

Section 4. Application of the Guidelines

The design specifications (guidelines) presented in Section 5 apply to new construction of "covered multifamily dwellings", as defined in Section 2. These guidelines are recommended for designing dwellings that comply with the requirements of the Fair Housing Amendments Act of 1988.

Section 5. Guidelines

Requirement 1. Accessible building entrance on an accessible route.

Under section 100.205(a), covered multifamily dwellings shall be designed and constructed to have at least one building entrance on an accessible route, unless it is impractical to do so because of terrain or unusual characteristics of the site.

Guideline

(1) **Building entrance.** Each building on a site shall have at least one building entrance on an accessible route unless prohibited by the terrain, as provided in paragraphs (2)(a)(i) or (2)(a)(ii), or unusual characteristics of the site, as provided in paragraph (2)(b). This guideline applies both to a single building on a site and to multiple buildings on a site.

- (a) **Separate ground floor unit entrances.** When a ground floor unit of a building has a separate entrance, each such ground floor unit shall be served by an accessible route, except for any unit where the terrain or unusual characteristics of the site prohibit the provision of an accessible route to the entrance of that unit.
- (b) **Multiple entrances.** Only one entrance is required to be accessible to any one ground floor of a building, except in cases where an individual dwelling unit has a separate exterior entrance, or where the building contains clusters of dwelling units, with each cluster sharing a different exterior entrance. In these cases, more than one entrance may be required to be accessible, as determined by analysis of the site. In every case, the accessible entrance should be on an accessible route to the covered dwelling units it serves.

(2) **Site impracticality.** Covered multifamily dwellings with elevators shall be designed and constructed to provide at least one accessible entrance on an accessible route, regardless of terrain or unusual characteristics of the site. Covered multifamily dwellings without elevators shall be designed and constructed to provide at least one accessible entrance on an accessible route unless terrain or unusual characteristics of the site are such that the following conditions are found to exist:

- (a) Site impracticality due to terrain. There are two alternative tests for determining site impracticality due to terrain: the individual building test provided in paragraph (i), or the site analysis test provided in paragraph (ii). These tests may be used as follows.

A site with a single building having a common entrance for all units may be analyzed only as described in paragraph (i).

All other sites, including a site with a single building having multiple entrances serving either individual dwelling units or clusters of dwelling units, may be analyzed using the methodology in either paragraph (i) or paragraph (ii). For these sites for which either test is applicable, regardless of which test is selected, at least 20% of the total ground floor units in nonelevator buildings, on any site, must comply with the guidelines.

- (i) **Individual building test.** It is impractical to provide an accessible entrance served by an accessible route when the terrain of the site is such that:
 - (A) the slopes of the undisturbed site measured between the planned entrance and all vehicular or pedestrian arrival points within 50 feet of the planned entrance exceed 10 percent; and
 - (B) the slopes of the planned finished grade measured between the entrance and all vehicular or pedestrian arrival points within 50 feet of the planned entrance also exceed 10 percent.

If there are no vehicular or pedestrian arrival points within 50 feet of the planned entrance, the slope for the purposes of this paragraph (i) will be measured to the closest vehicular or pedestrian arrival point.

For purposes of these guidelines, vehicular or pedestrian arrival points include public or resident parking areas; public transportation stops; passenger loading zones; and public streets or sidewalks. To determine site impracticality, the slope would be measured at ground level from the point of the planned entrance on a straight line to (i) each vehicular or pedestrian arrival point that is within 50 feet of the planned entrance, or (ii) if there are no vehicular or pedestrian arrival points within that specified area, the vehicular or pedestrian arrival point closest to the planned entrance. In the case of sidewalks, the closest point to the entrance will be where a public sidewalk entering the site intersects with the sidewalk to the entrance. In the case of resident parking areas, the closest point to the planned entrance will be measured from the entry point to the parking area that is located closest to the planned entrance.

