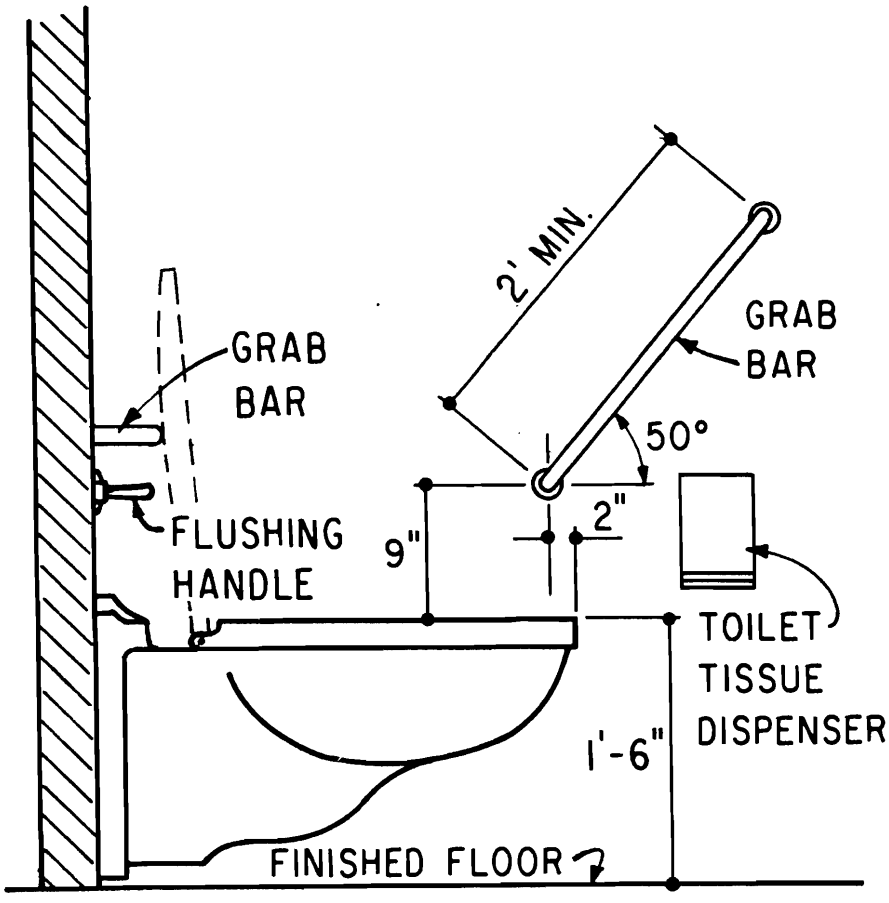


FIGURE 7

ELEVATION OF TOILET STALL FOR THE HANDICAPPED

5.6.2.1.(5) The water closet should meet the requirements of Subsection 5.6.3.

(6) A coat hanger or hook should be mounted 5 ft above floor level on a side wall. For safety reasons it should not project more than 1 in.; it should curve up to form a hook and have a rounded end.

Toilet stalls for the handicapped in addition to those required in Subsection 5.6.2 can be provided by combining two standard toilet stalls into one as shown in Figure 8. The common partition and one water closet should be removed and a door provided in accordance with Sentence 5.6.2.1.(2).

