

# ARTICLE 27. INDIANA VISITABILITY RULE FOR ONE AND TWO FAMILY DWELLINGS AND TOWNHOUSES

## Rule 1. Indiana Visitability Rule

### 675 IAC 27-1-1 Scope and enforcement

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 1. This rule applies only to the design and construction of one (1) or more visitability features in one (1) and two (2) family dwellings and Class 1 townhouses. In accordance with IC 22-13-4-7(g), the provisions of this rule are not mandatory unless a person contracts with a designer or a builder for construction of a visitability feature adopted in this rule in the new construction of a dwelling, in which case the designer and builder shall comply with the standards adopted in this rule for the design and construction of the visitability feature. The standards adopted under this rule:

(1) shall be enforced by a political subdivision that enforces the commission's standards with respect to Class 2 structures; and

(2) may not be enforced by the department of fire and building services.

*(Fire Prevention and Building Safety Commission; 675 IAC 27-1-1; filed Sep 12, 2005, 9:48 a.m.: 29 IR 504; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA)*

### 675 IAC 27-1-2 Definitions

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 2. The following definitions apply throughout this rule:

(1) "Accessible" means that a dwelling or portion of a dwelling can be approached, entered, and used by persons with a disability.

(2) "Accessible route" means a continuous unobstructed path connecting accessible elements and spaces in a building or within a site that can be negotiated by a person with a disability using a wheelchair. Interior accessible routes may include corridors, floors, and ramps. Exterior accessible routes may include parking access aisles, curb ramps, walks, and ramps.

(3) "Adaptable dwelling units" means dwelling units that include one (1) or more of any features of adaptable design specified in section 3 of this rule.

(4) "Bathroom" means a bathroom, which includes a water closet (toilet), lavatory (sink), and bathtub or shower. The term does not include single-fixture facilities or those with only a water closet and lavatory. The term includes a compartmented bathroom, which is:

(A) one in which the fixtures are distributed among interconnected rooms;

(B) considered a single unit; and

(C) subject to the requirements for bathrooms.

(5) "Building", for the purpose of this rule, means a structure, facility, or portion thereof that contains or serves a one (1) or two (2) family dwelling or townhouse.

(6) "Building entrance on an accessible route" means an accessible entrance to a building within the site where the dwelling is located that is connected by an accessible route to public streets or sidewalks.

(7) "Clear" means unobstructed.

(8) "Dwelling unit" means a single unit of residence for a household of one (1) or more persons. Buildings containing dwelling units include the following:

(A) Single-family dwellings.

(B) Duplexes.

(C) Class 1 townhouses.

(9) "Entrance" means any exterior access point to a building or portion of a building used by residents for the purpose of entering. For purposes of this rule, the term does not include a door used primarily as a service entrance, even if residents

without disabilities occasionally use that door to enter.

(10) "Environmental controls" means switches or devices that control or regulate:

- (A) lights;
- (B) temperature;
- (C) fuses;
- (D) fans;
- (E) doors;
- (F) security system features; or
- (G) other features.

(11) "Loft" means an intermediate level between the floor and ceiling of any story located within a room or rooms of a dwelling that does not contain the only:

- (A) bathing facility;
- (B) lavatory;
- (C) water closet;
- (D) living area;
- (E) eating area; or
- (F) cooking area;

within the dwelling unit.

(12) "Multistory dwelling unit" means a dwelling unit with finished living space located on one (1) floor and the floor or floors immediately above or below it.

(13) "New construction" means the construction of a new dwelling on a vacant lot. The term does not include an addition to or remodeling of an existing building.

(14) "Powder room" means a room with only a water closet (toilet) and lavatory (sink).

(15) "Single-story dwelling unit" means a dwelling unit with all finished living space located on one (1) floor.

(16) "Site" means a parcel of land bounded by a property line or a designated portion of a public right-of-way.

(17) "Townhouse" means a single-family dwelling unit:

- (A) constructed in a row of attached units separated by property lines; and
- (B) with open space on at least two (2) sides.

A townhouse is regulated by the Indiana Residential Code (675 IAC 14) as a Class 1 structure.

(18) "Visitability feature" means any design feature of a dwelling that allows a person with a mobility impairment to enter and comfortably stay in a dwelling for a duration of time. The term includes features that allow a person with a mobility impairment to:

- (A) get in and out through one (1) exterior door of the dwelling without any steps; and
- (B) pass through all main floor interior doors, including a bathroom.

(19) "Visitable" means that a visitability feature is provided to render a portion of a dwelling accessible.

*(Fire Prevention and Building Safety Commission; 675 IAC 27-1-2; filed Sep 12, 2005, 9:48 a.m.: 29 IR 504; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA)*

### **675 IAC 27-1-3 Design and construction requirements**

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 3. When a person contracts with a designer or builder, or both, for the construction of a dwelling with a visitability feature:

- (1) the feature shall be designed and constructed in such a manner that complies with the standard put forth in the section of this rule for that feature; and
- (2) the accessible route shall be designed and constructed in such a manner that:
  - (A) at least one (1) building entrance is on an accessible route;
  - (B) all doors on the accessible route shall be thirty-six (36) inches (ninety-one and forty-four hundredths (91.44)

centimeters) in width; and

(C) all dwelling units shall contain the features of adaptable design, such as:

- (i) an accessible route into and through the dwelling unit;
- (ii) light switches, electrical receptacle outlets, thermostats, and other environmental controls in accessible locations;
- (iii) reinforcements in bathroom walls to allow installation of grab bars around the toilet, tub, shower stall, and shower seat, where such facilities are provided;
- (iv) kitchens and bathrooms such that an individual in a wheelchair can maneuver about the space; and
- (v) all habitable rooms shall have a minimum size of seven (7) feet by ten (10) feet.

*(Fire Prevention and Building Safety Commission; 675 IAC 27-1-3; filed Sep 12, 2005, 9:48 a.m.: 29 IR 505; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA)*

#### **675 IAC 27-1-4 Entrances**

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 4. (a) Each building shall have at least one (1) building entrance on an exterior accessible route.

