

BUILDING BLOCKS

SECTION 301—GENERAL

301.1 General. The provisions of Chapter 3 shall apply where required by the scoping provisions adopted by the *administrative authority* or by Chapters 4 through 11.

301.2 Building blocks. *Building blocks*, where required by this standard, shall comply with the following:

1. *Floor surfaces* shall comply with Section 302.
2. *Changes in level in floor surfaces* shall comply with Section 303.
3. *Turning spaces* shall comply with Section 304.
4. *Clear floor spaces* shall comply with Section 305.
5. *Knee and toe clearances* shall comply with Section 306.
6. *Protruding objects on circulation paths* shall comply with Section 307.
7. *Reach ranges* shall comply with Section 308.
8. *Operable parts* shall comply with Section 309.

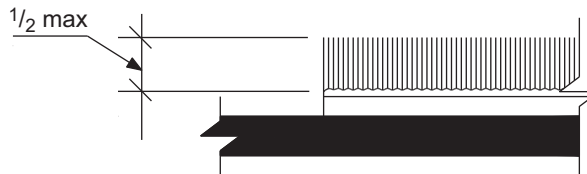
301.3 Overlap. Unless otherwise specified, *clear floor spaces*, *maneuvering clearances* at fixtures, *maneuvering clearances* at doors, and *turning spaces* shall be permitted to overlap.

SECTION 302—FLOOR SURFACES

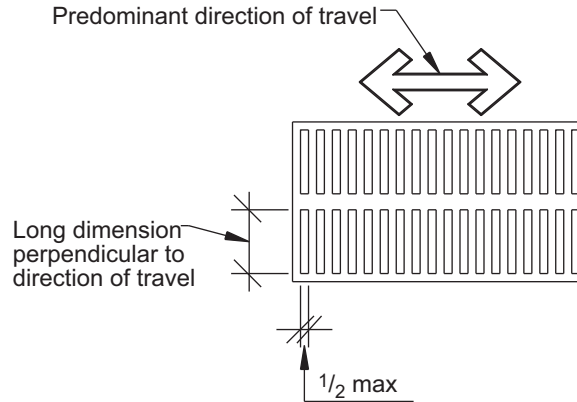
302.1 General. *Floor surfaces* shall be stable, firm and slip resistant, and shall comply with Section 302. *Floor surfaces* shall comply with *changes in level*.

302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing, or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. The pile shall be 1/2 inch (12.7 mm) maximum in height. Exposed edges of carpet shall be fastened to the floor and shall have trim along the entire length of the exposed edge. Carpet edge trim shall comply with *changes in level*.

FIGURE 302.2—CARPET ON FLOOR SURFACES



302.3 Openings. Openings in *floor surfaces* shall be of a size that does not permit the passage of a 1/2 inch (12.7 mm) diameter sphere, except as allowed in Sections 407.4.3, 408.4.3, 409.4.3, 410.4 and 805.10. Elongated openings shall be placed so that the long dimension is perpendicular to the predominant direction of travel.

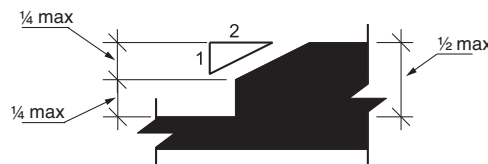
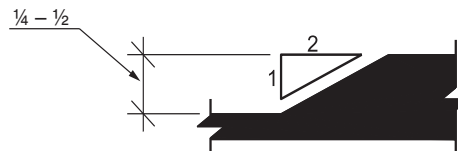
FIGURE 302.3—OPENINGS IN FLOOR SURFACES**SECTION 303—CHANGES IN LEVEL**

303.1 General. *Changes in level in floor surfaces shall comply with Section 303.*

303.2 Vertical. *Changes in level of 1/4 inch (6.4 mm) maximum in height shall be permitted to be vertical.*

FIGURE 303.2—VERTICAL CHANGE IN LEVEL

303.3 Beveled. *Changes in level greater than 1/4 inch (6.4 mm) and not more than 1/2 inch (12.7 mm) maximum in height shall be beveled with a slope not steeper than one unit vertical in two units horizontal (50 percent slope).*

FIGURE 303.3(1)—BEVELED CHANGES IN LEVEL—OPTION 1**FIGURE 303.3(2)—BEVELED CHANGES IN LEVEL—OPTION 2**

303.4 Ramps. *Changes in level greater than 1/2 inch (12.7 mm) in height shall be by a ramp complying with Section 405 or by a curb ramp complying with Section 406.*

