

ACCESSIBLE BUILDING ENTRANCE

These pages are excerpted from the Fair Housing Design Manual as a reference supplement to Sheet A8.1 1B Live/Work Buildout. 5/A8.1 & 4/A8.1 reference these pages by their number at the bottom of the page, such as (1.11) and (3.6).

good general illumination

weather protection

high intensity lighting focused at locks for people with low vision

color contrast between door and frame

clear, readable, high contrast signage

door closer with safe sweep period (ANSI 4.13.10)

view window (or wide angle peep hole in door)

maneuvering space next to latch side of door (ANSI 4.13.6)

lever or other easy-to-use door hardware (ANSI 4.13.9)

clear width of open doorway min. 32" (ANSI 4.13.5)

low force to open door (ANSI 4.13.11)

adequate slope to prevent ice build-up

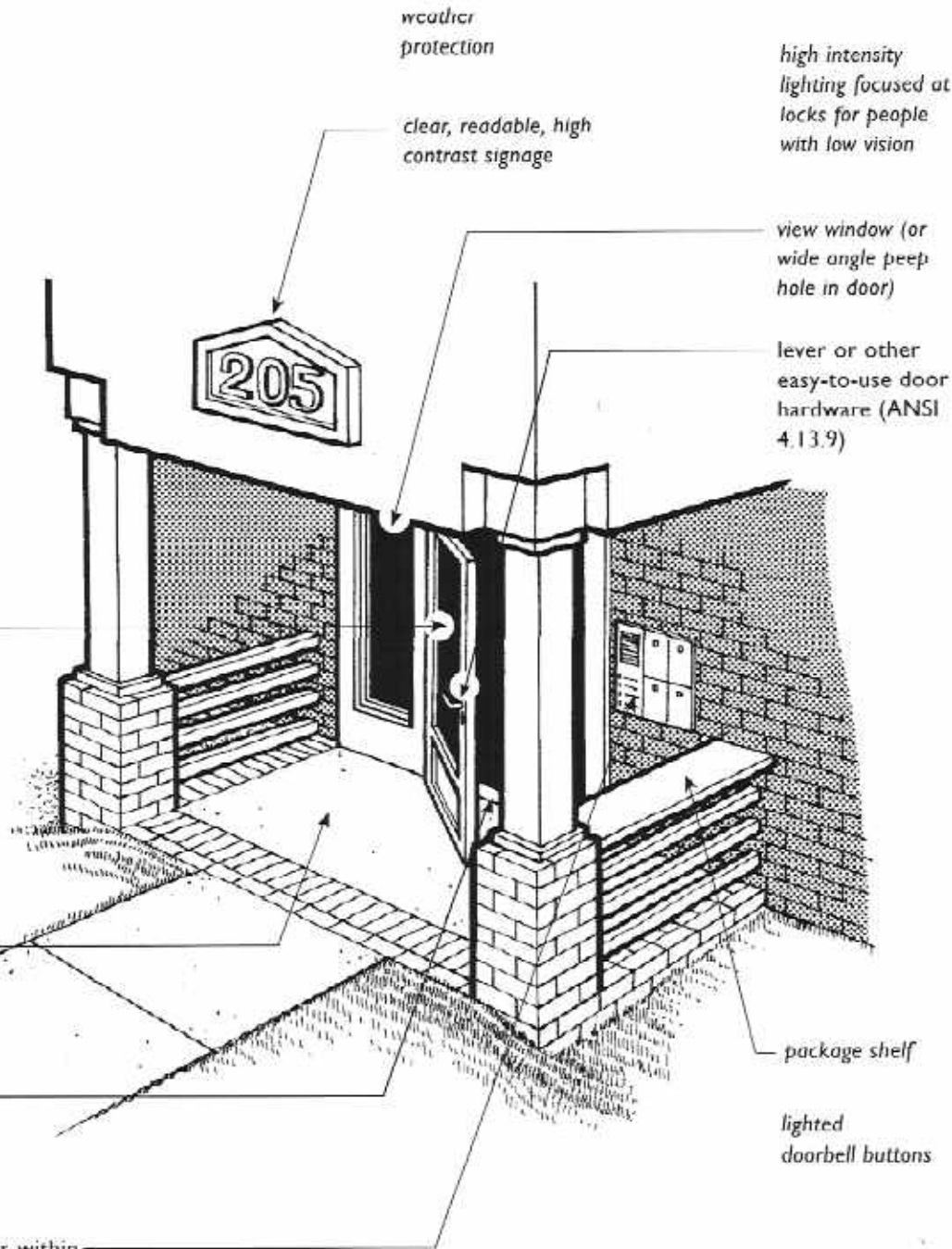
package shelf

low or no threshold (ANSI 4.13.8)

lighted doorbell buttons

Call and mail boxes within reach of a seated person.

Call boxes should be equipped with both visual and audible signals so as to be usable by both hearing and non-hearing people.



Design of Accessible Building Entrances

Notes in italic type are recommendations only and are not required by ANSI or the Guidelines. All recommended features are helpful to people with and without disabilities.

