

Designing a Barrier-free Accessible Bathroom

Clear floor space

Clear space measuring at least 30" x 48" must be provided to accommodate a single wheelchair. The space can be positioned for a forward or parallel approach to equipment. A portion of the clear floor space may be located under fixtures, lavatories or accessories as long as the required knee and toe clearance for people in wheelchairs is provided.

Mounting height requirements

Special consideration must be given to the mounting heights of lavatories, toilets and urinals, as well as all common accessories and grab bars.

Turning space

A wheelchair requires at least 60" in diameter to make a 180 degree turn. To conserve space, a T-shaped turning space with aisles 36" wide allowing a three-point turn is also acceptable. A portion of the diameter or T-shaped turning space may be located under fixtures, lavatories or accessories as long as the required knee and toe clearance is provided.

Handicap Lavatories

Every washroom must have at least one accessible lavatory that meets or exceeds ADAAG requirements.

A handicap lavatory must be set at the proper height and depth with enough clear floor space and clearance underneath to allow people in wheelchairs to easily approach and operate it. It must extend at least 17" from the rear wall and have a clearance of at least 29" from the bottom of the apron to the finished floor. The countertop or lavatory, should not exceed a height of 34". To allow a forward approach by people in wheelchairs, a clear floor space in front of the lavatory at least 30" wide and 48" deep must be provided with no more than 19" extending under the lavatory. A lavatory installed in a countertop should be placed within 2" of the front edge for maximum accessibility.

Exposed plumbing under barrier-free lavatories must be either insulated or located to eliminate any contact. Sharp edges must be avoided. A removable protective panel or shroud can be installed underneath an existing lavatory as long as required knee clearance is maintained.

Controls and operating mechanisms

Faucets for accessible lavatories, showers and baths and controls for accessible toilets, urinals and other restroom accessories must meet ADAAG specifications. All push buttons, valves, knobs and levers must be operable with one hand, without twisting the wrist or tightly grasping or pinching the control. The maximum force required to operate a faucet or control must not exceed 5 lb. Self-closing faucets that remain open at least 10 seconds are acceptable.

Handicap Toilets

All restrooms that include toilet stalls in new construction must provide at least one accessible standard compartment that complies with ADAAG requirements. A standard compartment has a minimum width of 60" and a length that allows using a wheelchair to approach the toilet either from the front or side. Horizontal grab bars must be mounted behind the toilet and on the nearest wall or partition.

An alternate compartment, with a width of 36" and grab bars on either side, is acceptable in alterations where a standard stall is technically impossible. An alternate compartment is required in addition to a standard compartment in all new construction that provides six or more stalls.

Seat heights must be 17" to 19" above the finished floor. Flush controls must be placed on the open side of the toilet with the most clear floor space and mounted no higher than 44" above the finished floor.