

A bathroom fit for a wheelchair

Follow guidelines when designing access for those with limited mobility

Whether you're thinking of designing a bathroom for wheelchair access or just to make the room more comfortable and functional for anyone with limited mobility, the standards developed by the federal government for the Americans with Disabilities Act (ADA) can offer some very useful guidelines.

Entrances: Starting with your entrance into the room, you want to make sure that the door is at least 32 inches wide. If the doorway is located off a hallway and you have a wheelchair that must turn from the hall into the doorway, then the door width needs to be increased to 36 inches. There should be no threshold in the doorway. If a threshold is necessary, select a flat one that is no more than $\frac{1}{4}$ inch high, or one that is beveled on both sides and no greater than $\frac{3}{4}$ inch high.

For anyone with limited hand strength, a standard doorknob can be very difficult to grip. Instead of a knob, select a lever handle, and keep the height of the handle at 48 inches or less above the floor.

Interior Clearances: In order to make a 180-degree turn, a wheelchair needs at least 60 inches (5 feet) of clearance. Since this amount of clear space is sometimes difficult to achieve, consider a T-shaped space instead, with each side of the T being at least 36 inches wide. This configuration will

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allow enough space for a wheelchair to be able to comfortably make a three-point turn instead of having to maneuver in a complete circle. Pathways to any fixtures need to be at least 36 inches wide, and the sink should have a clear space in front of it that is at least 30 inches by 48 inches.

Fixtures: Accessible toilets are made so that the seat is between 17 and 19 inches above the floor, as opposed to about 14 to 15 inches for a conventional toilet. For the sink, you want to be sure that the rim is no higher than 34 inches above the floor. Sinks should extend out at least 17 inches from the rear wall, and the area under the sink needs to be open with a clearance of at least 29 inches from the floor to the bottom of the sink. If the sink is installed in a countertop, it should be

no more than 2 inches from the front edge of the counter for maximum accessibility. Use a protective boot over the water lines and trap underneath the sink to prevent contact, and utilize a single-handle, lever-style faucet that is easily operated with one closed fist.

Grab Bars: Grab bars are a wonderful feature in just about any bathroom, and make the room safer and more convenient for anyone to use. A horizontal grab bar should be placed on the wall behind the toilet, and a second one on the closet sidewall adjacent to the toilet. Grab bars should also be placed inside bathtub and shower enclosures. If you are remodeling or building new and the walls are open, be sure to provide wood blocking in the walls to simplify attachment of the grab bars.

Floor covering: Sheet vinyl flooring is perhaps the best choice, since it is smooth and easy to clean. If using ceramic tile, select large, smooth tiles to minimize grout lines and surface irregularities, and look for a non-slip surface texture. For carpeting, stick with naps that are $\frac{1}{2}$ inch high or less.

ADA-compliant fixtures are readily available from any plumbing fixture retailer or home center, and home centers will also carry doors and lever handles.