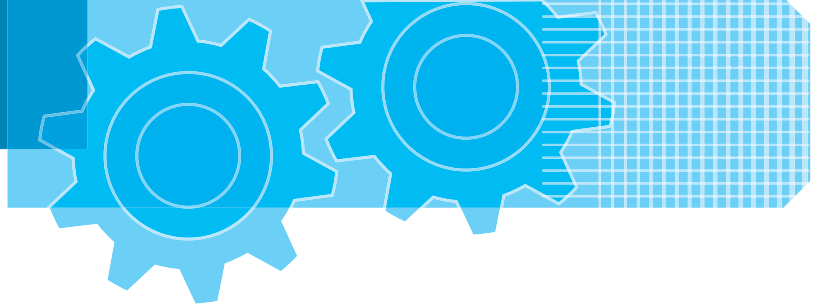


Tech Tip

do you know?



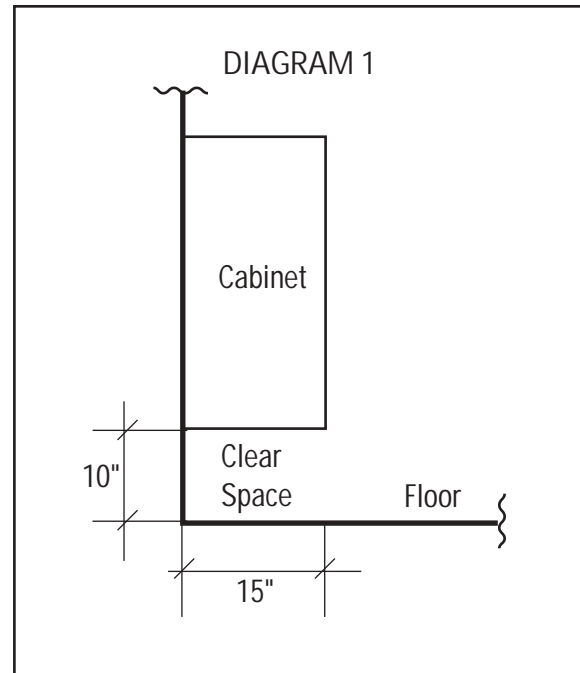
Do you know how much space is required in an accessible toilet stall to meet the accessibility standards? Or what the mounting heights are for mirrors and grab bars in an accessible bathroom? Using ANSI/ICC A117.1–1998 *Accessible and Usable Buildings and Facilities* as a reference, here are a few of the basics.

How much clearance is required for a wheelchair in an accessible bathroom? **Section 304** states that the circular, wheelchair turning space provided must be a minimum of 60 inches in diameter. This turning space shall be permitted to include knee and toe clearance that complies with **Section 306**. A wheelchair accessible compartment with a floor-mounted toilet, shall be a minimum of 60 inches wide measured perpendicular to the side wall and a minimum of 59 inches deep measured perpendicular to the rear wall, as found in **604.8.1.1**.

In addition to these regulations, toilet compartment doors shall NOT swing into the minimum required compartment area. Doors must comply with **Section 404**, which addresses accessible clear width and maneuvering clearances. However, if the approach is on the latch side of the compartment door, 42 inches of clearance space must be allowed between the closed door and any obstruction, such as the opposite wall. The door must be hinged no more than 4 inches from the adjacent wall or partition farthest from the toilet and must be a self-closing door. Pulls complying with **Section 404.2.7** should be located on both sides of the door near the latch.

604.5 requires grab bars on both the rear wall and the side wall closest to the toilet. The side-wall grab bar must be a minimum of 42 inches long, installed no more than 12 inches from the rear wall, and must extend at least 54 inches from the rear wall.

604.5.2 indicates that rear-wall grab bars must be centered on the toilet and a minimum of 24 inches



long. If space is available, the bar should be 36 inches long, with the additional length on the transfer side of the toilet—the transfer side being the open side away from the side bar. Grab bar height is referenced in Section 609. Grab bars must be mounted no lower than 33 inches and no higher than 36 inches from the floor. There must be 1½ inches of clearance space between the grab bar and the wall to which it is mounted.