SECTION 304—TURNING SPACE

304.1 General. *A turning space shall comply with Section 304.*

304.2 Floor surface. *A turning space shall comply with floor surfaces. Changes in level shall not be permitted within the turning space.*

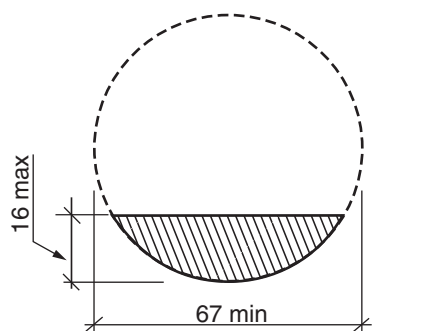
Exception: Slopes not steeper than one unit vertical in 48 units horizontal (2 percent slope) shall be permitted.

304.3 Size and slope. *Turning spaces* shall comply with Section 304.3.1 or 304.3.2. Circular *turning spaces* shall not have slopes steeper than one unit vertical in 48 units horizontal (2 percent slope) measured along any diameter and along the diameter 90 degrees (1.57 rad) to the first diameter. The base and arms of T-turns shall not have slopes steeper than one unit vertical in 48 units horizontal (2 percent slope) measured along the length and width.

304.3.1 Circular space. Circular *turning space* shall comply with Section 304.3.1.1 or 304.3.1.2, as applicable.

304.3.1.1 New buildings and facilities. In new buildings and *facilities*, the *turning space* shall be a circular space with a 67-inch (1700 mm) minimum diameter.

FIGURE 304.3.1.1—CIRCULAR TURNING SPACE—NEW BUILDINGS—SIZE AND OVERLAP



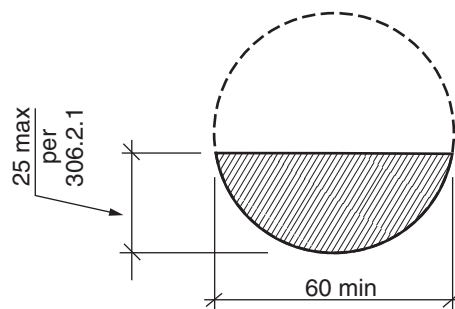
Overlap of knee and toe clearance

304.3.1.1.1 Overlap. *Turning spaces* shall be permitted to include *knee and toe clearance* complying with Section 306. Where the *turning space* includes *knee and toe clearances* under an obstruction, the overlap shall comply with the following:

1. The depth of the overlap shall not exceed 16 inches (405 mm).
2. The depth shall not exceed the depth of the *knee and toe clearances* provided.
3. The overlap shall be permitted only within the turning circle area shown shaded in Figure 304.3.1.1.

304.3.1.2 Existing buildings and facilities. In *existing buildings* and *facilities*, the *turning space* shall be a circular space with a 60-inch (1525 mm) minimum diameter.

FIGURE 304.3.1.2—CIRCULAR TURNING SPACE—EXISTING BUILDINGS—SIZE AND OVERLAP



Overlap of knee and toe clearance

304.3.1.2.1 Overlap. *Turning spaces* shall be permitted to include *knee and toe clearance* complying with Section 306.

304.3.2 T-shaped space. A T-shape *turning space* shall comply with Section 304.3.2.1 or 304.3.2.2, as applicable.

304.3.2.1 New buildings and facilities. In new buildings and *facilities*, the *turning space* shall be a T-shaped space complying with one of the following:

1. A T-shaped space, clear of obstruction, that fits within an area 68 inches (1725 mm) in width and 60 inches (1525 mm) in depth, with two arms and one base that are all 36 inches (915 mm) minimum in width. Each arm shall extend 16 inches (405 mm) minimum from each side of the base located opposite the other, and the base shall extend 24 inches (610 mm) minimum from the arms. At the intersection of each arm and the base, the interior corners shall be chamfered for 8 inches (205 mm) minimum along both the arm and along the base.
2. A T-shaped space, clear of obstruction, that fits within an area 64 inches (1625 mm) in width and 60 inches (1525 mm) in depth, with two arms 38 inches (965 mm) minimum in width and a base 42 inches (1065 mm) minimum in width. Each arm shall extend 11 inches (280 mm) minimum from each side of the base, located opposite the other, and the base shall extend 22 inches (560 mm) minimum from each arm.