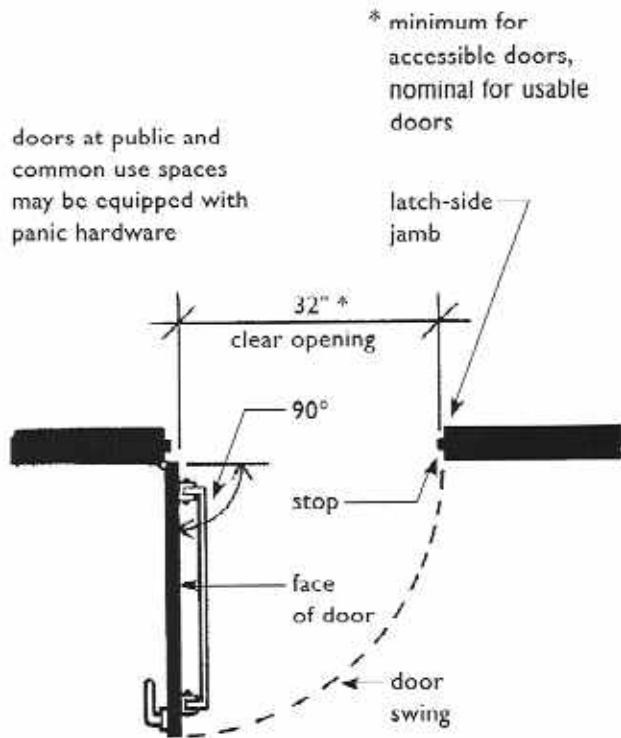
TYPES OF DOORS

HINGED DOORS, SINGLE-LEAF

At hinged doors the 32-inch opening is measured from the stop on the latch side jamb to the face of the door when standing in a 90-degree open position. Because the door, when open, remains in the doorway, the size of door used for the main entry door must be wide enough so that when open 90 degrees, it provides 32 inches minimum clear width. Main entry doors to dwelling units may be thicker than doors used within the unit, often making it necessary to install a door wider than 34 inches at the main entry. (In addition, most building codes require a 36-inch door at the main entry.) Within the dwelling unit, a 34-inch wide door, hung in the standard manner, is considered a usable door because it provides an "acceptable" nominal 32-inch clear opening of at least 31-5/8 inches clear.

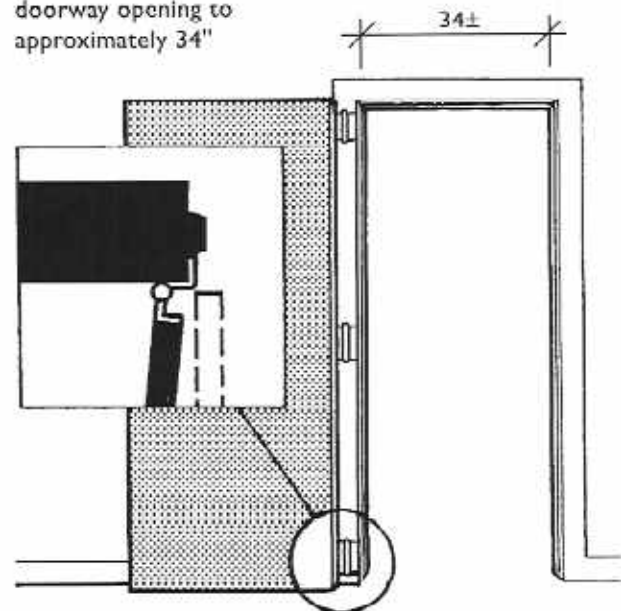
Accessible hinged doors in public and common use spaces may be equipped with push bar or panic type hardware even though the bar may protrude into the 32-inch clear width. The hardware should be mounted high enough (approximately 36 inches minimum above the floor) to allow sufficient room for people pushing themselves in manual wheelchairs to get through the doorway without catching their arms, shoulders, or clothing on the panic hardware. In no case may the bar extend more than 4 inches from the door because it then becomes a hazardous protruding object, see ANSI 4.4 Protruding Objects.

In the interior of dwelling units it is possible for residents or landlords to adapt the nominal 32-inch clear opening to create a wider and more usable doorway by installing offset or swing-clear hinges, by removing the lower portion



Measuring Clear Width at Hinged Doors

installation of swing-clear hinges is a modification that increases a 32" doorway opening to approximately 34"