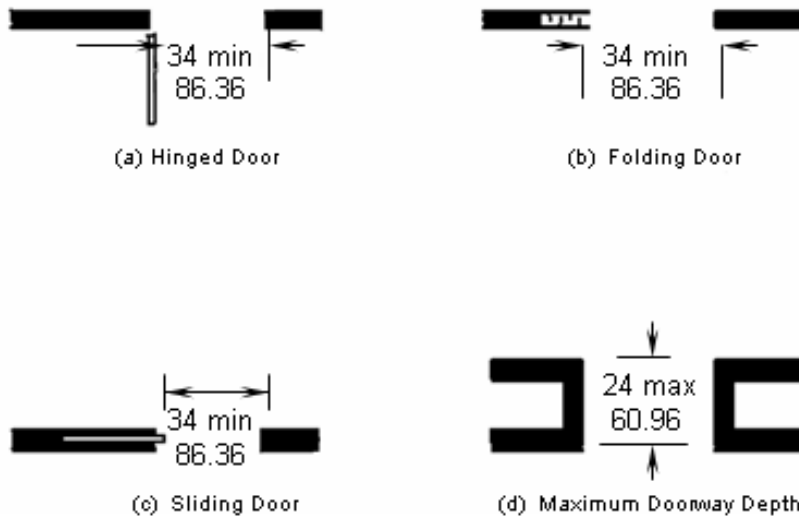
(b) Only one (1) entrance is required to be accessible to any one (1) ground floor of a building, except in cases where an individual dwelling unit has a separate exterior entrance. In every case, the accessible entrance shall be on an accessible route to the dwelling unit. *(Fire Prevention and Building Safety Commission; 675 IAC 27-1-4; filed Sep 12, 2005, 9:48 a.m.: 29 IR 505; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA)*

#### **675 IAC 27-1-5 Usable doors**

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 5. (a) Within the dwelling unit, a door intended for user passage through the unit having a clear opening of at least thirty-four (34) inches (eighty-six and thirty-six hundredths (86.36) centimeters) nominal width when the door is open ninety (90) degrees (one and fifty-seven hundredths (1.57) radians), measured between the face of the door and the stop, shall conform to section 3(2)(A) of this rule (see Figure 1(a), 1(b), and 1(c)). Openings more than twenty-four (24) inches (sixty and ninety-six hundredths (60.96) centimeters) in depth are not considered doorways (see Figure 1(d)). Figure 1(a) through 1(d) is as follows:



**Figure 1 Clear Doorway Width and Depth**

NOTE: A thirty-six (36) inch (ninety-one and forty-four hundredths (91.44) centimeters) door hung in the standard manner shall provide an acceptable, nominal thirty-four (34) inch (eighty-six and thirty-six hundredths (86.36) centimeters) clear opening. This door may be adapted to provide a wider opening by using offset hinges or by removing lower portions of the door stop, or both. Pocket or sliding doors are acceptable doors in dwelling units and have the added advantage of not impinging on clear floor space in small rooms.

(b) Handles, pulls, latches, locks, and other operable parts on accessible doors shall have a shape that is easy to grasp with one (1) hand and does not require tight grasping, pinching, or twisting of the wrist to operate. Such hardware shall be thirty-four (34) inches (eighty-six and thirty-six hundredths (86.36) centimeters) minimum and forty-eight (48) inches (one hundred twenty-one and ninety-two hundredths (121.92) centimeters) maximum above the floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides. An exception is that locks used only for security purposes and not used for normal operation are permitted in any location. (*Fire Prevention and Building Safety Commission; 675 IAC 27-1-5; filed Sep 12, 2005, 9:48 a.m.: 29 IR 506; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA*)

#### 675 IAC 27-1-6 Maneuvering clearances at doors

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 6. (a) Swinging doors shall have maneuvering clearances complying with TABLE V6.1 as follows:

**TABLE V6.1 MANEUVERING CLEARANCES FOR MANUAL SWINGING DOORS**

TYPE OF USE		MINIMUM CLEARANCES	
APPROACH DIRECTION	DOOR SIDE	PERPENDICULAR TO DOOR <sup>1</sup>	BEYOND LATCH PARALLEL TO DOOR
From front	Pull	60 inches (1,524 mm)	18 inches (457 mm)
From front	Push	48 inches (1,219 mm)	0 inches (0 mm) <sup>2</sup>
From hinge	Pull	60 inches (1,524 mm) 54 inches (1,372 mm) <sup>5</sup>	36 inches (914 mm) 42 inches (1,067 mm) <sup>5</sup>
From hinge	Push	42 inches (1,067 mm) <sup>3</sup>	54 inches (1,372 mm)
From latch	Pull	48 inches (1,219 mm) <sup>4</sup>	24 inches (610 mm)
From latch	Push	42 inches (1,067 mm) <sup>4</sup>	24 inches (610 mm)

<sup>1</sup>Maneuvering space shall include full width of doorway.

<sup>2</sup>Add 12 inches (305 mm) if closer and latch provided.

<sup>3</sup>Add 6 inches (152 mm) if closer and latch provided.

<sup>4</sup>Add 6 inches (152 mm) if closer provided.

<sup>5</sup>Alternative design.

(b) Sliding doors and folding doors shall have maneuvering clearances complying with Table V6.2 as follows:

TABLE V6.2 MANEUVERING CLEARANCES FOR SLIDING AND FOLDING DOORS

APPROACH DIRECTION	MINIMUM CLEARANCES	
	PERPENDICULAR TO DOOR <sup>1</sup>	PARALLEL TO DOOR
From front	48 inches (1,219 mm)	0 inches (0 mm)
From hinge side	42 inches (1,067 mm)	54 inches (1,372 mm) <sup>2</sup>
From latch side	42 inches (1,067 mm)	24 inches (610 mm) <sup>2</sup>

<sup>1</sup>Maneuvering space shall include full width of doorway.

<sup>2</sup>From the latch side toward the approach direction.

(c) Floor or ground surface within the maneuvering clearances shall have a slope not greater than 1:48 and shall comply with section 13 of this rule. (*Fire Prevention and Building Safety Commission; 675 IAC 27-1-6; filed Sep 12, 2005, 9:48 a.m.: 29 IR 506; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA*)

#### 675 IAC 27-1-7 Maneuvering clearances at doorways without doors

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 7. (a) Doorways without doors that are less than thirty-six (36) inches (nine hundred fourteen (914) millimeters) wide shall have maneuvering clearances complying with TABLE V7.1 as follows:

TABLE V7.1 MANEUVERING CLEARANCES FOR DOORWAYS WITHOUT DOORS

APPROACH DIRECTION	MINIMUM CLEARANCES
	PERPENDICULAR TO DOORWAY <sup>1</sup>
From front	48 inches (1,219 mm)
From side	42 inches (1,067 mm)

<sup>1</sup>Maneuvering space shall include full width of doorway.

(b) Where the plane of the doorway is recessed more than eight (8) inches (twenty and three-tenths (20.3) centimeters) from the plane of the wall, clearances for front approach shall be provided.