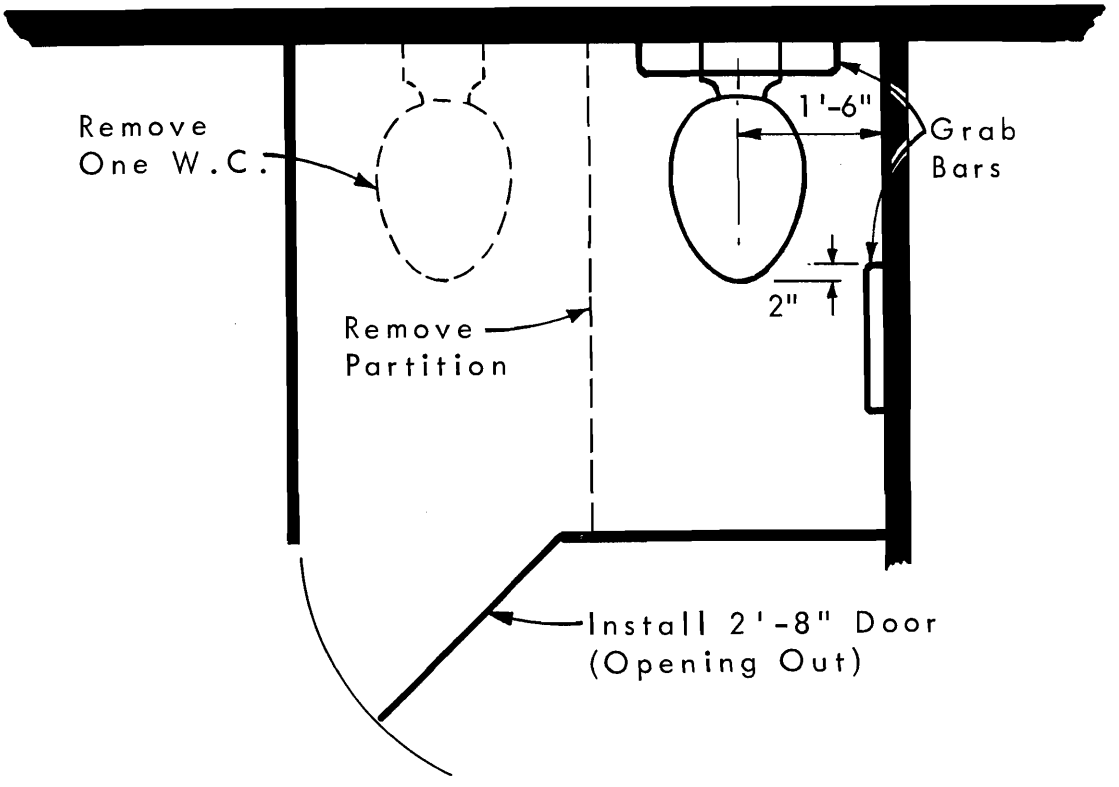


FIGURE 8

CONVERSION OF 2 STANDARD TOILET STALLS FOR THE HANDICAPPED

In planning toilet facilities for transportation terminals or other public places used by patients in transit, a "Unit Room" should be provided as illustrated in Figure 9. The Unit Room should be separate from other toilet facilities to allow an attendant if of the opposite sex to go into the toilet room with the patient.