Use of Swing-Clear Hinges

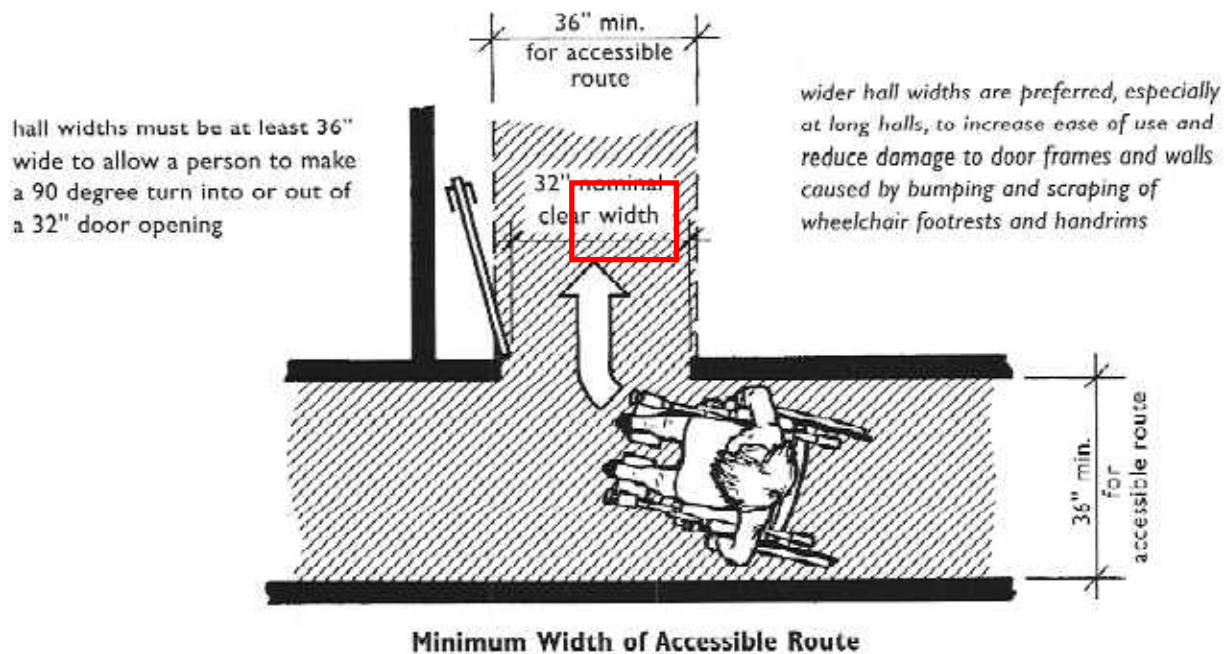
ACCESSIBLE ROUTE

WIDTH

The 36-inch wide fully accessible route as described in Chapters 1 and 2 must connect with the clear floor space outside the primary entry door of each covered dwelling unit. As the accessible route passes into the unit it may be reduced to 32 inches minimum clear width at the door. Throughout the unit the accessible route must be 36 inches wide or wider, except as it passes through passage doors,

where it may be reduced to 32 inches nominal clear width. See Chapter 3: "Usable Doors."

When specifications for accessible routes are presented in most accessibility standards they contain provisions for minimum height or headroom. The Guidelines, with respect to the interiors of dwelling units, do not include a specification for headroom. Protruding objects also are not addressed within the interior of the dwelling unit, but they should be avoided in all cases.



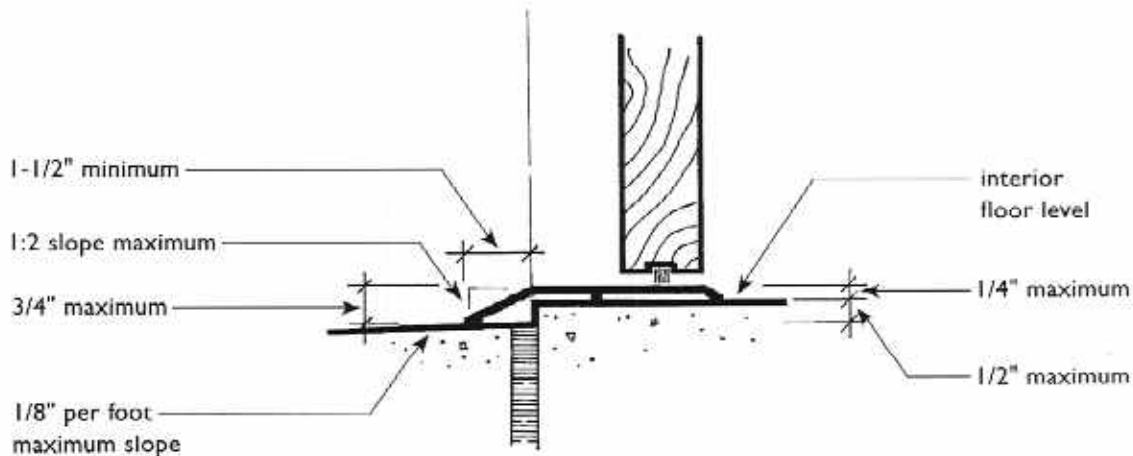
CHANGES IN LEVEL

Within single-story dwelling units (and on the primary entry level of multistory dwelling units in buildings with elevators) the maximum vertical floor level change is 1/4 inch, except when a tapered threshold is used, the maximum height is 1/2 inch. Even small abrupt changes of level in the

surface of an accessible route pose a tripping hazard for many people and can be a significant obstacle for people using wheelchairs. People who walk wearing braces and/or who have difficulty maintaining balance are particularly susceptible to catching their toes on small changes in level.

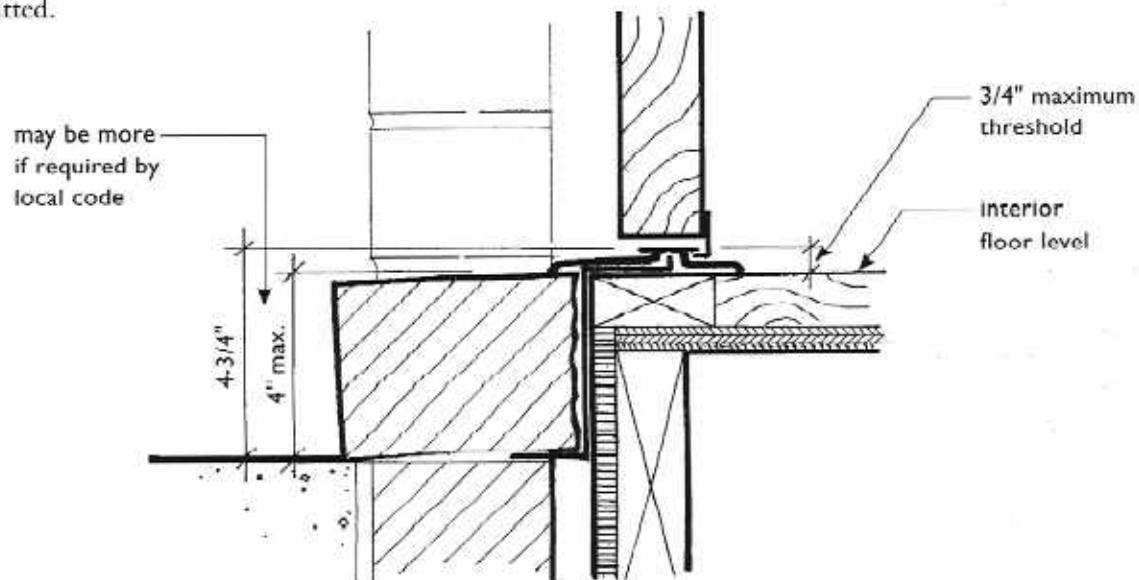
Swinging Primary Entry Door at Concrete Landing