- (ii) **Site analysis test.** Alternatively, for a site having multiple buildings, or a site with a single building with multiple entrances, impracticality of providing

an accessible entrance served by an accessible route can be established by the following steps:

- (A) The percentage of the total buildable area of the undisturbed site with a natural grade less than 10% slope shall be calculated. The analysis of the existing slope (before grading) shall be done on a topographic survey with two foot (2') contour intervals with slope determination made between each successive interval. The accuracy of the slope analysis shall be certified by a professional licensed engineer, landscape architect, architect or surveyor.
- (B) To determine the practicality of providing accessibility to planned multifamily dwellings based on the topography of the existing natural terrain, the minimum percentage of ground floor units to be made accessible should equal the percentage of the total buildable area (not including floodplains, wetlands, or other restricted use areas) of the undisturbed site that has an existing natural grade of less than 10% slope.
- (C) In addition to the percentage established in paragraph (B), all ground floor units in a building, or ground floor units served by a particular entrance, shall be made accessible if the entrance to the units is on an accessible route, defined as a walkway with a slope between the planned entrance and a pedestrian or vehicular arrival point that is no greater than 8.33%
- (b) Site impracticality due to unusual characteristics. Unusual characteristics include sites located in a federally-designated floodplain or coastal high-hazard area and sites subject to other similar requirements of law or code that the lowest floor or the lowest structural member of the lowest floor must be raised to a specified level at or above the base flood elevation. An accessible route to a building entrance is impractical due to unusual characteristics of the site when:
- (i) the unusual site characteristics result in a difference in finished grade elevation exceeding 30 inches and 10 percent measured between an entrance and all vehicular or pedestrian arrival points within 50 feet of the planned entrance; or
- (ii) if there are no vehicular or pedestrian arrival points within 50 feet of the planned entrance, the unusual characteristics result in a difference in finished grade elevation exceeding 30 inches and 10 percent measured between an entrance and the closest vehicular or pedestrian arrival point.
- (3) Exceptions to site impracticality. Regardless of site considerations described in paragraphs (1) and (2), an accessible entrance on an accessible route is practical when:
- (a) There is an elevator connecting the parking area with the dwelling units on a ground floor. (In this case, those dwelling units on the ground floor served by an elevator, and at least one of each type of public and common use areas, would be subject to these guidelines.) However:
- (i) Where a building elevator is provided only as a means of creating an accessible route to dwelling units on a ground floor, the building is not considered an elevator building for purposes of these guidelines; hence, only the ground floor dwelling units would be covered.
- (ii) If the building elevator is provided as a means of access to dwelling units other than dwelling units on a ground floor, then the building is an elevator building which is a covered multifamily dwelling, and the elevator in that building must provide accessibility to all dwelling units in the building, regardless of the slope of the natural terrain; or
- (b) An elevated walkway is planned between a building entrance and a vehicular or pedestrian arrival point and the planned walkway has a slope no greater than 10 percent.
- (4) Accessible entrance. An entrance that complies with ANSI 4.14 meets section 100.205(a).
- (5) Accessible route. An accessible route that complies with ANSI 4.3 would meet section 100.205(a). If the slope of the finished grade between covered multifamily dwellings and a public or common use facility (including parking) exceeds 8.33%, or where other physical barriers (natural or manmade) or legal restrictions, all of which are outside the control of the owner, prevent the installation of an accessible pedestrian route, an acceptable alternative is to provide access via a vehicular route, so long as necessary site provisions such as parking spaces and curb ramps are provided at the public or common use facility.

Requirement 2. Accessible and usable public and common use areas.

Section 100.205(c)(1) provides that covered multifamily dwellings with a building entrance on an accessible route shall be designed in such a manner that the public and common use areas are readily accessible to and usable by handicapped persons.

Guideline

The following chart identifies the public and common use areas that should be made accessible, cites the appropriate section of the ANSI Standard, and describes the appropriate application of the specifications, including modifications to the referenced Standard.