(c) Floor or ground surface within the maneuvering clearances shall have a slope not greater than 1:48 and shall comply with section 13 of this rule. (*Fire Prevention and Building Safety Commission; 675 IAC 27-1-7; filed Sep 12, 2005, 9:48 a.m.: 29 IR 507; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA*)

#### 675 IAC 27-1-8 Accessible route into and through the dwelling unit

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 8. (a) A minimum clear width of thirty-six (36) inches (ninety-one and forty-four hundredths (91.44) centimeters) shall be provided.

(b) In single-story dwelling units, changes in levels within the dwelling unit with heights greater than one-fourth (¼) inch through one-half (½) inch (greater than six and thirty-five hundredths (6.35) millimeters through twelve and seven-tenths (12.7) millimeters) shall be beveled with a slope no greater than 1:2. Except for design features, such as a loft or an area on a different

level within a room, for example, a sunken living room, changes in levels greater than one-half (½) inch shall be ramped or have other means of access. Where a single-story dwelling unit has special design features, all portions of the single-story unit, except the loft or the sunken or raised area, shall be on an accessible route. Additional requirements are as follows:

(1) In single-story dwelling units with lofts, all spaces other than the loft shall be on an accessible route.

(2) Design features, such as sunken or raised functional areas, shall not interrupt the accessible route through the remainder of the dwelling unit.

(c) Except as provided in subsection (e), thresholds at exterior doors, including sliding door tracks, shall be no higher than three-fourths (¾) inch (nineteen (19) millimeters). Thresholds and changes in level at these locations shall be beveled with a slope no greater than 1:2.

(d) Exterior deck, patio, or balcony surfaces shall not be more than one-half (½) inch (twelve and seven-tenths (12.7) millimeters) below the floor level of the interior of the dwelling unit unless they are constructed of impervious material such as concrete, brick, or flagstone. In such case, the surface shall not be more than four (4) inches (ten and two-tenths (10.2) centimeters) below the floor level of the interior of the dwelling unit.

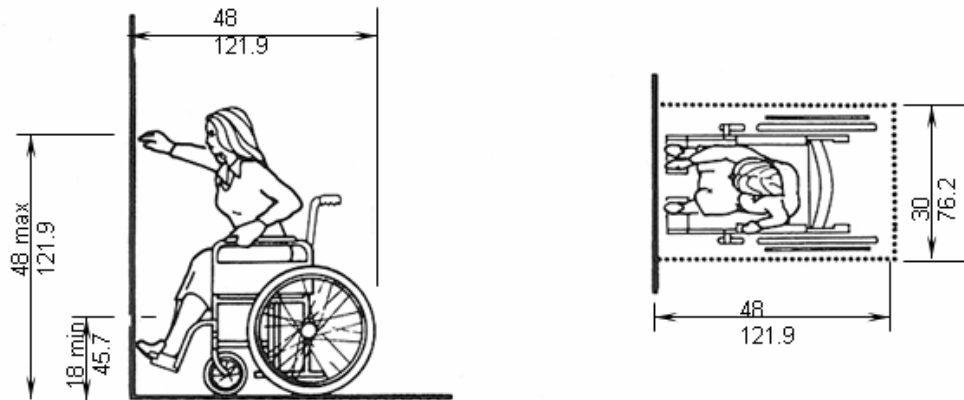
(e) At the primary entry door to the dwelling unit with direct exterior access, outside landing surfaces constructed of impervious materials, such as concrete, brick, or flagstone, shall not be more than one-half (½) inch (twelve and seven-tenths (12.7) millimeters) below the floor level of the interior of the dwelling unit. The finished surface of this area that is located immediately outside the entry may be sloped, up to one-eighth (⅛) inch per foot (ten and forty-two hundredths (10.42) millimeters per meter) for drainage. (*Fire Prevention and Building Safety Commission; 675 IAC 27-1-8; filed Sep 12, 2005, 9:48 a.m.: 29 IR 507; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA*)

**675 IAC 27-1-9 Light switches, electrical receptacle outlets, thermostats, and other environmental controls in accessible locations**

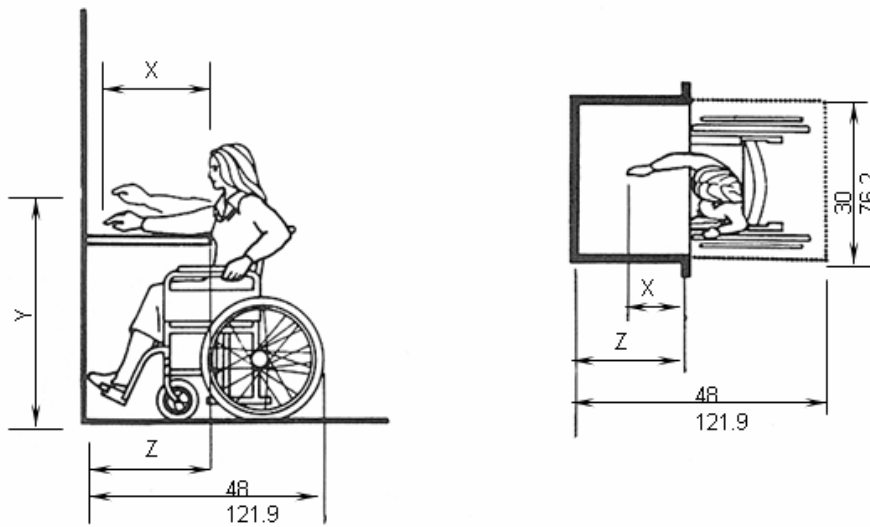
Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 9. Light switches, electrical receptacle outlets, thermostats, and other environmental controls shall be located no higher than forty-eight (48) inches (one hundred twenty-one and nine-tenths (121.9) centimeters) and no lower than eighteen (18) inches (forty-five and seventy-two hundredths (45.72) centimeters) above the floor. If the reach is over an obstruction, for example, an overhanging shelf twenty-four (24) inches (sixty and ninety-six hundredths (60.96) centimeters) in depth, the maximum height is reduced to forty-four (44) inches (one hundred eleven and seventy-six hundredths (111.76) centimeters) for forward approach, or forty-six (46) inches (one hundred sixteen and eighty-four hundredths (116.84) centimeters) for side approach, provided the obstruction, for example, a kitchen base cabinet, is no more than twenty-four (24) inches (sixty and ninety-six hundredths (60.96) centimeters) in depth. The depth of obstructions shall not exceed twenty-five (25) inches (sixty-three and five-tenths (63.5) centimeters) from the wall beneath a control (see Figure 2). Figure 2 is as follows:

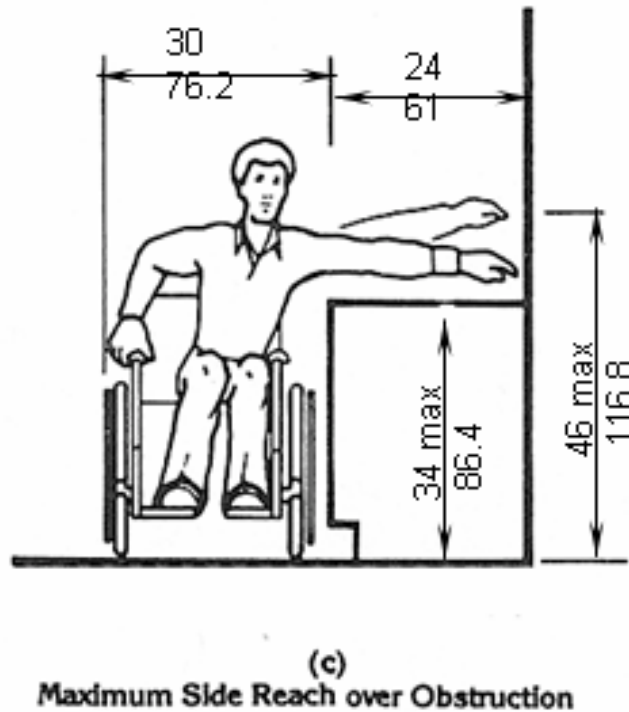


(a)  
High Forward Reach Limit



NOTE: x shall be  $\leq 25$  in (635 mm); z shall be  $\geq x$ . When  $x < 20$  in (510 mm), then y shall be 48 in (1220 mm) maximum. When x is 20 to 25 in (510 to 635 mm), then y shall be 44 in (1120 mm) maximum.

(b)  
Maximum Forward Reach over an Obstruction



**Figure 2 Reach Ranges**

*(Fire Prevention and Building Safety Commission; 675 IAC 27-1-9; filed Sep 12, 2005, 9:48 a.m.: 29 IR 508; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA)*

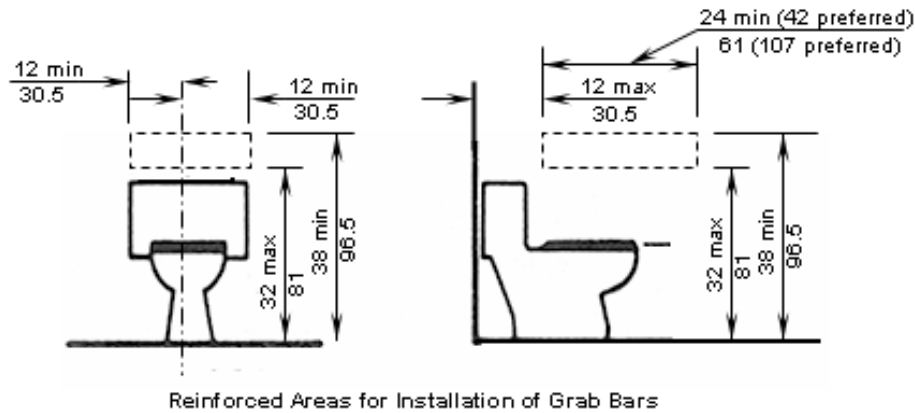
**675 IAC 27-1-10 Reinforced walls for grab bars**

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

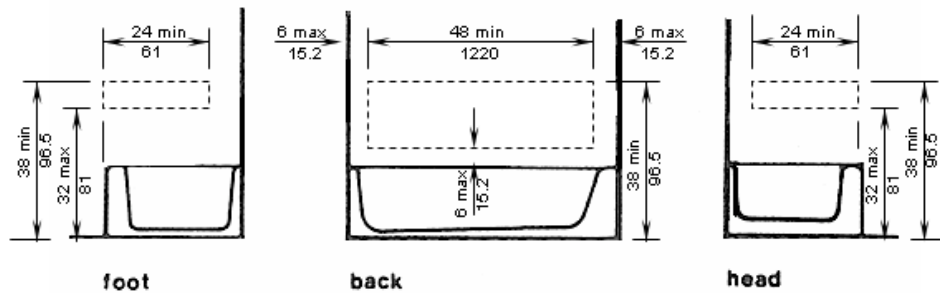
Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 10. (a) Reinforced bathroom walls to allow later installation of grab bars around the toilet, tub, shower stall, and shower seat, where such facilities are provided, shall conform to section 3(2)(C)(iii) of this rule (see Figures 3, 4, and 5). Where the toilet is not placed adjacent to a side wall, the bathroom shall comply if provision is made for installation of floor mounted foldaway or similar alternative grab bars. Where the powder room is the only toilet facility located on an accessible level of a multistory dwelling unit, it shall comply with this requirement for reinforced walls for grab bars. Figures 3, 4, and 5 are as follows:

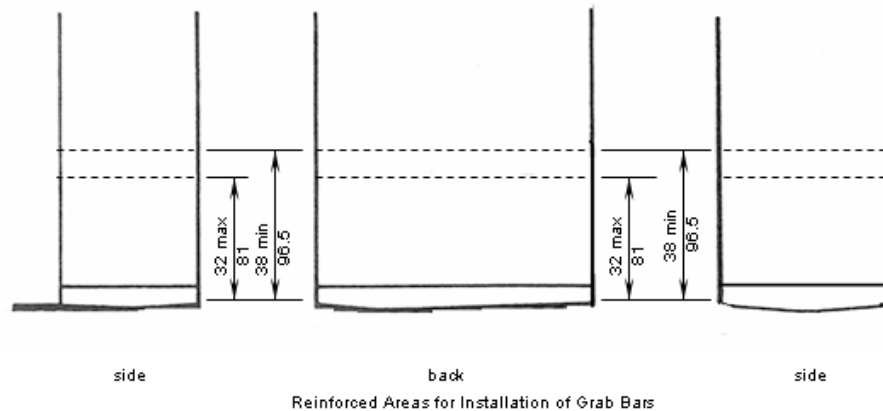




**Figure 3 Water Closets in Adaptable Bathrooms**



**Figure 4 Bathtubs in Adaptable Bathrooms**



**Figure 5 Showers in Adaptable Bathrooms**

NOTE: Installation of reinforcement for grab bars for bathtubs or showers is not limited by the illustrative figures. Reinforced areas for floor-mounted grab bars is [sic., are] acceptable.