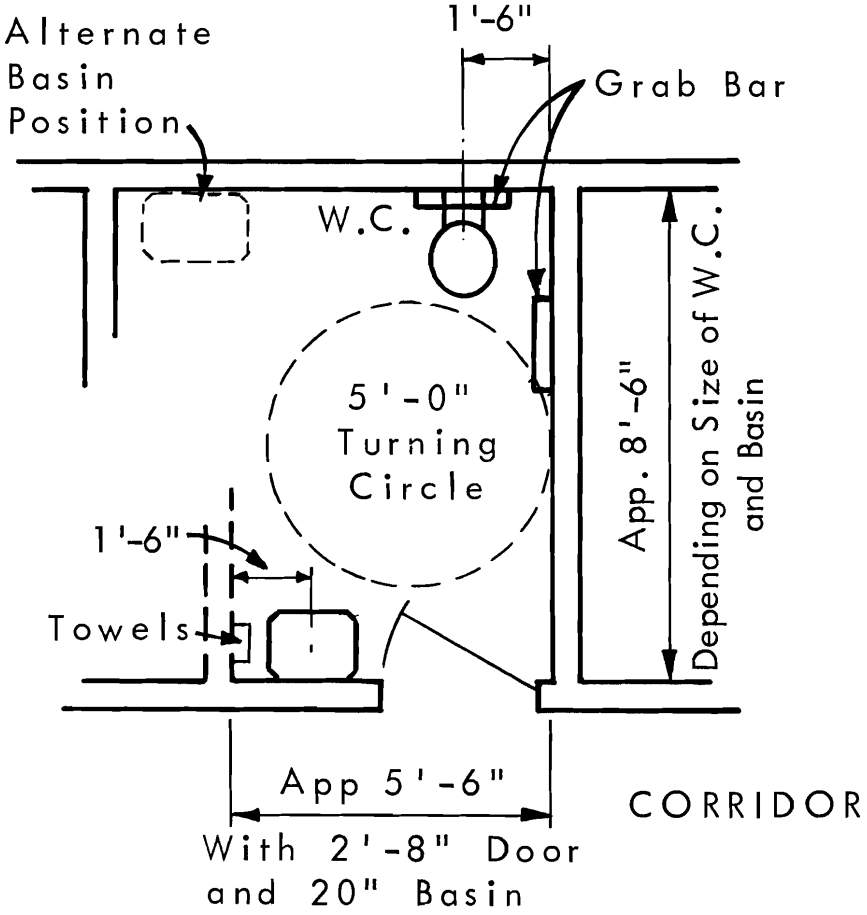


FIGURE 9

PLAN OF UNIT ROOM

5.6.3. Water Closets

5.6.3.1. Water closets for the handicapped shall be mounted so that the top of the seat is 1 ft 6 in. above floor level.

Water closets should be so designed to allow the approach of a wheelchair without obstructing the footrest. Wall mounted fixtures are preferable, but some floor models with receding understructures may also be suitable. Flushing control handles should be hand operated and easily accessible to a person in a wheelchair. A strong solid seat lid should be provided to serve as a back support for paraplegics, and as a seat for others. Seats with spring up action should not be used.

5.6.4. Wash Basins

5.6.4.1.(1) Wash basins should be wall mounted, without legs or pedestals.

(2) Wash basins should have a clearance of 2 ft 2 in. under the apron and bowl to a point at least 10 in. from the front of the fixture, when mounted with the top at standard height.

Lever type faucet handles are preferred.
Waste outlet pipes constitute a burn hazard and should be placed at the back of the bowl or be adequately insulated.