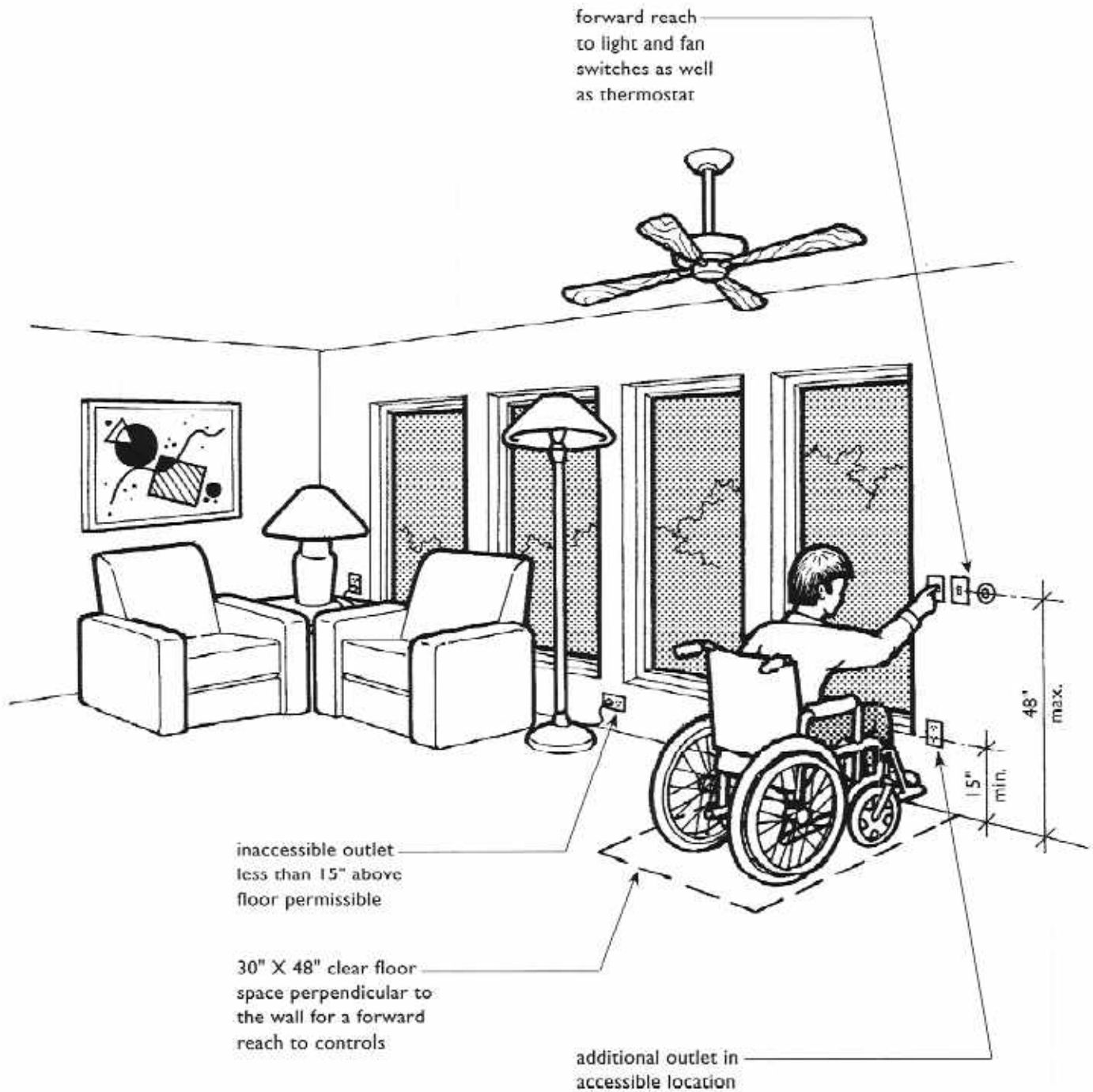
showing allowable changes in level at primary entry doors with direct exterior access onto concrete or other impervious landing surface where 1/2-inch maximum changes in level are permitted.



Swinging Secondary Door at Concrete Landing

showing allowable changes in level at exterior swinging doors onto concrete or other impervious landing surface where 4-inch changes in level are permitted.





All Covered Switches, Outlets, and Controls Operated on a Frequent Basis Must be in Accessible Locations

hood fan and light controls, when mounted on the hood, are part of an appliance and are, therefore, not covered. However, if the range hood fan and light are wired to a separate switch on a wall or any location other than on the hood, range, or cooktop, then the control must be in an accessible location.

Garbage disposals do not fall under any of the categories of covered controls. The operating switch for a garbage disposal is not mounted on the appliance itself but is wired to another location. Although not a covered control, since garbage disposals are used frequently and since it is relatively simple to place operating switches for

garbage disposals in accessible locations, it is recommended that it be done.

Emergency interrupt switches to mechanical systems such as furnaces or hot water heaters also are not covered by the Guidelines. However, it is recommended that such switches be in locations that can be reached from a seated position. Even when the mechanical system is located behind a narrow door in a small closet dedicated specifically to that purpose, it is recommended that the interrupt switch be positioned so it can be reached from outside the closet by a person using a wheelchair.