BASIC COMPONENTS FOR ACCESSIBLE AND USABLE PUBLIC AND COMMON USE AREAS OR FACILITIES

Accessible element or space	ANSI A117.1 section	Application
1. Accessible route(s)	4.3	<p>Within the boundary of the site:</p> <p>(a) From public transportation stops, accessible parking spaces, accessible passenger loading zones, and public streets or sidewalks to accessible building entrances (subject to site considerations described in section 5).</p> <p>(b) Connecting accessible buildings, facilities, elements and spaces that are on the same site. On-grade walks or paths between separate buildings with covered multifamily dwellings, while not required, should be accessible unless the slope of finish grade exceeds 8.33% at any point along the route. Handrails are not required on these accessible walks.</p> <p>(c) Connecting accessible building or facility entrances with accessible spaces and elements within the building or facility, including adaptable dwelling units.</p> <p>(d) Where site or legal constraints prevent a route accessible to wheelchair users between covered multifamily dwellings and public or common-use facilities elsewhere on the site, an acceptable alternative is the provision of access via a vehicular route so long as there is accessible parking on an accessible route to at least 2% of covered dwelling units, and necessary site provisions such as parking and curb cuts are available at the public or common use facility.</p>
2. Protruding objects	4.4	Accessible routes or maneuvering space including, but not limited to halls, corridors, passageways, or aisles.
3. Ground and floor surface treatments	4.5	Accessible routes, rooms, and spaces, including floors, walks, ramps, stairs, and curb ramps.
4. Parking and passenger-loading zones	4.6	If provided at the site, designated accessible parking at the dwelling unit on request of residents with handicaps, on the same terms and with the full range of choices (e.g., surface parking or garage) that are provided for other residents of the project, with accessible parking on a route accessible to wheelchairs for at least 2% of the covered dwelling units; accessible visitor parking sufficient to provide access to grade-level entrances of covered multifamily dwellings; and accessible parking at facilities (e.g., swimming pools) that serve accessible buildings.
5. Curb ramps	4.7	Accessible routes crossing curbs.
6. Ramps	4.8	Accessible routes with slopes greater than 1:20.
7. Stairs	4.9	Stairs on accessible routes connecting levels not connected by an elevator.
8. Elevator	4.10	If provided.
9. Platform lift	4.11	May be used in lieu of an elevator or ramp under certain conditions.
10. Drinking fountains and water coolers	4.15	Fifty percent of fountains and coolers on each floor, or at least one, if provided in the facility or at the site.
11. Toilet rooms and bathing facilities	4.22	Where provided in public-use and common-use facilities, at least one of each fixture provided per room. (including water closets, toilet rooms and stalls, urinals, lavatories and mirrors, bathtubs, shower stalls, and sinks.)
12. Seating, tables, or work surfaces	4.30	If provided in accessible spaces, at least one of each type provided.
13. Places of assembly	4.31	If provided in the facility or at the site.
14. Common-use spaces and facilities	4.1 through 4.30	<p>If provided in the facility or at the site:</p> <p>(a) Where multiple recreational facilities (e.g., tennis courts) are provided sufficient accessible facilities of each type to assure equitable opportunity for use by persons with handicaps.</p> <p>(b) Where practical, access to all or a portion of nature trails and jogging paths.</p>
15. Laundry rooms	4.32.6	If provided in the facility or at the site, at least one of each type of appliance provided in each laundry area, except that laundry rooms serving covered multifamily dwellings would not be required to have front-loading washers in order to meet the requirements of § 100.205(c)(1). (Where front loading washers are not provided, management will be expected to provide assistive devices on request if necessary to permit a resident to use a top loading washer.)

Requirement 3. Usable doors.

Section 100.205(c)(2) provides that covered multifamily dwellings with a building entrance on an accessible route shall be designed in such a manner that all the doors designed to allow passage into and within all premises are sufficiently wide to allow passage by handicapped persons in wheelchairs.

Guideline

Section 100.205(c)(2) would apply to doors that are a part of an accessible route in the public and common use areas of multifamily dwellings and to doors into and within individual dwelling units.

- (1) On accessible routes in public and common use areas, and for primary entry doors to covered units, doors that comply with ANSI 4.13 would meet this requirement.

- (2) Within individual dwelling units, doors intended for user passage through the unit which have a clear opening of at least 32 inches nominal width when the door is open 90 degrees, measured between the face of the door and the stop, would meet this requirement. (See Fig. 1 (a), (b), and (c).) Openings more than 24 inches in depth are not considered doorways. (See Fig. 1 (d).)

Note:

A 34-inch door, hung in the standard manner, provides an acceptable nominal 32-inch clear opening. This door can be adapted to provide a wider opening by using offset hinges, by removing lower portions of the door stop, or both. Pocket or sliding doors are acceptable doors in covered dwelling units and have the added advantage of not impinging on clear floor space in small rooms. The nominal 32-inch clear opening provided by a standard six-foot sliding patio door assembly is acceptable.