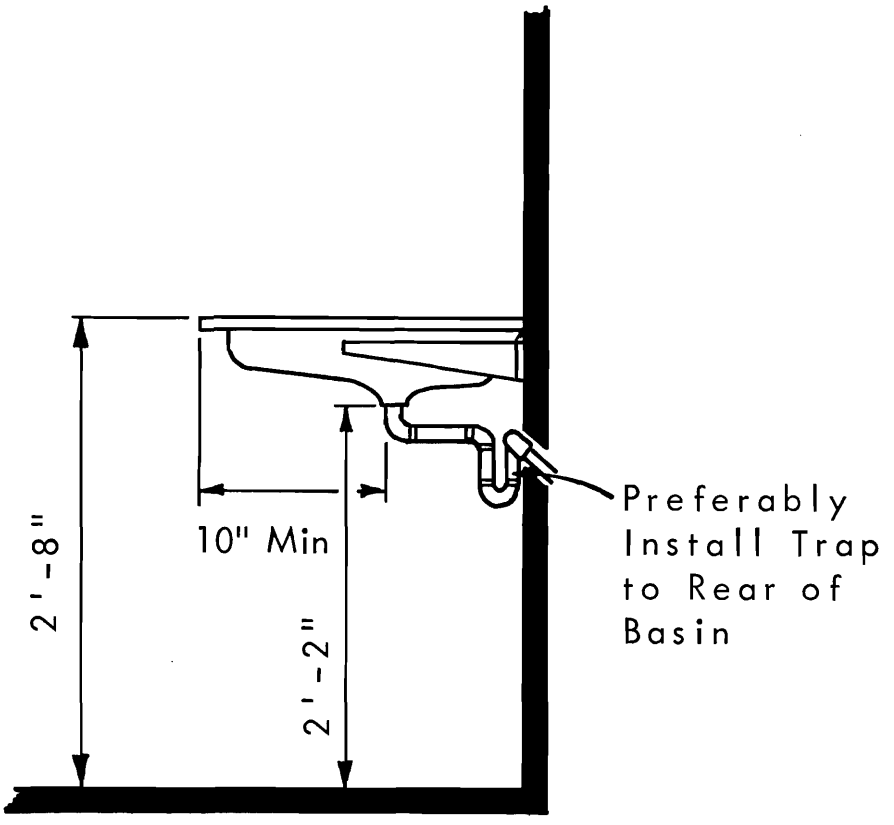


FIGURE 10

WASH BASIN FOR THE HANDICAPPED

5.6.5. Urinals

5.6.5.1.(1) Floors under urinals should be level with the main floor of the toilet room.

(2) The opening of the basin of wall mounted urinals should be 1 ft 7 in. above the floor.

5.6.6. Accessories

5.6.6.1.(1) Mirrors and shelves should be provided above wash basins at a maximum height of 3 ft 2 in. from the floor to the bottom of the mirror and the top of the shelf.

(2) Towel racks, towel dispensers, disposal units, toilet paper dispensers, electric hand dryers and soap dispensers should be mounted at a maximum height of 3 ft 4 in. from the floor.

(3) A coat hanger or hook should be mounted 5 ft above floor level and meet the requirements of Article 5.6.2.1.(6).

5.7. Water Fountains

5.7.1. Water fountains or coolers should have up-front spouts and hand-operated controls.

5.7.2. Wall mounted coolers should be mounted with the basin 3 ft above the floor.

5.7.3. Where floor mounted water coolers more than 3 ft high are used, a paper cup dispenser for the handicapped should be mounted 3 ft above the floor.

Fully recessed water fountains are not recommended. Where a fountain is set into an alcove, the alcove should be wider than a wheelchair.

5.8. Public Telephones

5.8.1. Where public telephones are provided, at least one should meet the requirements of Articles 5.8.1.1. to 5.8.1.4.

5.8.1.1. The booth or enclosure should be located so that it can be entered by a person in a wheelchair.

5.8.1.2. The dial, handset and coin deposit slots should be mounted not more than 4 ft above the floor.

5.8.1.3. The telephone should be equipped with an amplifier on the receiver.

5.8.1.4. A directory shelf should be mounted 30 in. above the floor.

5.9. Cafeterias

5.9.1. Cafeterias should be designed to allow passage of a wheelchair through the food service lanes and between tables. Cutlery and food display racks should be visible and within reach of a person seated in a wheelchair.

5.10. Controls

5.10.1. Controls for lights, heating and ventilation equipment, windows, draperies, fire alarms and all similar controls of frequent or essential use should be placed within reach of persons in wheelchairs and should be of a type that may be easily operated by the disabled. Electrical receptacles should be at least 1 ft 6 in. above the floor.

5.11. Lighting

5.11.1. A minimum illumination level of 5 foot-candles (½ watt per square foot of floor area—incandescent lighting) shall be provided on exterior ramps.

5.12. Warning Signals

5.12.1. Where it is practicable, emergency signals of both the audio and visual warning type should be provided for the benefit of persons with hearing or sight disabilities.

5.13. Hazards

5.13.1. Every effort should be made to eliminate hazards that may cause injury to those with physical disabilities.

Objects such as door closers, lights and signs projecting into corridors or doorways should be mounted at least 6 ft 6 in. above the floor.

Chapter 6—Housing

6.1. Design Criteria

All living areas and essential facilities in and related to the dwelling unit should be accessible to persons in wheelchairs.

A single-storey dwelling with the floor close to grade level is the most efficient house for the handicapped. Unless the basement is accessible to the nonambulatory person, facilities of frequent use (such as the laundry) should be located on the main floor.