(b) Reinforcement for grab bars may be provided in a variety of ways, for example, by plywood or wood blocking, so long as the necessary reinforcement is placed to permit later installation of grab bars in appropriate locations. (*Fire Prevention and Building Safety Commission; 675 IAC 27-1-10; filed Sep 12, 2005, 9:48 a.m.: 29 IR 510; readopted filed Aug 4, 2011, 8:35 a.m.:*

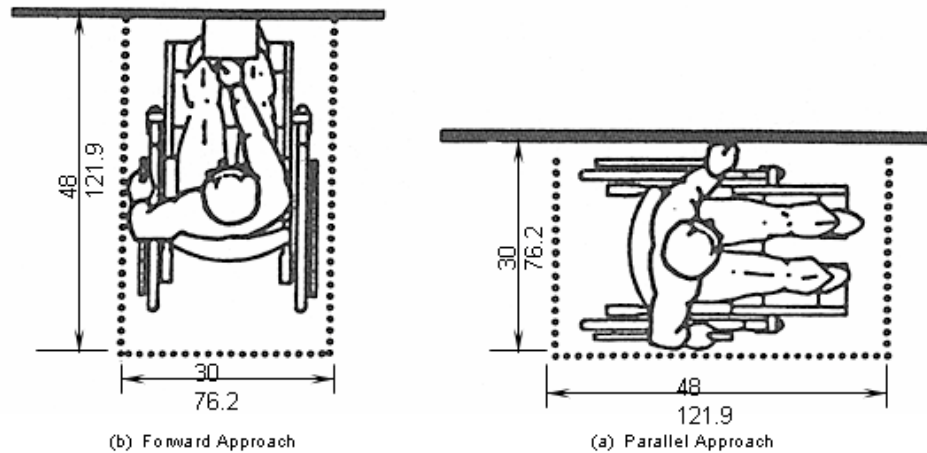
20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA)

**675 IAC 27-1-11 Visitable kitchens**

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-2-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 11. (a) A clear floor space at least thirty (30) inches by forty-eight (48) inches (seventy-six and two-tenths (76.2) centimeters by one hundred twenty-one and nine-tenths (121.9) centimeters) that allows a parallel approach by a person in a wheelchair shall be provided at the range or cooktop and sink, and either a parallel or forward approach shall be provided at the oven, dishwasher, refrigerator/freezer, or trash compactor (see Figure 6). Figure 6 is as follows:



**Figure 6 Minimum Clear Floor Space for Wheelchairs**

(b) Clearance between counters and all opposing base cabinets, countertops, appliances, or walls shall be at least forty (40) inches (one hundred one and six-tenths (101.6) centimeters).

(c) In U-shaped kitchens with a sink, range, or cooktop at the base of the "U", a sixty (60) inch (one hundred fifty-two and four-tenths (152.4) centimeters) diameter turning space shall be provided to allow parallel approach, or base cabinets shall be removable at that location to allow knee space for a forward approach. (*Fire Prevention and Building Safety Commission; 675 IAC 27-1-11; filed Sep 12, 2005, 9:48 a.m.: 29 IR 511; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA*)

**675 IAC 27-1-12 Visitable bathrooms**

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 12. (a) Either all bathrooms in the dwelling unit shall comply with subsection (b) or at least one (1) bathroom in the dwelling unit shall comply with subsection (b) and all other bathrooms and powder rooms within the dwelling unit shall be on an accessible route with usable entry doors in accordance with TABLE V6.1 in section 6(a) of this rule or TABLE V6.2 in section 6(b) of this rule.

(b) Bathrooms that have reinforced walls for grab bars (see section 10 of this rule) shall conform to section 3(2)(B)(iii) [*sic.*] of this rule as follows:

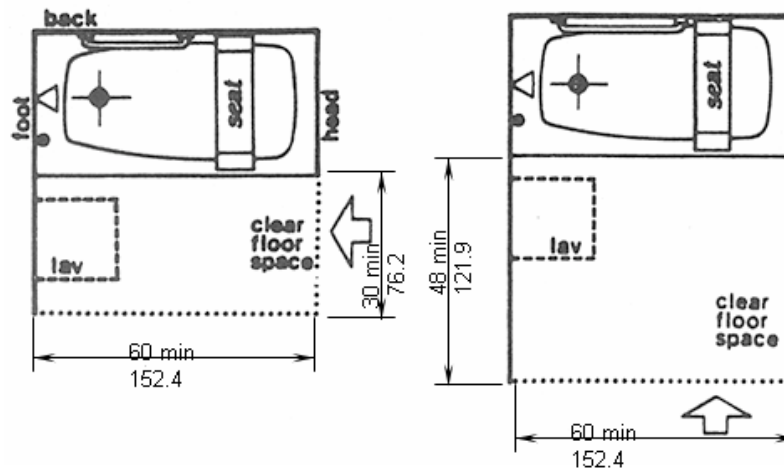
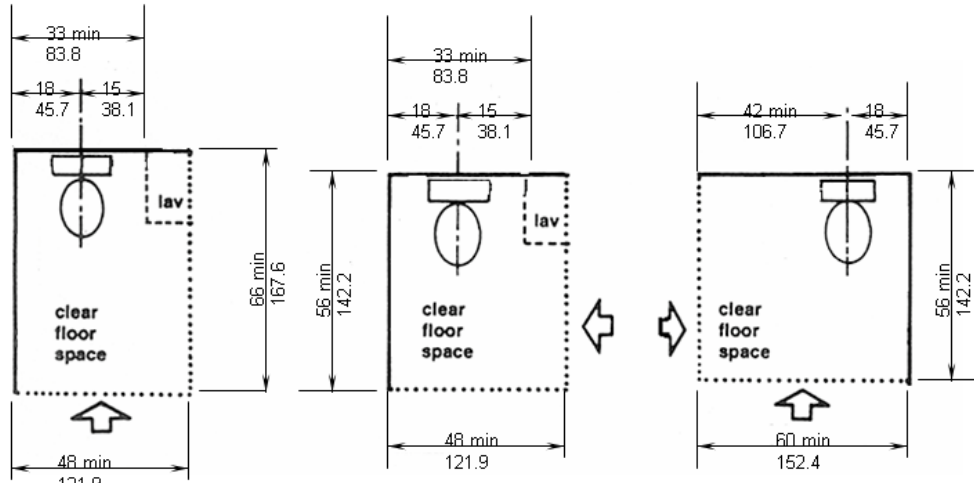
(1) Sufficient maneuvering space shall be provided within the bathroom for a person using a wheelchair or other mobility aid to:

- (A) enter and close the door;
- (B) use the fixtures;
- (C) reopen the door; and

(D) exit.