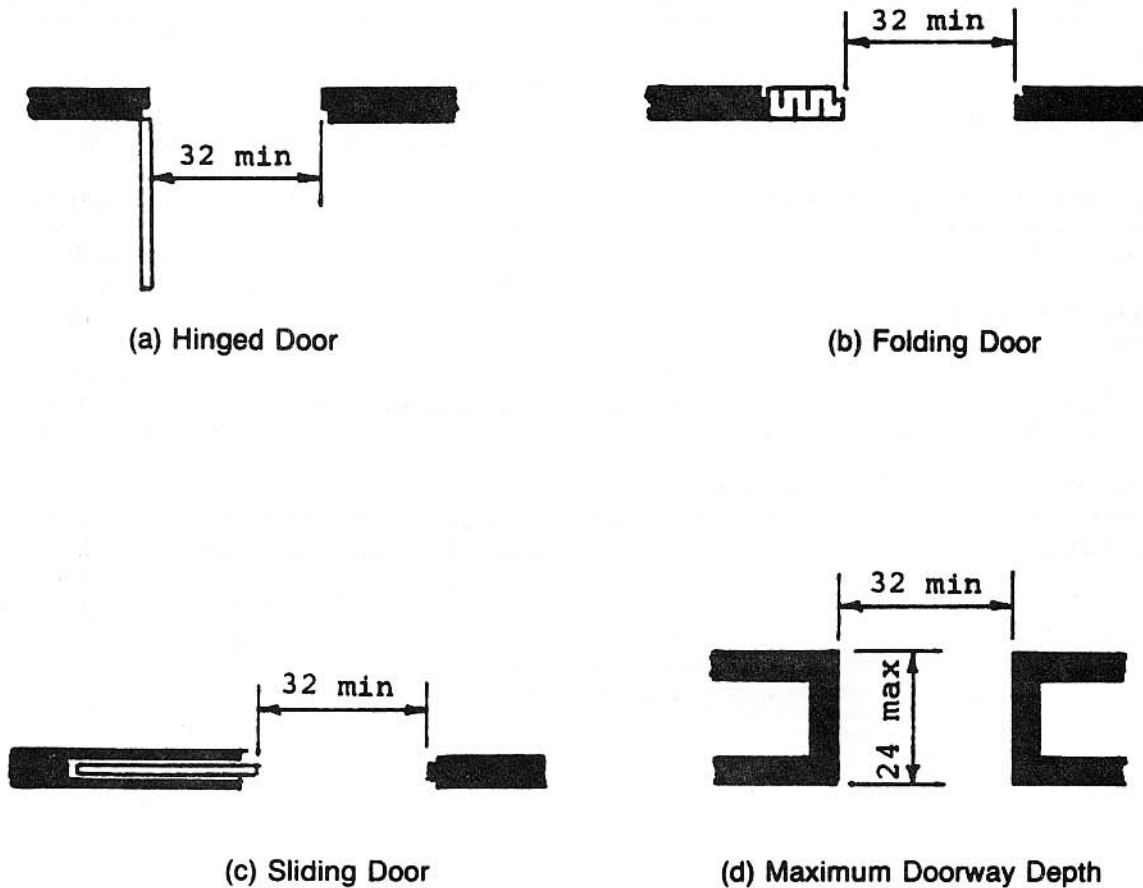


Fig. 1 Clear Doorway Width and Depth

Requirement 4. Accessible route into and through the covered dwelling unit.

Section 100.205(c)(3)(i) provides that all covered multifamily dwellings with a building entrance on an accessible route shall be designed and constructed in such a manner that all premises within covered multifamily dwelling units contain an accessible route into and through the covered dwelling unit.

Guideline

Accessible routes into and through dwelling units would meet section 100.205(c)(3)(i) if:

- (1) A minimum clear width of 36 inches is provided.
- (2) In single-story dwelling units, changes in level within the dwelling unit with heights between 1/4 inch and 1/2 inch are beveled with a slope no greater than 1:2. Except for design features, such as a loft or an area on a different level within a room (e.g., a sunken living room), changes in level greater than 1/2 inch are ramped or have other means of access. Where a single story dwelling unit has special design features, all portions of the single-story unit, except the loft or the sunken or raised area, are on an accessible route; and
 - (a) In single-story dwelling units with lofts, all spaces other than the loft are on an accessible route.
 - (b) Design features such as sunken or raised functional areas do not interrupt the accessible route through the remainder of the dwelling unit.
- (3) In multistory dwelling units in buildings with elevators, the story of the unit that is served by the building elevator (a) is the primary entry to the unit, (b) complies with Requirements 2 through 7 with respect to the rooms located on the entry/accessible floor; and (c) contains a bathroom or powder room which complies with Requirement 7. (Note: multistory dwelling units in non-elevator buildings are not covered dwelling units because, in such cases, there is no ground floor unit.)
- (4) Except as provided in paragraphs (5) and (6) below, thresholds at exterior doors, including sliding door tracks, are no higher than 3/4 inch. Thresholds and changes in level at these locations are beveled with a slope no greater than 1:2.

