

If the pit toilet has lightweight privacy screens or has no walls, the riser should have vertical or nearly vertical sides, a flat area on each side of the seat that is about 3 inches (75 millimeters) wide, and a seat cover that also functions as a back rest. For safety, grab bars must not be mounted on lightweight privacy screens that won't support 250 pounds (1,112 newtons). A clear floor or ground space that is at least 60 inches (1,525 millimeters) wide and 56 inches (1,420 millimeters) deep is required.

Of the required width of clear floor space, only 16 to 18 inches (405 to 455 millimeters) can be on one side of the centerline of the riser, and the rest must be on the other side. The depth of the clear space is measured from the back of the riser and extends in front of the riser (figure 87). If there is a condition for departure, the space can be reduced to 56 by 48 inches (1,420 by 1,220 millimeters).

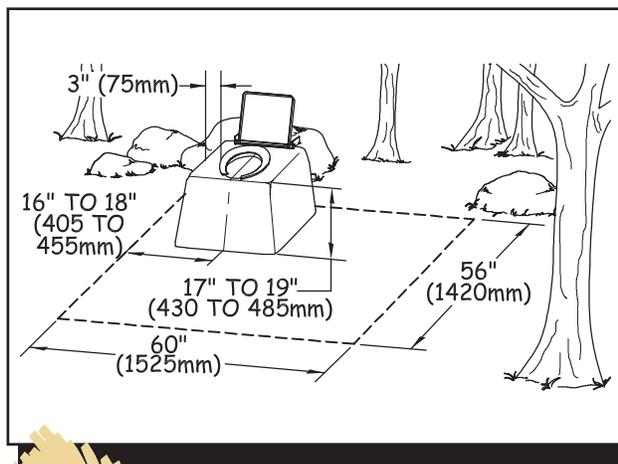


Figure 87—The requirements for clear space at an unenclosed toilet.

Whether the pit toilet has walls or not, the slope of the turning space and the clear floor or ground space generally can't exceed 1:50 (2 percent) in any direction. The slope can be up to 1:33 (3 percent) in any direction where required for proper drainage. The surface must be firm and stable and made from a material that is appropriate to the setting and level of development. Slope or surface requirements don't have to be met where a condition for departure exists.



#### CONSTRUCTION TIP—

##### **Privacy screens**

Lightweight privacy screens are sometimes provided for pit toilets in remote general forest areas. Screens may be provided in areas that have heavy visitor use but where walls or sturdier enclosures would significantly change the recreational setting or adversely impact significant natural features, or where it is difficult and expensive to pack in conventional construction materials. These screens may be made from tent fabric or other thin materials, and have only enough structural strength to stay upright.

Because privacy screens don't have enough strength to support a 250-pound (1,112-newton) load on grab bars, grab bars should never be attached to them. Imagine the consequences if a screen and the grab bar attached to it fell over when a person tried to use it to transfer to a toilet! Instead of attaching grab bars to screens, the screens should be positioned outside the clear area required for unenclosed toilets, so people can use the toilet without needing grab bars.

The entrance to each pit toilet should be at ground level. If this isn't feasible, because of the toilet's operation and maintenance requirements, a trail complying with Forest Service Trail Accessibility Guidelines (FSTAG) section 7.3 must be provided between the ground and toilet entrance. FSTAG section 7.0 explains the requirements for trails to "associated constructed features" such as pit toilets. If the pit toilet must be located above the ground and a trail isn't feasible because of a condition for departure, steps are permitted—but only as a last resort.

Composting and moldering toilets have a "basement" area where waste is processed. The need to service the area under the riser may make it difficult to provide a

ground-level entrance to the toilet. In other areas, surface bedrock, permafrost, or other ground conditions make it tough to dig a pit. Table 3 will help designers avoid steps at toilet entries and may trigger other creative ideas for accessible entries.

Table 3—Pit toilet entry decision aid.

<b>Are steps needed for this pit toilet?</b>	Is maintenance access to a waste processing area below the riser needed? Is digging a pit into the ground impractical?	➔ NO	Provide ground level entrance.
	↓ YES		
	Have all options for a ground level entrance been exhausted?	➔ NO	Look at the site again. Is excavation, placement of the building on a slope, or addition of fill material at the entrance feasible to allow a ground-level entrance?
	↓ YES		
	As an absolute last resort, provide steps in accordance with FSORAG section 6.6.9.		