6.1.1. Entrances

6.1.1.1. At least one entrance to each dwelling unit shall be usable by persons in wheelchairs.

An alternate method of exit should be available in case of emergency.

6.1.2. Doors and Doorways

6.1.2.1. Doorways shall have a clear opening, free of protruding hardware, of at least 2 ft 6 in. when the door is open. Doors shall be at least 2 ft 8 in. wide. Where doors or openings lead off a 3 ft 2 in. passage at right angles, the clear opening shall be at least 3 ft wide.

Sliding or folding doors are generally suitable for easy opening and closing by handicapped persons.

6.1.3. Hallways

6.1.3.1. The clear width of a passage or hallway shall be at least 3 ft 2 in.

6.1.4. Kitchen Space

6.1.4.1. A clearance of at least 4 ft 6 in. shall be provided in front of base cabinets, work surfaces, counter tops and appliances. Knee space should be provided under the sink.

A work surface can be provided by a cutting board located at a suitable level. Sliding doors are preferable for kitchen cabinets.

6.1.5. Bathrooms

6.1.5.1.(1) Bathrooms shall be designed to allow free movement of a wheelchair.

(a) Bathtub

The access area to the bathtub shall be at least 2 ft 6 in. wide by 3 ft 6 in. in length to allow for parallel placement of a wheelchair.

(b) Water Closet

Clearance at one side and in front of a water closet shall be at least 2 ft 6 in.

(c) Wash-Basins

Wash-basins should be wall mounted, without legs or pedestals, and should have a clearance of 2 ft 2 in. under the apron and bowl to a point at least 10 in. from the front of the fixture, when mounted with the top at standard height.

Lever type faucet handles are preferred. Waste outlet pipes constitute a burn hazard and should be placed at the back of the bowl or be adequately insulated.

(d) Where a shower is installed as a separate fixture, the shower stall shall be at least 3 ft wide by 4 ft deep. The sill shall be designed to permit easy entrance of a wheelchair.