- (5) Exterior deck, patio, or balcony surfaces are no more than 1/2 inch below the floor level of the interior of the dwelling unit, unless they are constructed of impervious material such as concrete, brick or flagstone. In such case, the surface is no more than 4 inches below the floor level of the interior of the dwelling unit, or lower if required by local building code.
- (6) At the primary entry door to dwelling units with direct exterior access, outside landing surfaces constructed of impervious materials such as concrete, brick or flagstone, are no more than 1/2 inch below the floor level of the interior of the dwelling unit. The finished surface of this area that is located immediately outside the entry may be sloped, up to 1/8 inch per foot (12 inches), for drainage.

Requirement 5. Light switches, electrical outlets, thermostats and other environmental controls in accessible locations.

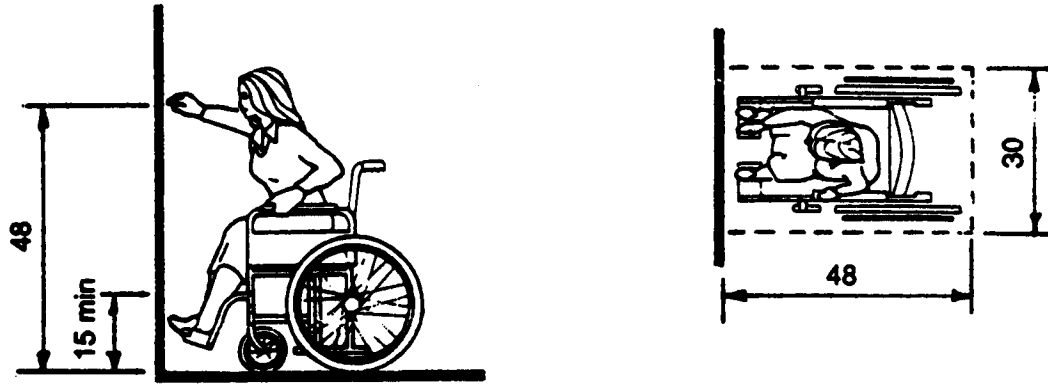
Section 100.205(c)(3)(ii) requires that all covered multifamily dwellings with a building entrance on an accessible route shall be designed and constructed in such a manner that all premises within covered multifamily dwelling units contain light switches, electrical outlets, thermostats, and other environmental controls in accessible locations.

Guideline

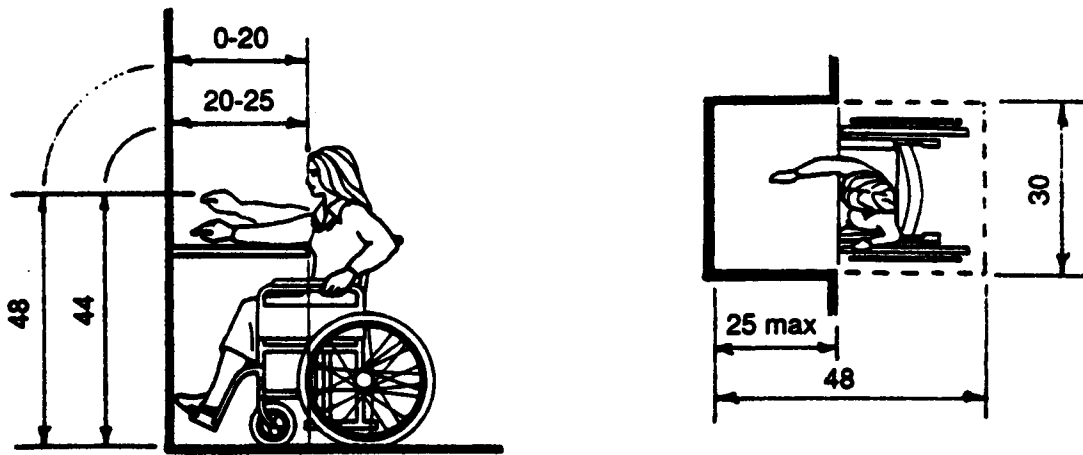
Light switches, electrical outlets, thermostats and other environmental controls would meet section 100.205(c)(3)(ii) if operable parts of the controls are located no higher than 48 inches, and no lower than 15 inches, above the floor. If the reach is over an obstruction (for example, an overhanging shelf) between 20 and 25 inches in depth, the maximum height is reduced to 44 inches for forward approach; or 46 inches for side approach, provided the obstruction (for example, a kitchen base cabinet) is no more than 24 inches in depth. Obstructions should not extend more than 25 inches from the wall beneath a control. (See Fig.2.)