The need for steps may be eliminated altogether if enough time is spent on site selection. For instance, a sloping site may allow the maintenance “basement” to be accessed from the downhill side, while providing a ground-level entrance to the toilet on the uphill side (figure 88).



Figure 88—The two accesses to an uphill-downhill composting toilet.



**DESIGN TIP—**

***Toilet steps should be a design solution of last resort.***

If steps are used, keep in mind that a person using a wheelchair will have to get out of the wheelchair and transfer up the steps onto the pit toilet floor. Since pit toilet floors are seldom cleaned regularly, it is easy to imagine how dirty and disgusting this would be. Avoid steps if at all possible! Think about it—would you want to make that trip?

If steps can't be avoided, they must meet specific requirements that aren't the same as standard building code requirements. The treads must be at least 14 inches (355 millimeters) deep and 36 inches (915 millimeters) wide and no more than 9 inches (230 millimeters) high.

*Continued* ➔

Practically speaking, the deeper the tread, the shallower the rise should be for comfortable use. With a 14-inch (355-millimeter) tread, a 6-inch (150-millimeter) riser is preferable, even though up to 9 inches (230 millimeters) is allowed. A level, clear ground space that is 30 by 48 inches (760 by 1,220 millimeters) must be provided along one unobstructed side of the steps.

One of the steps must be 17 to 19 inches (430 to 485 millimeters) above the clear ground space so that a person in a wheelchair can transfer onto it. Single steps are hazards that should be avoided; at least two steps, but preferably three, should be used. Although it's not mentioned in the FSORAG, be sure that a door swing doesn't block access from the step someone uses when transferring from a wheelchair.

**Warming Huts**—Permanent, fully enclosed buildings are not warming huts. Permanent buildings with walls, roof, and a door must meet all the applicable requirements of the ABAAS. Warming huts are temporary or partially enclosed spaces used intermittently for brief periods as protection from the weather. If amenities such as tables or wood stoves are provided in warming huts, they must meet the requirements of FSORAG sections 1 through 5 explained above. In addition, a turning space at least 60 inches (1,525 millimeters) in diameter (see figure 81) or “T” shaped with a minimum 60- by 36-inch (1,525- by 915-millimeter) “arm” and a minimum 36-inch (915-millimeter-) wide by 24-inch (610-millimeter-) long “base” (figure 82) must be provided inside the hut. This requirement is the same as ABAAS section 304.3.

Warming huts in recreation sites must be connected to other major features of the recreation area by an ORAR. If the floor of the hut is above ground level, the ORAR can either ramp up to floor level, or it can end adjacent

to the tent platform 17 to 19 inches (430 to 485 millimeters) lower than the platform. This height allows someone to transfer from a wheelchair to the platform.

Warming huts provided in GFAs don't have to be connected to an ORAR.

**Outdoor Rinsing Showers**—Even though the ABAAS sections 607, 608, and 609 cover showers, outdoor rinsing showers are specifically addressed in the FSORAG because the ABAAS description and provisions are intended for indoor facilities. Outdoor showers permit people to rinse off sand, dirt, and debris. They are not intended for bathing. They generally don't offer privacy and people usually are not permitted to disrobe.

Two types of outdoor rinsing showers are addressed: a low shower, accessible to someone in a seated position, and a high shower accessible to someone who is standing. If two or more outdoor rinsing showers are provided in a recreation site, at least one must be a low shower meeting the requirements explained below and at least one must be a high shower meeting the requirements explained below. If only one outdoor rinsing shower is provided, it must meet the requirements and be usable from both a seated and standing position. Accessible outdoor rinsing showers must be connected to the other major features of the recreation area by an ORAR. There is no exception to the ORAR because outdoor rinsing showers aren't typically found in GFAs.

For a low outdoor rinsing shower, a fixed shower head must be mounted between 48 and 54 inches (1,220 and 1,370 millimeters) above the ground or floor, the same as the ABAAS requirement for accessible indoor showers. For a high outdoor rinsing shower, a fixed shower head must be mounted at least 72 inches (1,830 millimeters) above the ground or floor. A hand-held shower spray unit complying with ABAAS section 608.6 may be used in place of a fixed shower head. Hand-held showerheads are vulnerable to vandalism and breakage, so they are

probably not a good design choice for most recreation sites. A more durable choice would be to mount low and high showerheads on one pole or wall.