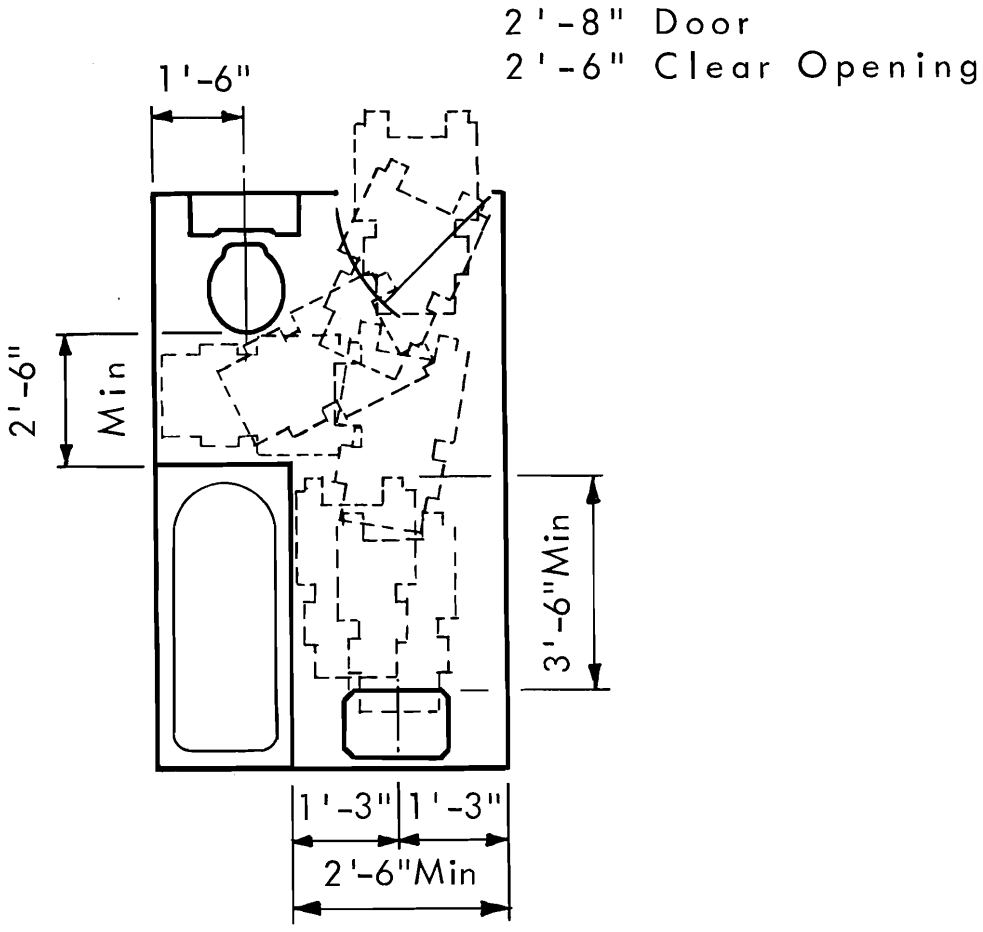


FIGURE 11

BATHROOM LAYOUT SHOWING MINIMUM CLEARANCES FOR FREE MOVEMENT OF A WHEELCHAIR

NOTE: There are many ways of arranging the fixtures in a bathroom, depending on the shape and total floor space available. Figure 11 is used only to show the minimum distances that one fixture should be from another fixture or from a wall.

6.1.5.2.(1) Grab Bars and Ceiling Supports

(a) In new construction the location of grab bars and ceiling supports should be determined before the interior ceiling and wall cladding are completed. This will allow the placing of properly secured backing for the fixing of these items.

(b) In existing dwellings of wood construction grab bars should be designed so they can be securely attached to the framing members.

(c) In masonry construction grab bars may be affixed by expansion anchors or toggle bolts.

(d) For persons with nonambulatory disabilities, provisions should be made for fixing an eye bolt to the ceiling for the suspension of a chain or stirrup grip for use in getting into and out of the bathtub.

6.1.6. Clothes Closets

6.1.6.1. Floors in clothes closets shall be at the same level as the floor of the room they serve.

6.1.6.2. Doors shall provide a clear opening of at least 1 ft 8 in. to allow entry of the front portion of a wheelchair.

6.1.7. Bedrooms

6.1.7.1. At least one bedroom should be designed to allow free movement of a wheelchair. An example of a suitable layout is shown in Figure 12.