SWITCHES, OUTLETS, AND CONTROLS COVERED BY THE GUIDELINES

Covered

- light switches for controlling all room lights
- electrical outlets
- environmental controls
 - thermostats and controls for other heating, air-conditioning, and ventilation systems

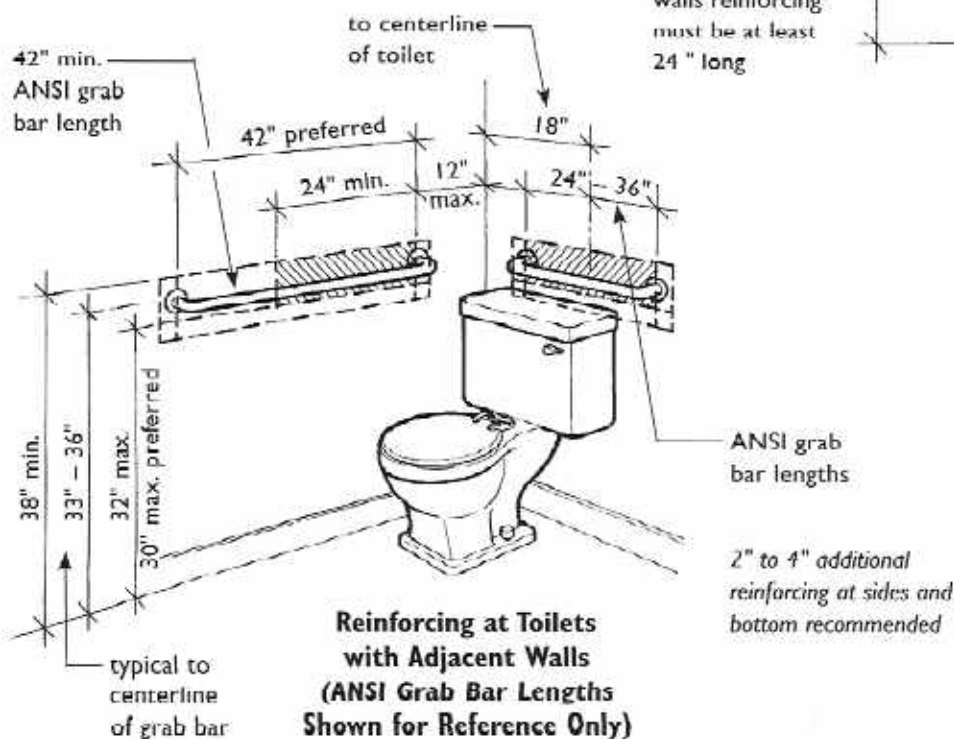
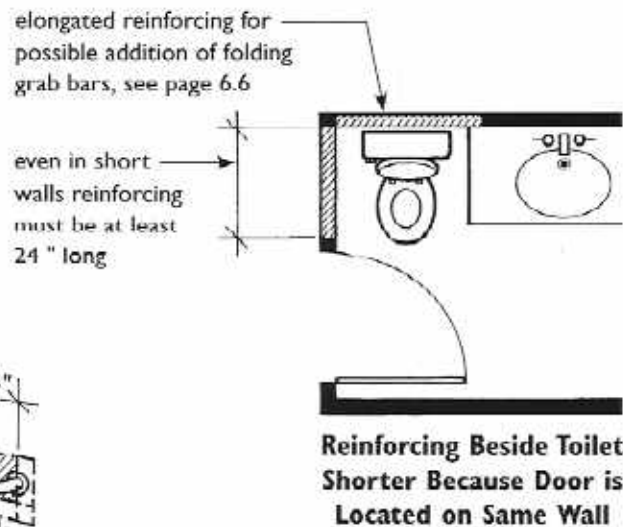
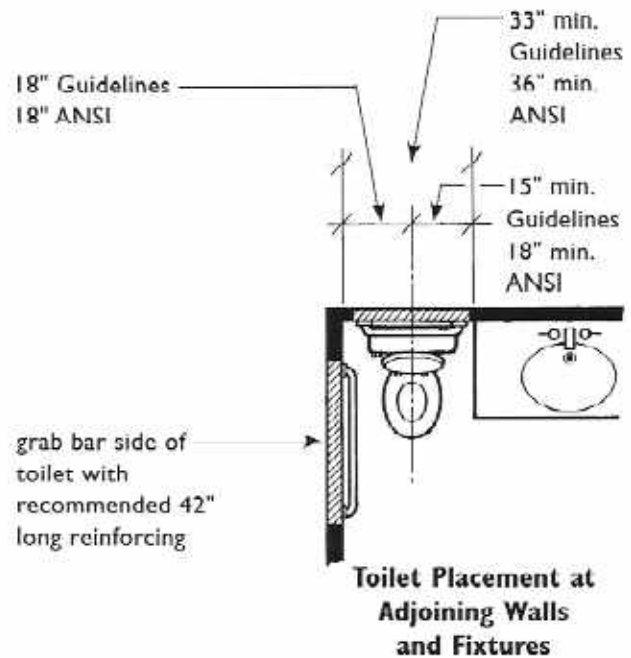
Not Covered

- circuit breakers
- appliance controls
- outlets dedicated for specific appliances

REINFORCED WALLS FOR GRAB BARS

Toilets positioned beside a wall offer the highest degree of safe use since a grab bar can be mounted to the side of the toilet. The dimensions describing the distance from the center of the toilet to a side wall and to the nearest fixture or obstruction on the opposite side have been adapted from the ANSI Standard. The 18 inches from the centerline of the toilet to the wall is an absolute measurement and will accommodate a grab bar and the shoulders of a person seated on the toilet. The Guidelines provide for a 15-inch minimum dimension on the nongrab bar side, which is more lenient than ANSI (which requires 18 inches minimum).

In small bathrooms where the door is located in the side wall immediately adjacent to the toilet, full length reinforcing as specified in the Guidelines may not be possible without enlarging the room. While a short grab bar is not preferred, it does work for some people.



Fixed floor and wall-mounted grab bars also can be installed where toilets are not adjacent to full length walls. This type of installation will require little if any additional reinforcing but is a poor choice because the grab bars tend to block access to adjacent fixtures. The fixed floor mount encroaches on clear floor space and interferes with wheelchair maneuvering.