3. A T-shaped space, clear of obstruction, that is 64 inches (1625 mm) in width and 60 inches (1525 mm) in depth, with two arms and one base 40 inches (1015 mm) minimum in width. Each arm shall extend 12 inches (305 mm) minimum from each side of the base, and the base shall extend 20 inches (510 mm) minimum from each arm.

FIGURE 304.3.2.1(1)—T-SHAPED TURNING SPACE—NEW BUILDINGS—OPTION 1

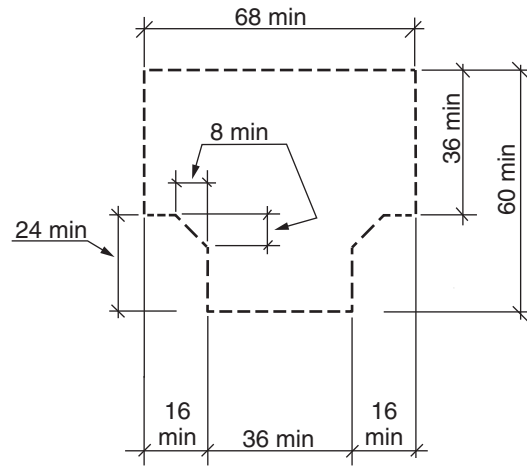


FIGURE 304.3.2.1(2)—T-SHAPED TURNING SPACE—NEW BUILDINGS—OPTION 2

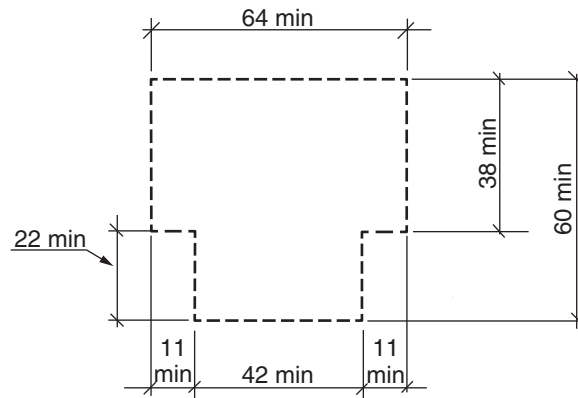
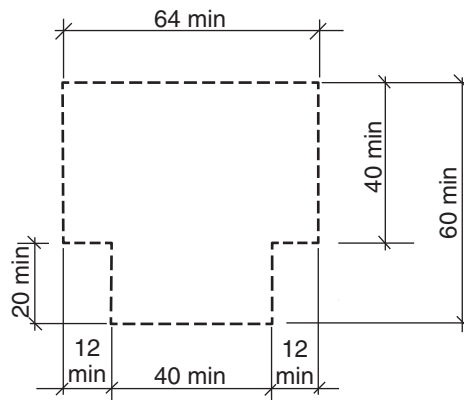
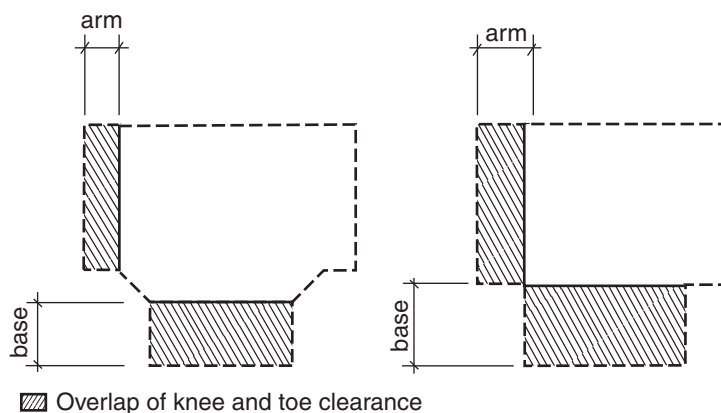