Note

Controls or outlets that do not satisfy these specifications are acceptable provided that comparable controls or outlets (i.e., that perform the same functions) are provided within the same area and are accessible, in accordance with this guideline for Requirement 5.

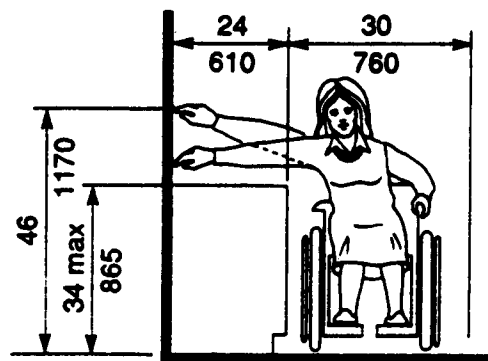


(a) Forward Reach Limit



NOTE: Clear knee space should be as deep as the reach distance.

(b) Maximum Forward Reach Over an Obstruction



(c) Maximum Side Reach Over Obstruction

Fig. 2 Reach Ranges

Requirement 6. Reinforced walls for grab bars.

Section 100.205(c)(3)(iii) requires that covered multifamily dwellings with a building entrance on an accessible route shall be designed and constructed in such a manner that all premises within covered multifamily dwelling units contain reinforcements in bathroom walls to allow later installation of grab bars around toilet, tub, shower stall and shower seat, where such facilities are provided.

Guideline

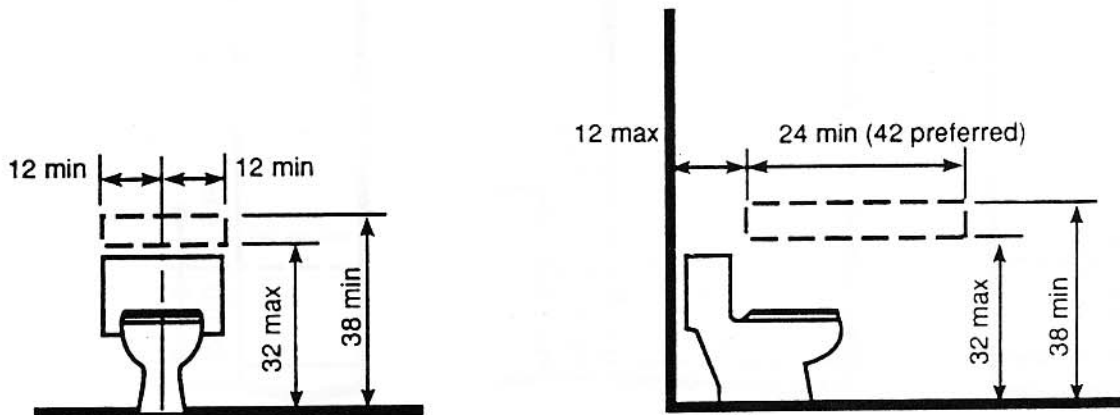
Reinforced bathroom walls to allow later installation of grab bars around the toilet, tub, shower stall and shower seat, where such facilities are provided, would meet section 100.205(c)(3)(iii) if reinforced areas are provided at least at those points where grab bars will be mounted. (For example, see Figs. 3, 4 and 5.) Where the toilet is not placed adjacent to a side wall, the bathroom would comply if provision was made for installation of floor mounted, foldaway or similar alternative grab bars. Where the

powder room (a room with a toilet and sink) is the only toilet facility located on an accessible level of a multistory dwelling unit, it must comply with this requirement for reinforced walls for grab bars.

Note:

Installation of bathtubs is not limited by the illustrative figures; a tub may have shelves or benches at either end; or a tub may be installed without surrounding walls, if there is provision for alternative mounting of grab bars. For example, a sunken tub placed away from walls could have reinforced areas for installation of floor-mounted grab bars. The same principle applies to shower stalls -- e.g., glass-walled stalls could be planned to allow floor-mounted grab bars to be installed later.