Grab bars for accessible outdoor rinsing showers are not used for transfers, but are essential for stability in a wet environment. Three types of grab bars are addressed in this section: vertical, circular, and horizontal. Vertical and circular grab bars are used with showers mounted on posts. Horizontal grab bars are used with shower heads mounted on walls. Every outdoor rinsing shower must have at least one vertical, circular, or horizontal grab bar.

Grab bars for accessible outdoor rinsing showers must comply with the standard reach ranges of ABAAS section 308 that are explained in *Reach Ranges and Operability Requirements*. Grab bar size, position, mounting requirements, and structural strength are explained in *Grab Bars*. The location requirements for grab bars at outdoor rinsing showers are explained below.

If a vertical grab bar is provided at a shower head mounted on a post, the grab bar must be installed directly under the shower head. It must extend from no more than 33 inches (840 millimeters) above the floor or ground to within 3 inches (75 millimeters) of the shower head (figure 89).

If the shower head is mounted on a post, a circular grab bar may be used in place of a vertical grab bar. The grab bar must surround the usable part of the post and be installed under the shower head between 33 and 36 inches (840 and 915 millimeters) above the ground or floor (figure 90).

If a shower head is mounted on a wall, a horizontal grab bar must be provided. The grab bar must be installed under the shower head between 33 and 36 inches (840 and 915 millimeters) above the ground or floor and extend at least 18 inches (455 millimeters) in both directions from the center line of the shower head (figure 91).

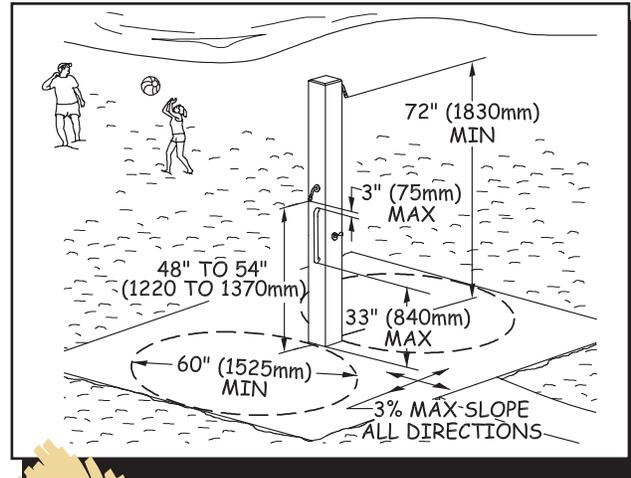


Figure 89—The requirements for a vertical grab bar.

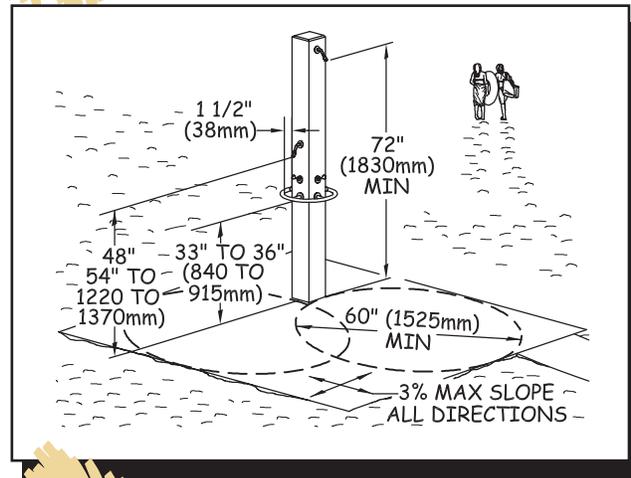


Figure 90—The requirements for a circular grab bar.