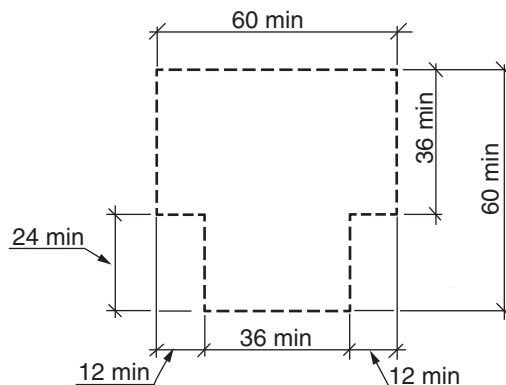
FIGURE 304.3.2.1(3)—T-SHAPED TURNING SPACE—NEW BUILDINGS—OPTION 3



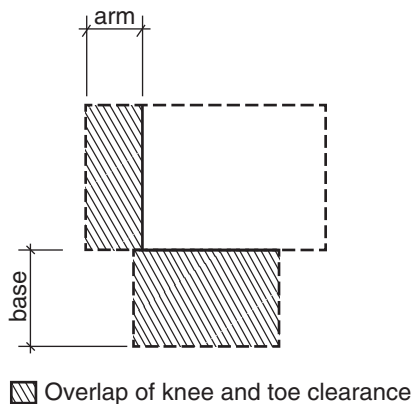
304.3.2.1.1 Overlap. *Turning spaces* shall be permitted to include *knee and toe clearance* complying with Section 306 of either the base or one arm. For Option 1, the base or arm is the portion beyond the chamfer.

FIGURE 304.3.2.1.1—T-SHAPED TURNING SPACE—NEW BUILDINGS—OVERLAP

304.3.2.2 Existing buildings and facilities. In *existing buildings and facilities*, the *turning space* shall be a T-shaped space within a 60-inch (1525 mm) minimum square, with arms and base 36 inches (915 mm) minimum in width. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction, and the base shall be clear of obstructions 24 inches (610 mm) minimum.

FIGURE 304.3.2.2—T-SHAPED TURNING SPACE—EXISTING BUILDINGS—SIZE

304.3.2.2.1 Overlap. *Turning spaces* shall be permitted to include *knee and toe clearance* complying with Section 306 only at the end of either the base or one arm.

FIGURE 304.3.2.2.1—T-SHAPED TURNING SPACE—EXISTING BUILDINGS—OVERLAP

304.4 Door swing. Unless otherwise specified, doors shall be permitted to swing into the *turning space*.

SECTION 305—CLEAR FLOOR SPACE

305.1 General. A *clear floor space* shall comply with Section 305.

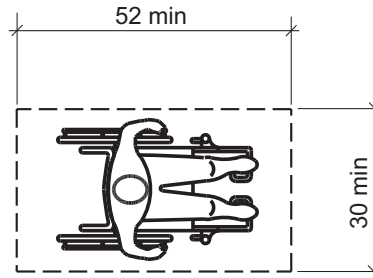
305.2 Floor surfaces. A *clear floor space* shall comply with *floor surfaces*.

Exception: *Running slopes* and *cross slopes* not steeper than one unit vertical in 48 units horizontal (2 percent slope) shall be permitted.

305.3 Size. The size of a *clear floor space* shall comply with Section 305.3.1, 305.3.2 or 305.3.3, as applicable.

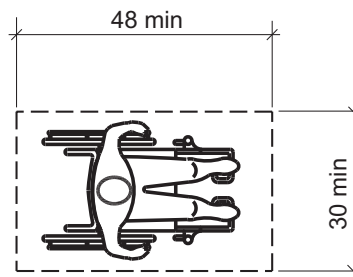
305.3.1 New buildings and facilities. In new buildings and *facilities*, the *clear floor space* shall be 52 inches (1320 mm) minimum in length and 30 inches (760 mm) minimum in width.

FIGURE 305.3.1—SIZE OF CLEAR FLOOR SPACE—NEW BUILDINGS



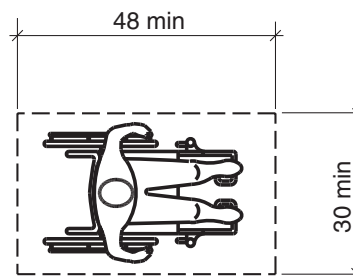
305.3.2 Existing buildings and facilities. In *existing buildings* and *facilities*, the *clear floor space* shall be 48 inches (1220 mm) minimum in length and 30 inches (760 mm) minimum in width.

FIGURE 305.3.2—SIZE OF CLEAR FLOOR SPACE—EXISTING BUILDINGS



305.3.3 Type B dwelling units and sleeping units. In new and *existing buildings* and *facilities*, the *clear floor space* within Type B *dwelling units* and *sleeping units* shall be 48 inches (1220 mm) minimum in length and 30 inches (760 mm) minimum in width.

FIGURE 305.3.3—TYPE B UNITS—SIZE OF CLEAR FLOOR SPACE



305.4 Knee and toe clearance. Unless otherwise specified, a *clear floor space* shall be permitted to include *knee and toe clearance* complying with Section 306.

305.5 Position. Unless otherwise specified, a *clear floor space* shall be positioned for either forward or parallel approach to an *element*.