As well as for turning space clearance, **Section 603.3** lists requirements for mounting heights for mirrors, coat hooks and shelves. Mirrors must be mounted with the bottom edge of the reflective surface no greater than 40 inches above the floor or ground. Coat hooks should comply with Section 308 for forward- and side-reach mounting heights.

Now try the questions on the next page using A117.1–1998 as your reference.



Tech Tip

do you know?



1. Does diagram 1 meet the requirements for wheelchair clearance? Reference by section and explain your answer if necessary.
2. Do the horizontal grab bar locations in diagrams 2a and 2b meet the standards for accessible toilet rooms? Reference by section and explain your answer if necessary.
3. You have entered an accessible bathroom that has a coat hook on the main bathroom entry door. The coat hook is mounted 60 inches from the finished floor. Does this coat hook mounting meet the accessibility standards for unobstructed forward and side reach of A117.1-1998? Reference by section and explain your answer if necessary.

DIAGRAM 2a

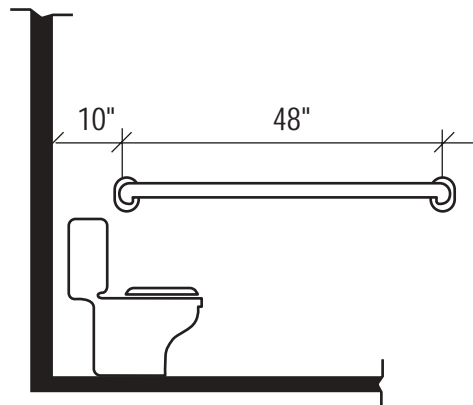
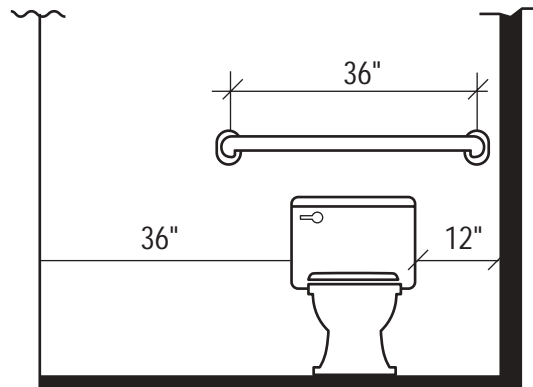


DIAGRAM 2b



You will earn 3 CEP points by reading the article and working the problems. Then copy or detach this page, fill in the answers above and the form below, and submit your answers by mailing or faxing the page to DHI.



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Retain a copy of this exercise for your Continuing Education renewal application. Answers to these problems will be posted on our website (www.dhi.org) on the first day of the next month following the issue month of the magazine.





Tech Tip Answers for February 2003

1. No. Diagram A does not meet the requirements for wheelchair clearance. While the 10 inch clearance from the floor to the cabinet falls above the minimum 9 inches as stated in 306.2.1, the depth extended under the cabinet is 15 inches and 306.2.3 indicates minimum clearance shall extend 17 inches minimum beneath the cabinet
2. Diagram 2A. Yes. Referencing 604.5.1, the 48 inch bar exceeds the minimum 42 inches and the 10 inch area between the bar and rear wall falls in the 12 inch maximum. And the extension from the rear wall is 58 inches exceeding the 54 inch minimum extension from the rear wall.

Diagram 2b No. 604.5.2 says a 24 inch grab bar should be centered on the toilet, it also indicates where space permits the bar shall be 36 inches long minimum with the additional length located on the side away from the side wall or what it terms the transfer side.

3. No. 603.4 indicates "coat hooks provided within toilet rooms shall accommodate a forward reach or side reach complying with Section 308", which gives a maximum reach of 48 inches for forward and side reach. The exception for existing elements are permitted at only 54 inches maximum above the floor or ground. 60" exceeds all of the allowable maximums in 308.