Reinforcement for grab bars may be provided in a variety of ways (for example, by plywood or wood blocking) so long as the necessary reinforcement is placed so as to permit later installation of appropriate grab bars.



Reinforced Areas for Installation
of Grab Bars

Fig. 3 Water Closets in Adaptable Bathrooms

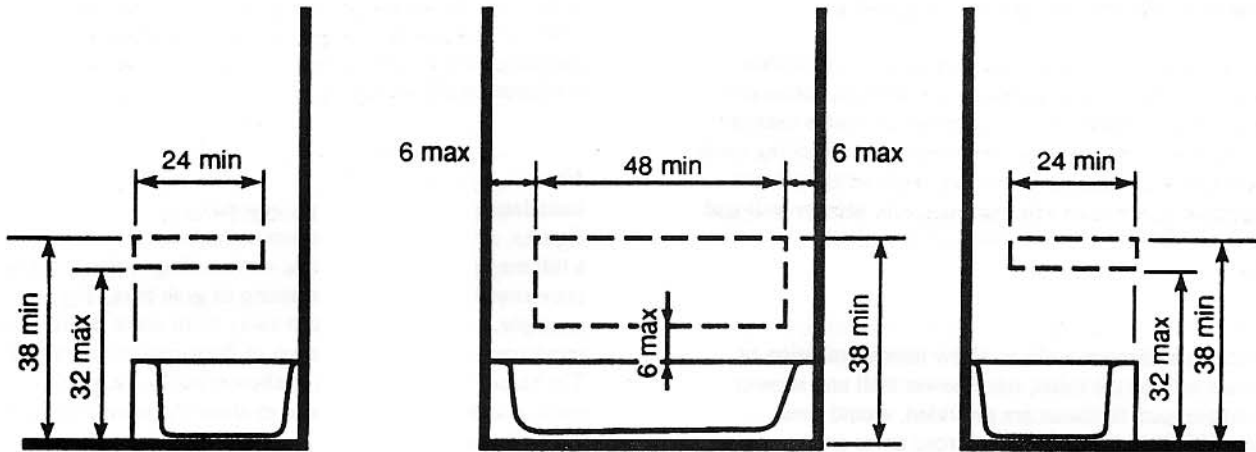


Fig. 4 Location of Grab Bar Reinforcements for Adaptable Bathtubs

NOTE: The areas outlined in dashed lines represent locations for future installation of grab bars for typical fixture configurations.

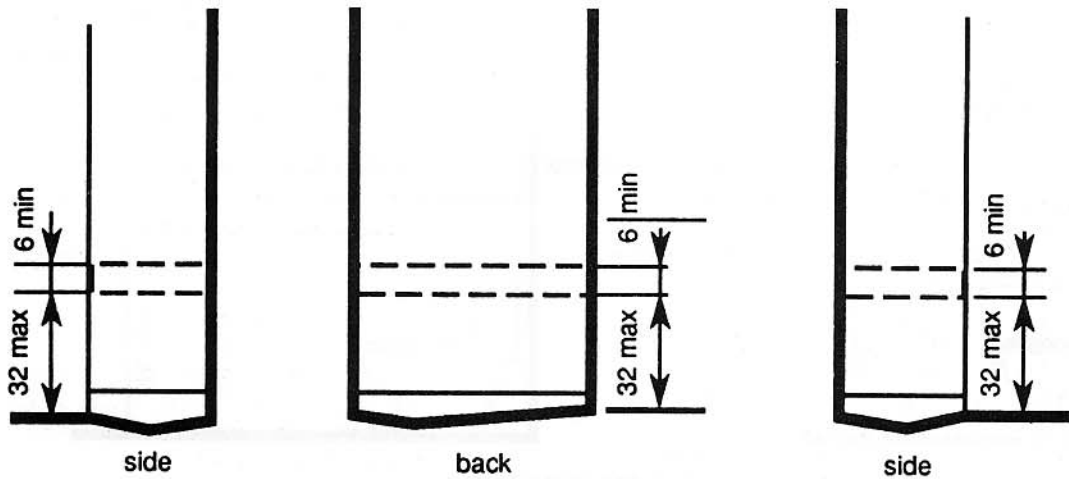


Fig. 5 Location of Grab Bar Reinforcements for Adaptable Showers

NOTE: The areas outlined in dashed lines represent locations for future installation of grab bars.