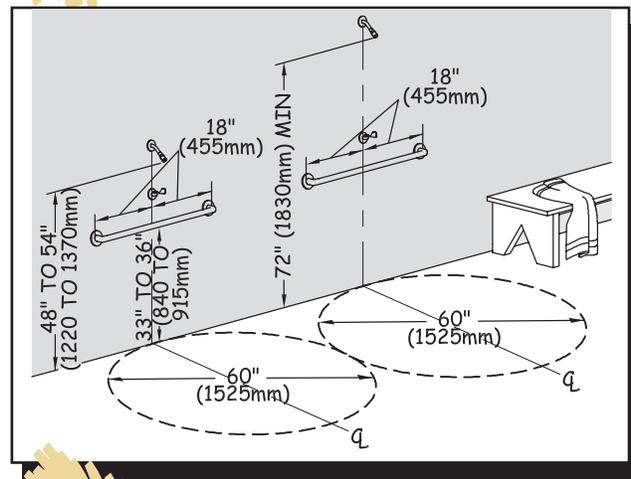


Figure 91—The requirements for horizontal grab bars.

Rinsing shower controls and operating mechanisms must comply with the provisions for reach ranges and operability specified in ABAAS sections 308 and 309 as explained in *Reach Ranges and Operability Requirements*. If self-closing controls are used, the controls must remain open for at least 10 seconds.

A clear floor or ground space at least 60 inches (1,525 millimeters) in diameter must be provided at each accessible outdoor rinsing shower. It must be located so that the water from the shower head is directed toward the center of the clear space. The slope of the clear space can't exceed 1:33 (3 percent) in any direction. The surface must be firm and stable and made from a material that is appropriate to the level of development and the setting.

**Signs**—Signs provide key information concerning the accessibility of programs and facilities. In accordance with ABAAS section 216, the International Symbol of Accessibility must be posted at six places:

- Accessible parking spaces in parking lots with five or more parking spaces. Do not post the International Symbol of Accessibility at parking spurs provided at camping units or other individual accessible features.
- Accessible loading zones.
- Accessible restrooms and bathing facilities.
- At the main entrance to a building, with an arrow directing people to the closest accessible entrance, if the main entrance is not accessible.
- On the door to an accessible *Area of Refuge* inside multistory buildings.
- At an accessible means of egress out of a building.

The International Symbol of Accessibility can only be posted where all constructed features and areas comply with the ABAAS. Except for the requirement to post the word *VAN* on the parking sign at van accessible spaces, no words are required to be used with the symbol. If

words are used with the ISA, use *Accessible*; **do not** use *Handicapped*!

There is **NO** legal requirement on federally managed lands for International Symbol of Accessibility signs to be blue and white, even at parking spaces. If the International Symbol of Accessibility is used, it must be posted in accordance with ABAAS section 703.7, in high-contrast colors with a nonglare finish. A cream or pale yellow International Symbol of Accessibility on a brown background complies with this requirement and blends into an outdoor setting.

If you want the local law enforcement agency to be able to issue tickets for illegal parking at accessible parking spaces, the International Symbol of Accessibility must be displayed in blue and white and comply with the Manual of Uniform Traffic Control Devices (MUTCD) section 2B.39. Although their use is optional, the only approved colors for pavement markings designating accessible parking spaces are blue and white (MUTCD section 3B.18).

If a sign or kiosk has materials such as maps, brochures, fee envelopes, and so forth, the sign or kiosk must be designed to meet the standard accessible reach ranges in accordance with ABAAS section 308, as explained in *Reach Ranges and Operability Requirements*. Clear floor or ground spaces of 30 by 48 inches (760 by 1,220 millimeters) must be provided to allow a forward or side approach.

Post the appropriate international symbols where various modes of adaptive equipment are available, such as TTY (teletypewriter), sign language interpreters, assistive listening systems, and so forth (figures 92 through 101).

If you have questions about applying any of the above information, please contact your region's recreation accessibility coordinator. Current contact information is available on the Forest Service's internal computer

network at: <http://fsweb.mtdc.wo.fs.fed.us/toolbox/acc/documents/coord.htm>.



Figure 92—Information



Figure 93—International Symbol of Accessibility



Figure 94—Teletypewriter (frequently abbreviated as TTY)



Figure 95—Telephone with volume control



Figure 96—Video or film is closed caption



Figure 97—Audio description available



Figure 98—Assistive listening system available



Figure 99—Sign language interpretation available



Figure 100—Large-print (18-point) materials available



Figure 101—Materials available in Braille

Figures 92 to 101—International symbols indicating accessibility.