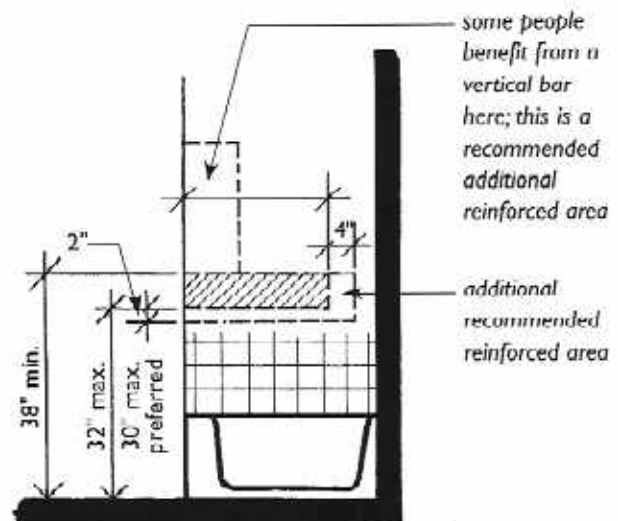


**Fixed Floor and Wall-Mounted Bars
 Not a Good Choice for Many People**

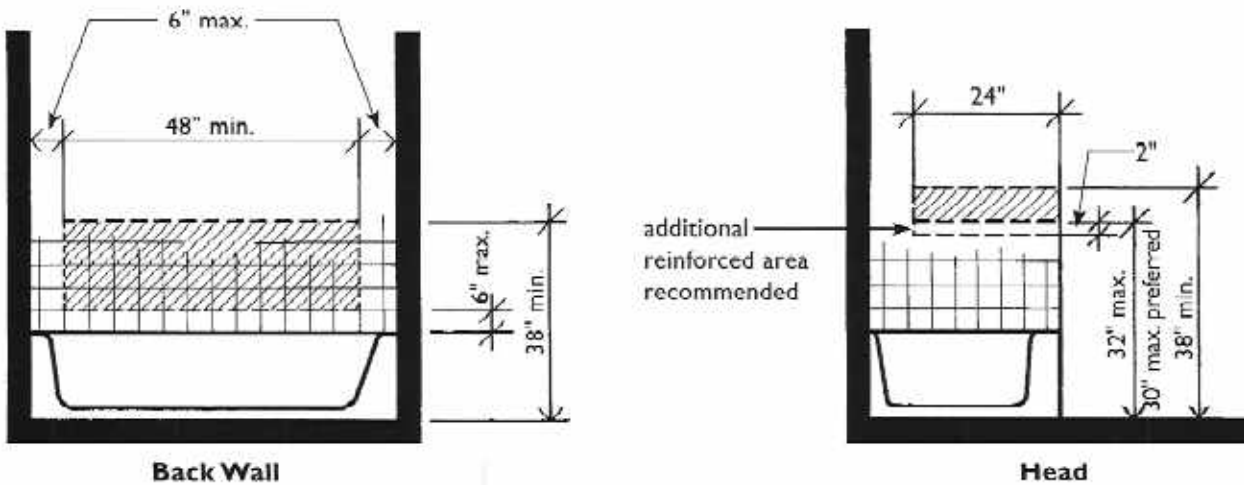
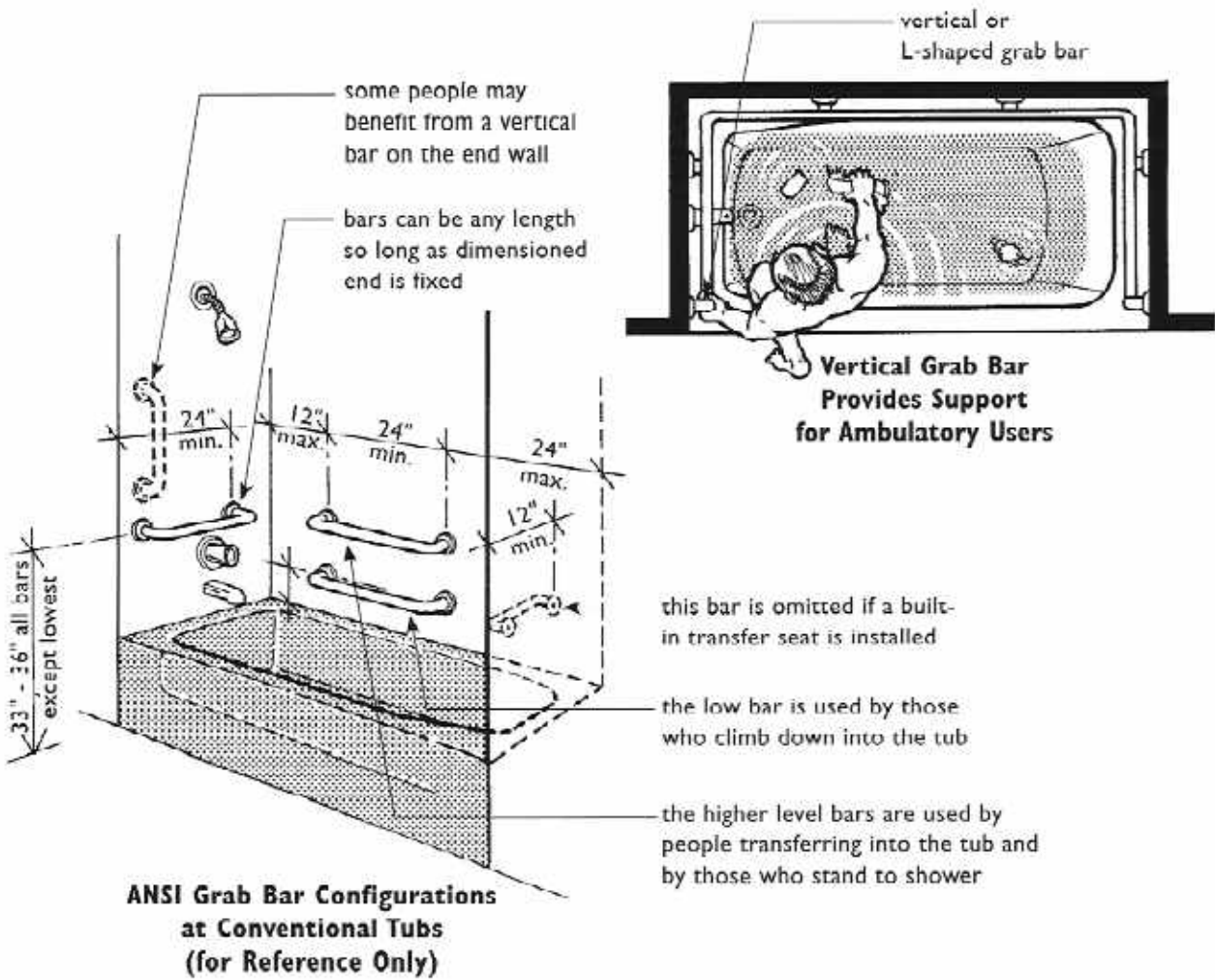
**REINFORCING FOR GRAB BARS
 AT CONVENTIONAL BATHTUBS**