Doors may swing into the clear floor space provided at any fixture if the maneuvering space is provided. Maneuvering spaces may include any knee space or toe space available below bathroom fixtures.

(2) Clear floor space shall be provided at fixtures as shown in Figures 7(a), 7(b), 7(c), and 7(d). Clear floor space at fixtures may overlap. Figure 7(a) through 7(d) is as follows:



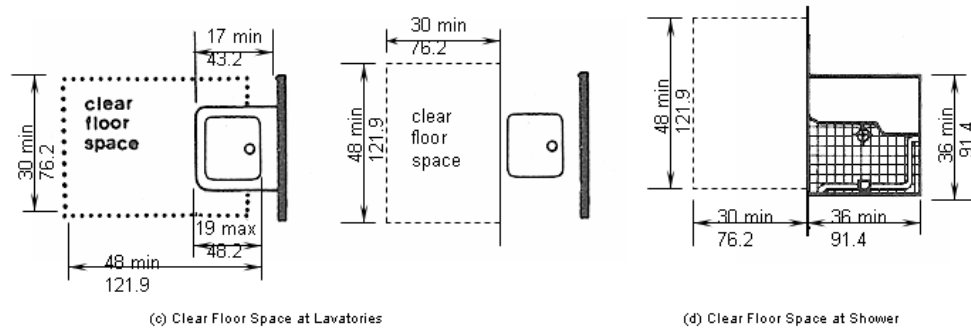


Figure 7 Clear Floor Space for Adaptable Bathrooms

(3) If the shower stall is the only bathing facility provided in the dwelling unit, the shower stall shall measure at least thirty-six (36) inches by thirty-six (36) inches (ninety-one and forty-four hundredths (91.44) centimeters by ninety-one and forty-four hundredths (91.44) centimeters). Cabinets under lavatories are acceptable provided the bathroom has space to allow a parallel approach by a person in a wheelchair. If a parallel approach is not possible within the space, any cabinets provided shall be removable to afford the necessary knee clearance for forward approach.

(4) Where the door swings into the bathroom, there shall be a clear space approximately thirty (30) inches by forty-eight (48) inches (seventy-six and two-tenths (76.2) centimeters by one hundred twenty-one and ninety-two hundredths (121.92) centimeters) within the room to position a wheelchair or other mobility aid clear of the path of the door as it is closed and to permit use of fixtures. This clear space may include any knee space and toe space available below bathroom fixtures.

(5) Where the door swings out, a clear space shall be provided within the bathroom for a person using a wheelchair or other mobility aid to:

- (A) position the wheelchair such that the person is allowed use of the fixtures; and
- (B) reopen the door to exit.

(6) When:

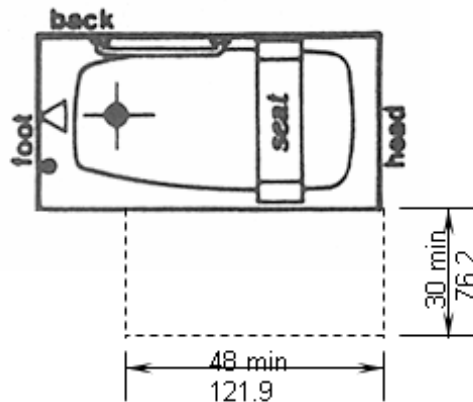
- (A) both tub and shower fixtures; or
- (B) two (2) or more lavatories;

are provided in a bathroom, at least one (1) shall be made accessible.

(7) Toilets shall be located within bathrooms in a manner that permits a grab bar to be installed on one (1) side of the fixture. In locations where toilets are adjacent to walls or bathtubs, the centerline of the fixture shall be at least eighteen (18) inches (forty-five and seventy-two hundredths (45.72) centimeters) from the wall or bathtub. The other (nongrab bar) side of the toilet fixture shall be at least fifteen (15) inches (thirty-eight and one-tenth (38.1) centimeters) from the finished surface of adjoining walls, vanities, or the edge of a lavatory (see Figure 7(a) in subdivision (2)).

(8) Vanities and lavatories shall be installed with the centerline of the fixture at least fifteen (15) inches (thirty-eight and one-tenth (38.1) centimeters) horizontally from an adjoining wall or fixture. The top of the fixture rim shall not exceed thirty-four (34) inches (eighty-six and thirty-six hundredths (86.36) centimeters) above the finished floor. If knee space is provided below the vanity, the bottom of the apron shall be at least twenty-seven (27) inches (sixty-eight and fifty-eight hundredths (68.58) centimeters) above the floor. If provided, full knee space (for front approach) shall be at least seventeen (17) inches (forty-three and eighteen-hundredths (43.18) centimeters) deep (see Figure 7(c) in subdivision (2)).

(9) For bathtubs and tub/showers located in the bathroom, a clear access aisle adjacent to the bathtub or tub/shower shall be provided that shall be at least thirty (30) inches (seventy-six and two-tenths (76.2) centimeters) wide and extend forty-eight (48) inches (one hundred twenty-one and ninety-two hundredths (121.92) centimeters) (measured from the head of the bathtub or tub/shower) (see Figure 8). Figure 8 is as follows:



**Figure 8 Alternative Specification – Clear Floor Space at Bathtub**

(10) Stall showers in the bathroom may be of any size or configuration. A minimum clear floor space measuring at least thirty (30) inches (seventy-six and two-tenths (76.2) centimeters) by forty-eight (48) inches (one hundred twenty-one and ninety-two hundredths (121.92) centimeters) shall be available outside the stall (see Figure 7(d) in subdivision (2)). If the shower stall is the only bathing facility provided in the dwelling unit, or on the accessible level of a multistory unit, and it measures a nominal thirty-six (36) inches by thirty-six (36) inches (ninety-one and forty-four hundredths (91.44) centimeters by ninety-one and forty-four hundredths (91.44) centimeters) or smaller, the shower stall shall have reinforcement to allow for installation of an optional hung bench seat.

*(Fire Prevention and Building Safety Commission; 675 IAC 27-1-12; filed Sep 12, 2005, 9:48 a.m.: 29 IR 511; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA)*

#### **675 IAC 27-1-13 Floor or ground surfaces**

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-23-4-7

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 13. (a) Floor or ground surfaces shall:

- (1) be stable, firm, and slip-resistant; and
- (2) comply with this section.
- (b) Carpet or carpet tile shall:
  - (1) be securely attached;
  - (2) have a firm cushion, pad, or backing or no cushion or pad; and
  - (3) have a level loop, textured loop, level cut pile, or level cut/uncut pile texture.

