Wheelchair Accessibility Guidelines

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Manual Wheelchair Turning and Required Dimensions

- **Turning radius**: the amount of space that is required to perform a 180° turn.
- The Americans with Disabilities Act (ADA) requires a building to provide turning space in the shape of a circle or T-shaped.
- 180° turn is the basis for defining a minimum space bounded by two sides with an open space along the axis of the turn.

**T-shaped Turn**

**Procedure**: Wheelchair user travels up the base of the T → turn wheelchair into one of the arms → reverse into the other arm → turn to move back down the base of the T.

**Dimensions required**:  
- 60-inch square minimum  
- Arms and base 36 inch minimum

![T-shaped Turn Diagram](image)

**Circular Turns**

**Procedure**: Simultaneously pull one wheel forward while pushing the opposite wheel backwards

**Dimensions required**:  
- 60-inch diameter minimum
- ADA requires space to include toe and knee clearance; knee clearance is 30 inches.

![Circular Turns Diagram](image)
U-Shaped Turn

- This type of turn is utilized when an individual must maneuver around an object.

Dimensions required when obstacle is less than 48 inches wide:
- 42 inches minimum clearance width approaching the turn
- 48 inches minimum clearance width at turn
- 42 inches minimum clearance width leaving the turn

Exception: If clearance width at the turning point is 60 inches, the clearance width approaching the turn and leaving the turn the minimum requirement is 36 inches.

Basic Accessibility (e.g., Hallways)

- The minimum space required to accommodate a single wheelchair is 30 inches wide by 48 inches long.
- The minimum clearance floor space for wheelchairs may be positioned for a forward or parallel approach to an object.

Bathroom

- Clearance space surrounding the toilet with a minimum dimension of 30 inches x 48 inches is required.

Ramps

- 36-inch clearance width between handrails.
- 36-inch landings are required at the top and 48-inch landings are required at the bottom of every ramp.
- In areas that the ramp changes direction landings must be 60-inch x 60 inch to allow room to turn.

Door Openings

- Clearance width of a door must be a minimum of 32 inches and a maximum of 48 inches.
- Doors can swing into the turning space.

References