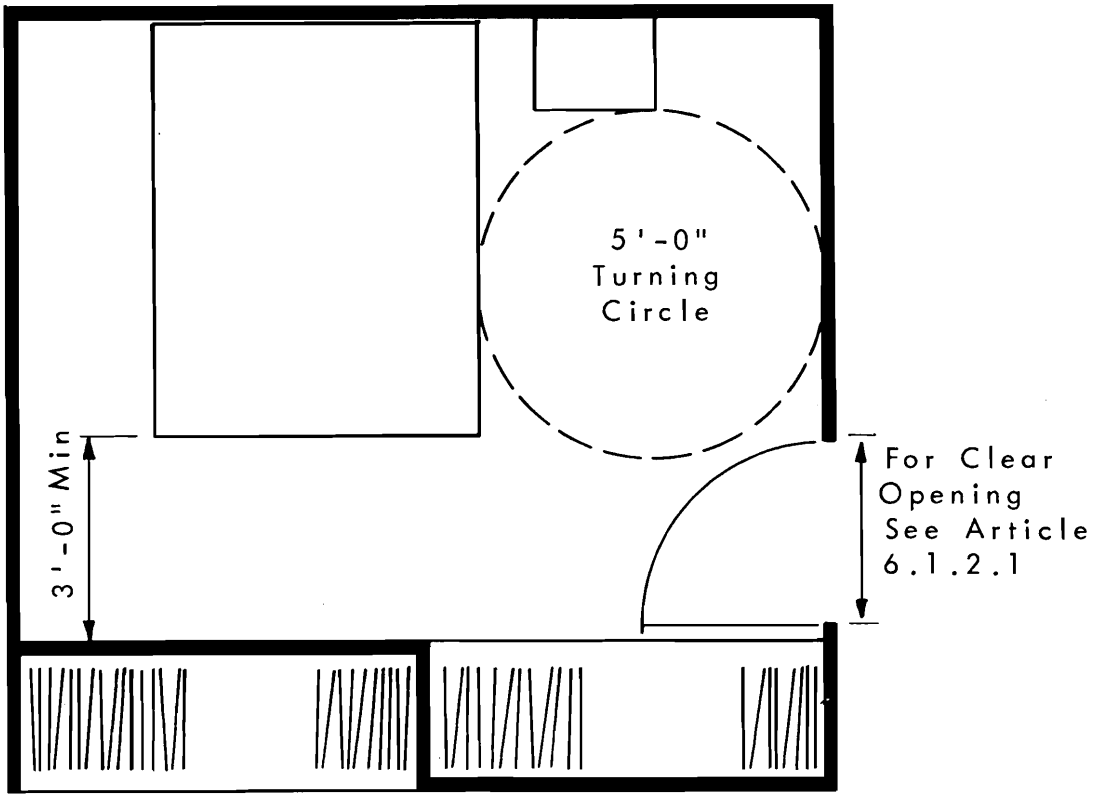


FIGURE 12

BEDROOM LAYOUT

6.1.8. General Storage

6.1.8.1. General storage areas should be accessible to wheelchairs.

6.1.9. Laundry Facilities

6.1.9.1. Laundry facilities should be accessible to wheelchairs.

6.1.9.2. A clearance of at least 4 ft 6 in. should be provided in front of laundry tubs, automatic washers and dryers.

6.1.10. Garages, Carports and Parking Spaces

6.1.10.1. Garages, carports or parking spaces should be accessible to wheelchairs.

6.1.10.2. The clear inside width of a garage or carport to accommodate one car should be at least 12 ft.

6.1.11. Walks

6.1.11.1. Walks should have a width of at least 3 ft; the gradient should not be more than one in twenty, constructed without steps or abrupt changes in level.

6.1.12 Ramps and Stairs

6.1.12.1. Ramps and stairs shall be in accordance with the requirements of Section 5.3.

6.1.13. Controls

6.1.13.1. Controls for lights, heating and ventilation equipment, windows, draperies and all similar controls of frequent or essential use should be placed within reach of persons in wheelchairs. Electrical receptacles should be at least 1 ft 6 in. above the floor.

6.1.14. Windows

6.1.14.1. Windows shall be designed and located so that they can be easily opened by a person in a wheelchair. Opening mechanisms should allow easy operation and cleaning of the windows.

6.1.14.2. Windows in the living areas should be placed at a level which allows a person in a wheelchair to see out.

An example of a CMHC house plan adapted for use by the handicapped is shown in Figure 13.

6.1.15. Shared Facilities

6.1.15.1. Shared recreation and service facilities in multi-family occupancies should be accessible to persons in wheelchairs.