Pile height shall be one-half ( $\frac{1}{2}$ ) inch (twelve and seven-tenths (12.7) millimeters) maximum. Exposed edges of carpet shall be fastened to floor or ground surfaces and shall have trim along the entire length of the exposed edge. Carpet edge trim shall comply with subsection (d).

(c) Openings in floor or ground surfaces shall be of a size that does not permit the passage of a one-half ( $\frac{1}{2}$ ) inch (twelve and seven-tenths (12.7) millimeters) diameter sphere. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

(d) The following change in level requirements for floor or ground surfaces are applicable:

- (1) Vertical changes in level of one-fourth ( $\frac{1}{4}$ ) inch (six and thirty-five hundredths (6.35) millimeters) maximum shall be permitted.
- (2) Changes in level greater than one-fourth ( $\frac{1}{4}$ ) inch (six and thirty-five hundredths (6.35) millimeters) through one-half ( $\frac{1}{2}$ ) inch (twelve and seven-tenths (12.7) millimeters) maximum shall be beveled with a slope not greater than 1:2.
- (3) Changes in level greater than one-half ( $\frac{1}{2}$ ) inch (twelve and seven-tenths (12.7) millimeters) shall be ramped and shall comply with section 14(b) of this rule.

(Fire Prevention and Building Safety Commission; 675 IAC 27-1-13; filed Sep 12, 2005, 9:48 a.m.: 29 IR 514; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA)

**675 IAC 27-1-14 Exterior accessible routes**

Authority: IC 22-13-2-2; IC 22-13-2-13; IC 22-13-4-7

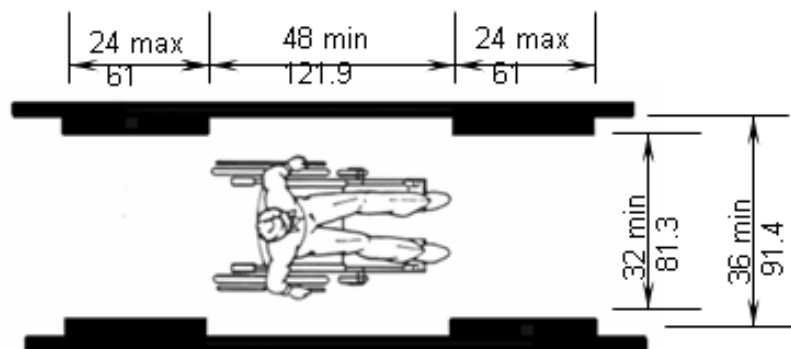
Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 14. (a) Exterior accessible routes shall consist of one (1) or more of the following components:

- (1) Walking surfaces with a slope not greater than 1:20.
- (2) Doorways.
- (3) Ramps.
- (4) Curb ramps.
- (5) Elevators.
- (6) Wheelchair (platform) lifts.

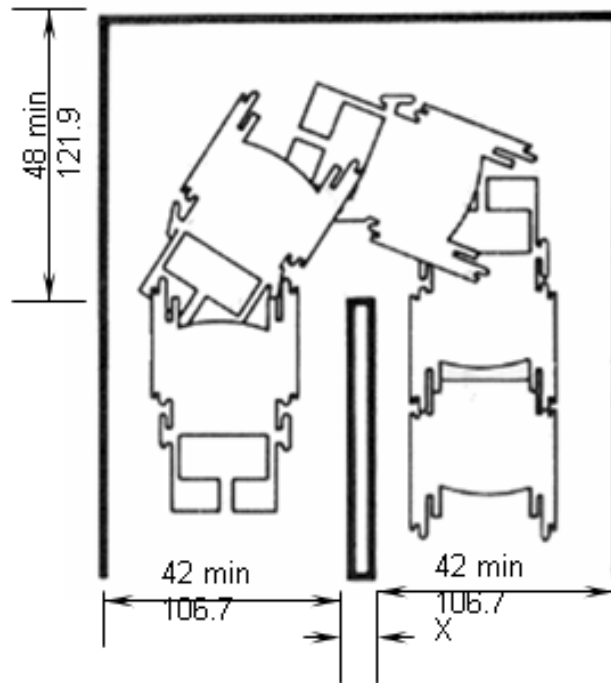
(b) All components of an exterior accessible route shall comply with the applicable portions of this rule and as follows:

- (1) Walking surfaces that are a part of an exterior accessible route shall comply with section 13 of this rule.
- (2) Floor or ground surfaces shall comply with section 13 of this rule.
- (3) The running slope of walking surfaces shall not be greater than 1:20. The cross slope of a walking surface shall not be greater than 1:48.
- (4) Changes in level shall comply with section 13 of this rule.
- (5) The clear width of an exterior accessible route shall be thirty-six (36) inches (ninety-one and forty-four hundredths (91.44) centimeters) minimum. Clear width may be reduced to thirty-two (32) inches (eighty-one and twenty-eight hundredths (81.28) centimeters) for a twenty-four (24) inch (six and ninety-six hundredths (6.96) centimeters) maximum segment, and segments shall be separated by no less than forty-eight (48) inches (one hundred twenty-one and ninety-two hundredths (121.92) centimeters) of thirty-six (36) inch (ninety-one and forty-four hundredths (91.44) centimeters) width (see Figure 9). Figure 9 is as follows:



**Figure 9 Clear Width of an Accessible Route**

- (6) Where an exterior accessible route makes a one hundred eighty (180) degree (three and one hundred forty-two thousandths (3.142) radians) turn around an object that is less than forty-eight (48) inches (one hundred twenty-one and ninety-two hundredths (121.92) centimeters) wide, clear widths shall be forty-two (42) inches (one hundred six and sixty-eight hundredths (106.68) centimeters) minimum approaching the turn; forty-eight (48) inches (one hundred twenty-one and ninety-two hundredths (121.92) centimeters) minimum during the turn; and forty-two (42) inches (one hundred six and sixty-eight hundredths (106.68) centimeters) minimum leaving the turn (see Figure 10). Figure 10 is as follows:



NOTE: Dimensions shown apply when  $x < 48$  in.