At conventional bathtubs the Guidelines specify wall reinforcing for grab bars as shown in the accompanying illustrations. The intent is to make it easy for a resident to install grab bars similar to those specified in ANSI A117.1 or other equal accessibility standard or code.

For the same reasons as discussed at toilets, the reinforced areas specified at the head and foot of tubs should be enlarged to provide full support for mounting plates and horizontal bars at the lowest position of 33" above the room floor. The enlarged reinforced areas are shown here as recommended additional reinforcing.

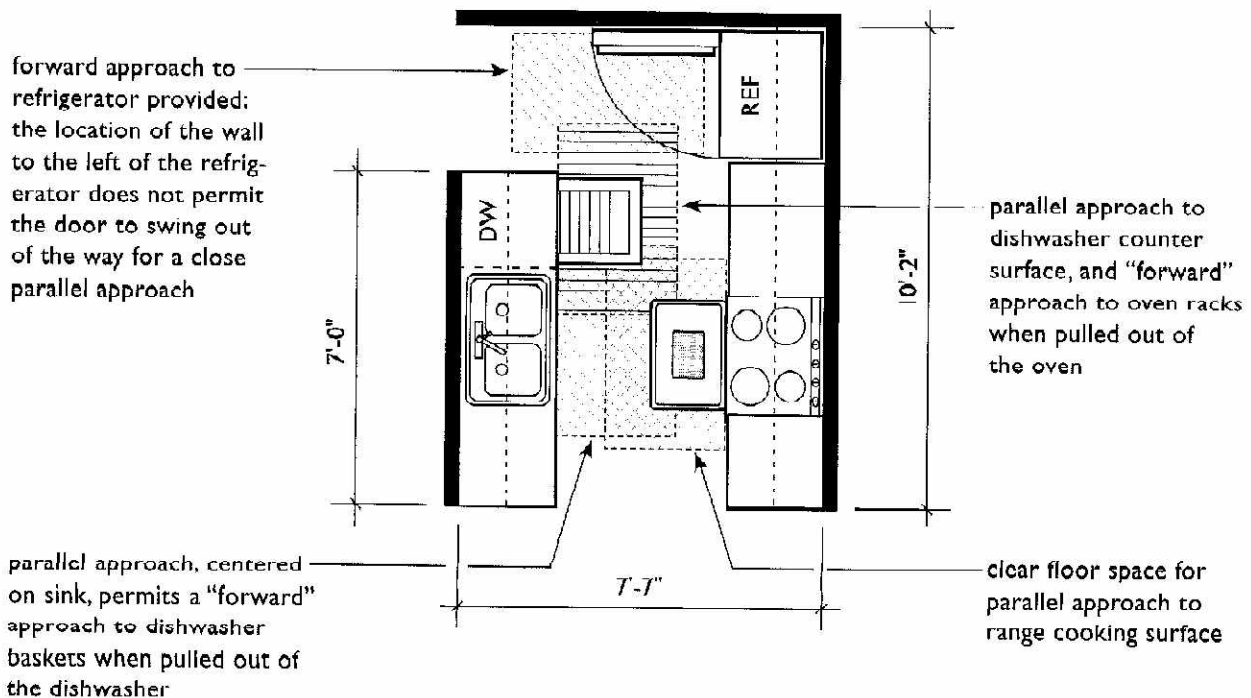
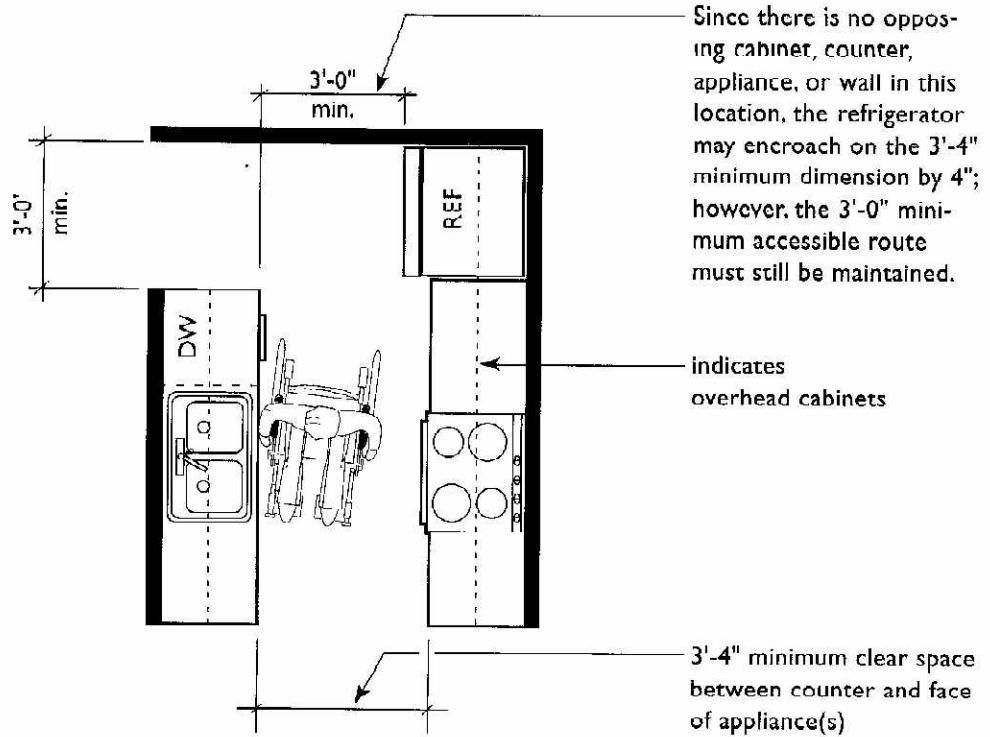


