Often overlooked in these considerations are the family, companions, or caregivers who may accompany an individual who expects and relies on accessibility features in restrooms. One trend that recognizes the need for assistance for many restroom users is the increased presence of family restrooms. These restrooms will accommodate diaper changing and children and older individuals who need assistance, particularly from opposite gender caregivers.

## SPACE REQUIREMENTS AND REACH RANGES

THE STANDARDS DESIGNATE CLEAR FLOOR SPACE to accommodate a single wheelchair of at least 30 inches by 48 inches (760 by 1220mm). The space can be positioned for a forward or parallel approach to restroom elements. A portion of the clear floor space may be located under fixtures, lavatories, or accessories as long as the required knee and toe clearance is provided (Fig. 14 and many others). If properly centered in front of controls and operating mechanisms, the clear floor space will allow both left- and right-hand access.

REACH RANGES AND MOUNTING HEIGHTS for restroom accessories may vary within a facility depending on the location of individual accessories and the direction of reach required for their use. To allow use by people with limited reach range, it is required that accessories be mounted with their "operable parts" — dispensing mechanisms, start buttons, coin slots, or dispenser openings — located no more than 48 inches (1220mm) above the finish floor (Fig. 1a.). Where accessories are mounted over obstructions such as counters, depending on the nature and depth of the obstruction it is required that they be located between 44 inches and 48 inches (1120 and 1220mm) maximum above the finish floor. The operable portions of any accessory should be mounted no lower than 15 inches (380mm) above the floor. However, the 2009 ICC/ANSI Standards limit the operable portions of dispensers in toilet compartments to no lower than 18 inches (455mm). When determining the mounting location of restroom accessories, make sure to account for side and forward approaches.

The 2009 ICC/ANSI Standards require that soap dispenser controls and faucets that serve certain accessible lavatories - larger restrooms determined by scoping such as IBC as to require an enhanced reach range - need to be installed with a reach depth of 11 inches (280mm) maximum.

Separately, the 2009 ICC/ANSI Standards also require altered installation heights and locations for towel dispensers and hand dryers — at or near an accessible lavatory - where reaching is obstructed, such as units mounted on perpendicular walls adjacent to accessible lavatories. The operable portions of these elements may need to be installed as low as 34 inches (865 mm) as shown in the table below, depending on how far back from the front edge of a lavatory or counter a unit is mounted.

## **OBSTRUCTED REACH**

	MAXIMUM REACH DEPTH	0.5 inches (13mm)	2 inches (51mm)	5 inches (125mm)	6 inches (150mm)	9 inches (230mm)	11 inches (280mm)
	Maximum Reach Height	48 inches (1220mm)	46 inches (1170mm)	42 inches (1065mm)	40 inches (1015mm)	36 inches (915mm)	34 inches (865mm)

TURNING SPACES IN RESTROOMS may be either a 60 inch (1525mm) circular space or a T-Shaped turning space within a 60 inch (1525mm) square minimum with arms and base minimum 36 inches (915mm) wide. The circular space allows a person using a wheelchair to make a 180-degree or 360 degrees turn (Fig. 2a). The T-Shaped space allows for a three-point-turn (Fig. 2b) and may be used to conserve space in some installations. A portion of the 60 inches (1525mm) diameter or T-Shaped turning spaces may be located under fixtures, lavatories, or accessories as long as the required knee and toe clearance is provided.

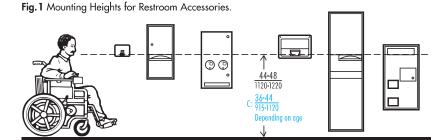


Fig. 1a Upper Range of Mounting Heights for Restroom Accessories with Operable Parts.

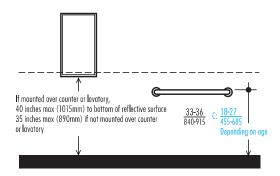


Fig. 1b Mirror and Toilet Grab Bar Mounting Heights.

## Fig. 2 Wheelchair Turning Spaces.

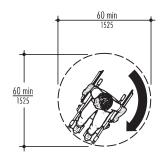


Fig. 2a 60 inch (1525mm) Diameter Turning Space.

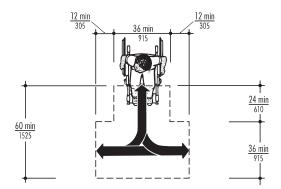


Fig. 2b T-Shaped Turning Space.

## NOTES FOR ALL FIGURES IN THIS PLANNING GUIDE

- This edition of the Planning Guide for Accessible Restrooms has adopted the simple measurement notation
  for figures that is found in the current standards. This notation eliminates the use of English and metric notation,
  substituting inch and millimeter dimensions with the inch always appearing over the millimeter in
  this manner: 48
  1200
- In certain figures with whole restrooms, overall room dimensions are given in feet and inches with the metric dimension listed in centimeters (cm).
- Bobrick product references are provided for many restroom layout fixtures. Not all figures and standards' references have a corresponding Bobrick product.
- 4. Neither standard requires that grab bars be located with reference to the center of the escutcheon. This Planning Guide shows centerline dimension lines where appropriate for locating grab bars. Both standards locate horizontal grab bars from finish floor to top of gripping surface.