**Figure 10 Clear Width at Turn**

(c) Walking surfaces on exterior accessible routes with a running slope greater than 1:20 are ramps and shall comply with the following:

- (1) Ramps shall have a running slope not greater than 1:12.
- (2) The cross slope of ramp runs shall not be greater than 1:48.
- (3) Floor or ground surfaces of ramps shall comply with section 13 of this rule.
- (4) The clear width of a ramp shall be thirty-six (36) inches (ninety-one and forty-four hundredths (91.44) centimeters) minimum.
- (5) The rise for any ramp run shall be thirty (30) inches (seventy-six and two-tenths (76.2) centimeters) maximum.
- (d) Ramps shall have landings at the bottom and top of each run. Landings shall comply with the following:
  - (1) Landings shall have a slope not greater than 1:48 and shall comply with section 13 of this rule.
  - (2) The clear width of landings shall be at least as wide as the widest ramp run leading to the landing.
  - (3) The landing length shall be sixty (60) inches (one hundred fifty-two and four-tenths (152.4) centimeters) minimum clear.
  - (4) Ramps that change direction at landings shall have a sixty (60) inch by sixty (60) inch (one hundred fifty-two and four-tenths (152.4) centimeters by one hundred fifty-two and four-tenths (152.4) centimeters) minimum landing at the change in direction.
  - (5) Where doorways are adjacent to a ramp landing, maneuvering clearances required by section 6 of this rule shall be permitted to overlap the landing area.
  - (6) Landings with a rise greater than six (6) inches (fifteen and twenty-four hundredths (15.24) centimeters) shall have handrails complying with subsection (f). Handrails shall not reduce the required clearances of a ramp run or landing.
  - (7) Edge protection complying with subdivision (9) shall be provided on each side of ramp runs and on each side of ramp landings. Exceptions are as follows:
    - (A) Ramps not required to have handrails where sides complying with subsection (e)(3) are provided.
    - (B) Sides of ramp landings serving an adjoining ramp run or stairway.

- (C) Sides of ramp landings having a vertical drop-off of one-half ( $\frac{1}{2}$ ) inch (twelve and seven-tenths (12.7) millimeters) maximum within ten (10) inches (twenty-five and four-tenths (25.4) centimeters) horizontally of the minimum landing area.
- (8) The floor or ground surface of the ramp run or landing shall extend a minimum of twelve (12) inches (thirty and forty-eight hundredths (30.48) centimeters) beyond the inside face of a railing complying with subsection (f).
- (9) A curb or barrier shall be provided that prevents the passage of a four (4) inch (ten and sixteen-hundredths (10.16) centimeters) diameter sphere below a height of four (4) inches (ten and sixteen-hundredths (10.16) centimeters).
- (10) Outdoor ramps and approaches to ramps shall be designed so that water will not accumulate on walking surfaces.
- (e) Curb ramps shall comply with the following:
- (1) Slopes of curb ramps shall comply with this section.
- (2) Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp or accessible route shall not be greater than 1:20. Transitions from ramps to walks, gutters, or streets shall be at the same level.
- (3) Where pedestrians must walk across a curb ramp, the ramp shall have flared sides. The slope of flares shall not be greater than 1:10. Where the width of the walking surface at the top of the ramp and parallel to the run of the ramp is less than forty-eight (48) inches (one hundred twenty-one and ninety-two hundredths (121.92) centimeters), the flared sides shall have a slope not greater than 1:12. Curb ramps with returned curbs shall be permitted where pedestrians would not normally walk across the ramp.
- (4) Curb ramps shall be thirty-six (36) inches (ninety-one and forty-four hundredths (91.44) centimeters) wide minimum, exclusive of flared sides.
- (5) Floor or ground surfaces of curb ramps shall comply with section 13 of this rule.
- (f) Handrails shall be provided on both sides of ramps and shall comply with the following:
- (1) Handrails shall be continuous within the full length of each ramp run. Inside handrails on switchback or dogleg ramps shall be continuous between runs. Other handrails shall comply with subdivision (9).
- (2) The top of gripping surfaces of handrails shall be thirty-four (34) inches (eighty-six and thirty-six hundredths (86.36) centimeters) minimum and thirty-eight (38) inches (ninety-six and fifty-two hundredths (96.52) centimeters) maximum vertically above ramp surfaces. Handrails shall be at a consistent height above ramp surfaces.
- (3) Clear space between the handrail and wall shall be one and one-half ( $1\frac{1}{2}$ ) inches (three and eighty-one hundredths (3.81) centimeters) minimum.
- (4) Gripping surfaces shall be continuous without interruption by newel posts, other construction elements, or obstructions. An exception is that handrail brackets or balusters attached to the bottom surface of the handrail shall not be considered obstructions provided they comply with the following criteria:
- (A) Not more than twenty percent (20%) of the handrail length is obstructed.
- (B) Horizontal projections beyond the sides of the handrail occur two and one-half ( $2\frac{1}{2}$ ) inches (six and thirty-five hundredths (6.35) centimeters) minimum below the bottom of the handrail.
- (C) Edges have a one-eighth ( $\frac{1}{8}$ ) inch (three and eighteen-hundredths (3.18) millimeters) minimum radius.
- (5) Handrails shall:
- (A) have a circular cross section with an outside diameter of one and one-fourth ( $1\frac{1}{4}$ ) inches (thirty-one and seventy-five hundredths (31.75) millimeters) minimum and two (2) inches (fifty and eight-tenths (50.8) millimeters) maximum; or
- (B) provide equivalent graspability complying with subdivision (4).
- (6) Handrails with other shapes shall be permitted provided:
- (A) they have a perimeter dimension of four (4) inches (ten and sixteen-hundredths (10.16) centimeters) minimum and six and one-fourth ( $6\frac{1}{4}$ ) inches (fifteen and eight hundred seventy-five thousandths (15.875) centimeters) maximum; and
- (B) their largest cross section dimension is two and one-fourth ( $2\frac{1}{4}$ ) inches (five and seven hundred fifteen-thousandths (5.715) centimeters) maximum.
- (7) Handrails, and any wall or other surfaces adjacent to them, shall be free of any sharp or abrasive elements. Edges shall have a one-eighth ( $\frac{1}{8}$ ) inch (three and eighteen-hundredths (3.18) millimeters) minimum radius.
- (8) Handrails shall not rotate within their fittings.



(9) Ramp handrails shall extend horizontally twelve (12) inches (thirty and forty-eight hundredths (30.48) centimeters) minimum beyond the top and bottom of ramp runs. Such extension shall return to a wall, a guard, or the walking surface or shall be continuous to the handrail of an adjacent ramp run. An exception is continuous handrails at the inside turn of ramps.

*(Fire Prevention and Building Safety Commission; 675 IAC 27-1-14; filed Sep 12, 2005, 9:48 a.m.: 29 IR 514; readopted filed Aug 4, 2011, 8:35 a.m.: 20110831-IR-675110254RFA; readopted filed Mar 10, 2017, 9:37 a.m.: 20170405-IR-675170005RFA)*

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