**Foot (Control Wall)
 Reinforced Areas Required by the Guidelines
 at Conventional Bathtubs**



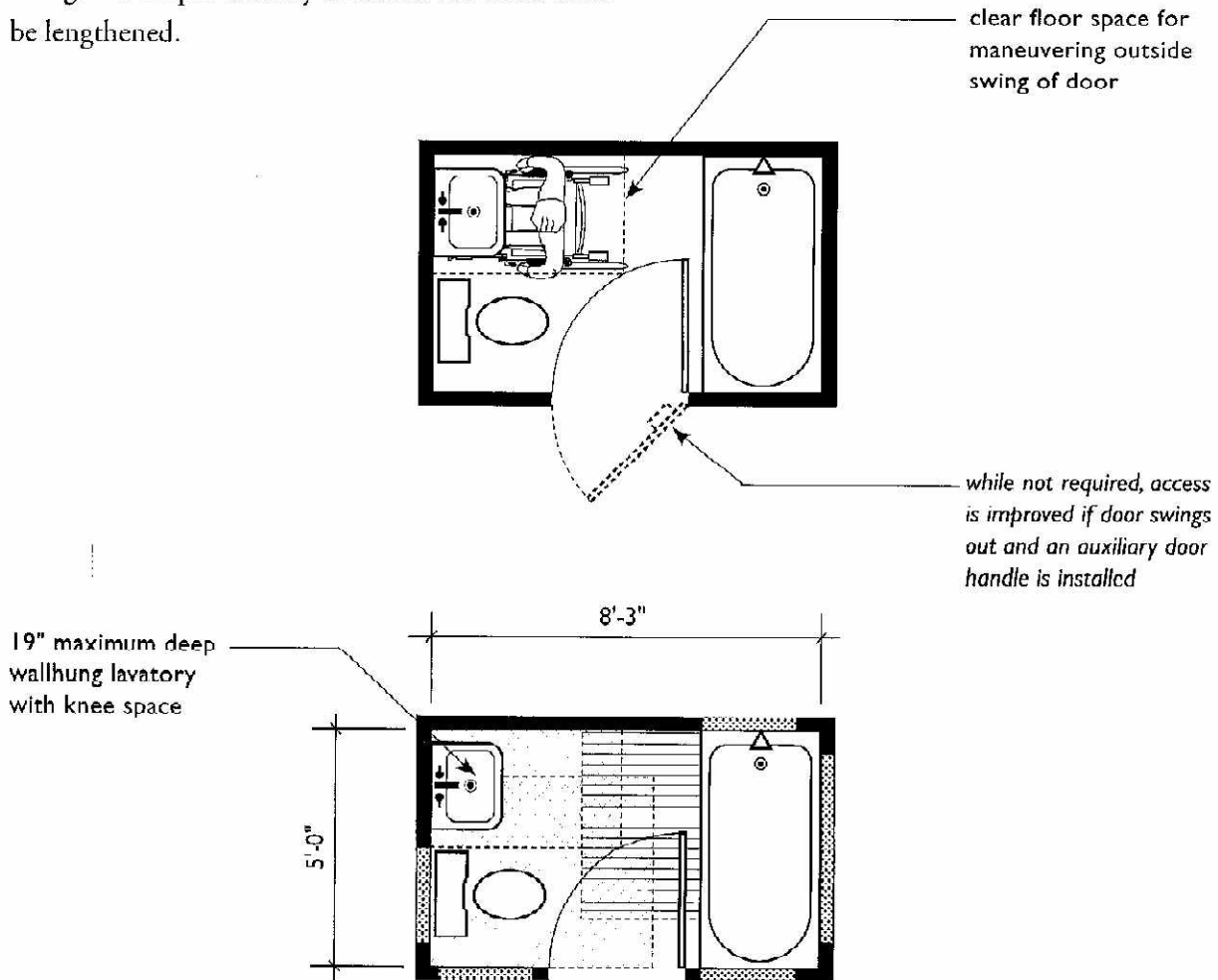
Reinforced Areas Required by the Guidelines at Conventional Bathtubs


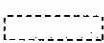
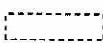
Parallel Wall Kitchen



“B” Bathroom with Bathtub

Only 19 inches of the required 30-inch x 48-inch clear floor space can go under a lavatory. A deeper lavatory would require that the clear floor space be positioned away from the plumbing wall and closer to the tub, causing it to overlap with the door swing. If a deeper lavatory is desired the room must be lengthened.



Legend:		reinforcing in walls or floors for grab bars		min. clear floor space at each fixture		min. clear floor space outside swing of door