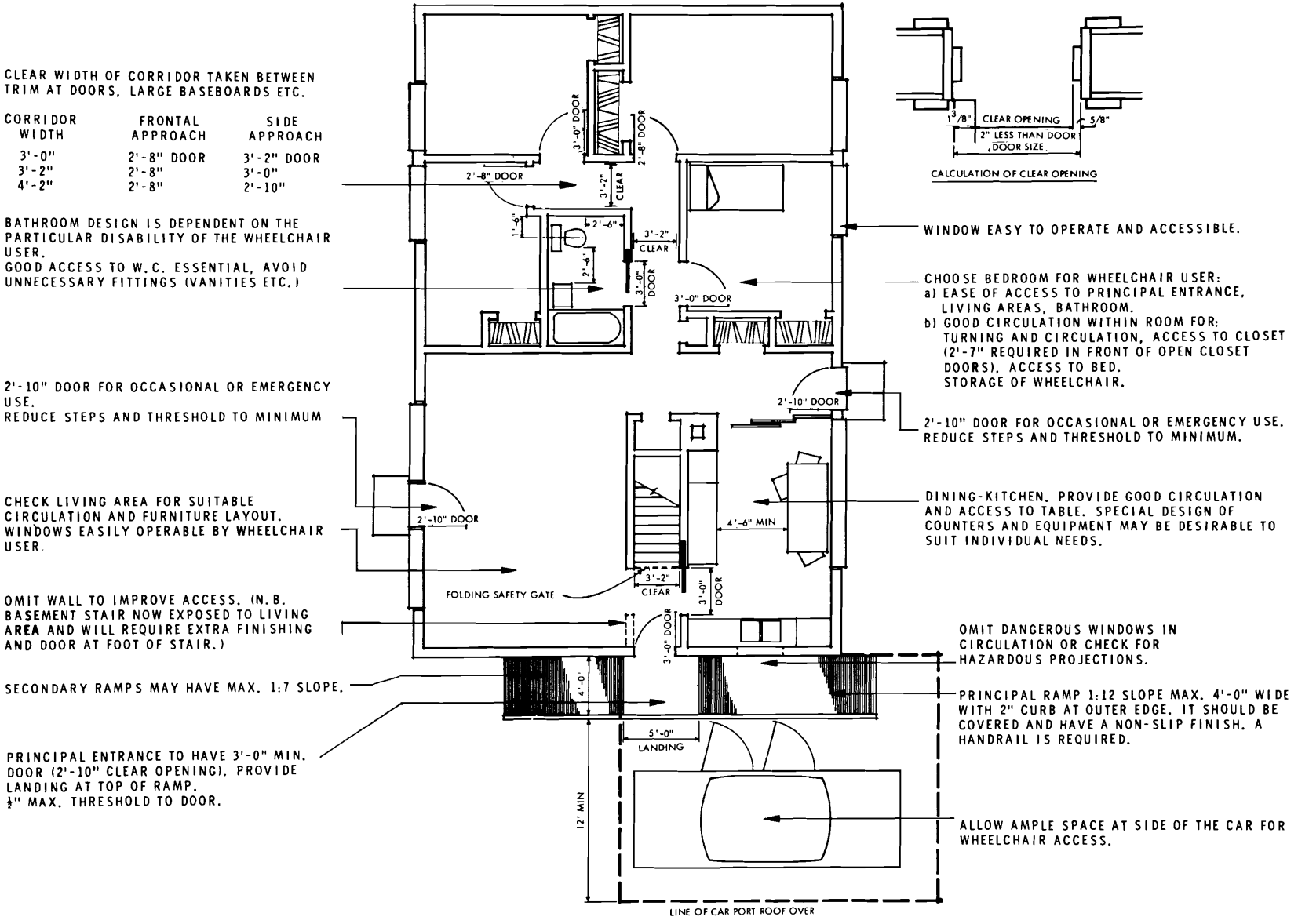


FIGURE 13
EXAMPLE OF CMHC HOUSE PLAN ADAPTED FOR USE BY THE HANDICAPPED

INDEX

The National Building Code is published by the National Research Council of Canada as an advisory document for use throughout Canada. It is advisory only and has no legal standing until and unless adopted for specific use by a provincial government and municipal administration. The Code is essentially a set of minimum regulations respecting the safety of buildings with reference to public health, fire protection and structural efficiency. It is not and is not intended to be a textbook of building design, advice upon which should be sought from professional sources. The Code relates to buildings and simple structures but it is not intended for use with specialized civil engineering structures. Its essential purpose is the promotion of public safety through the use of desirable building standards throughout Canada.

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