

4. Elevated levels in Group U not open to the general public.
5. Nonoccupied roofs that are not required to have *stairway* access in accordance with Section 1011.12.1.
6. Where permitted to access equipment and appliances in accordance with Section 306.5 of the *International Mechanical Code*.

## SECTION 1012 RAMPS

**1012.1 Scope.** The provisions of this section shall apply to ramps used as a component of a *means of egress*.

### Exceptions:

1. Ramped *aisles* within assembly rooms or spaces shall comply with the provisions in Section 1029.
2. Curb ramps shall comply with ICC A117.1.
3. Vehicle ramps in parking garages for pedestrian *exit access* shall not be required to comply with Sections 1012.3 through 1012.10 where they are not an *accessible route* serving *accessible* parking spaces, other required *accessible* elements or part of an *accessible means of egress*.

**1012.2 Slope.** Ramps used as part of a *means of egress* shall have a running slope not steeper than one unit vertical in 12 units horizontal (8-percent slope). The slope of other pedestrian *ramps* shall not be steeper than one unit vertical in eight units horizontal (12.5-percent slope).

**1012.3 Cross slope.** The slope measured perpendicular to the direction of travel of a *ramp* shall not be steeper than one unit vertical in 48 units horizontal (2-percent slope).

**1012.4 Vertical rise.** The rise for any *ramp* run shall be 30 inches (762 mm) maximum.

**1012.5 Minimum dimensions.** The minimum dimensions of *means of egress ramps* shall comply with Sections 1012.5.1 through 1012.5.3.

**1012.5.1 Width and capacity.** The minimum width and required capacity of a *means of egress ramp* shall be not less than that required for *corridors* by Section 1020.2. The clear width of a *ramp* between *handrails*, if provided, or other permissible projections shall be 36 inches (914 mm) minimum.

**1012.5.2 Headroom.** The minimum headroom in all parts of the *means of egress ramp* shall be not less than 80 inches (2032 mm) above the finished floor of the ramp run and any intermediate landings. The minimum clearance shall be maintained for the full width of the *ramp* and landing.

**1012.5.3 Restrictions.** *Means of egress ramps* shall not reduce in width in the direction of egress travel. Projections into the required *ramp* and landing width are prohibited. Doors opening onto a landing shall not reduce the clear width to less than 42 inches (1067 mm).

**1012.6 Landings.** Ramps shall have landings at the bottom and top of each *ramp*, points of turning, entrance, exits and at

doors. Landings shall comply with Sections 1012.6.1 through 1012.6.5.

**1012.6.1 Slope.** Landings shall have a slope not steeper than one unit vertical in 48 units horizontal (2-percent slope) in any direction. Changes in level are not permitted.

**1012.6.2 Width.** The landing width shall be not less than the width of the widest *ramp* run adjoining the landing.

**1012.6.3 Length.** The landing length shall be 60 inches (1525 mm) minimum.

### Exceptions:

1. In Group R-2 and R-3 individual *dwelling* and *sleeping units* that are not required to be *Accessible units*, *Type A units* or *Type B units* in accordance with Section 1107, landings are permitted to be 36 inches (914 mm) minimum.
2. Where the *ramp* is not a part of an *accessible route*, the length of the landing shall not be required to be more than 48 inches (1220 mm) in the direction of travel.

**1012.6.4 Change in direction.** Where changes in direction of travel occur at landings provided between *ramp* runs, the landing shall be 60 inches by 60 inches (1524 mm by 1524 mm) minimum.

**Exception:** In Group R-2 and R-3 individual *dwelling* or *sleeping units* that are not required to be *Accessible units*, *Type A units* or *Type B units* in accordance with Section 1107, landings are permitted to be 36 inches by 36 inches (914 mm by 914 mm) minimum.

**1012.6.5 Doorways.** Where doorways are located adjacent to a *ramp* landing, maneuvering clearances required by ICC A117.1 are permitted to overlap the required landing area.

**1012.7 Ramp construction.** Ramps shall be built of materials consistent with the types permitted for the type of construction of the building, except that wood *handrails* shall be permitted for all types of construction.

**1012.7.1 Ramp surface.** The surface of *ramps* shall be of slip-resistant materials that are securely attached.

**1012.7.2 Outdoor conditions.** Outdoor *ramps* and outdoor approaches to *ramps* shall be designed so that water will not accumulate on walking surfaces.

**1012.8 Handrails.** Ramps with a rise greater than 6 inches (152 mm) shall have *handrails* on both sides. *Handrails* shall comply with Section 1014.

**1012.9 Guards.** Guards shall be provided where required by Section 1015 and shall be constructed in accordance with Section 1015.

**1012.10 Edge protection.** Edge protection complying with Section 1012.10.1 or 1012.10.2 shall be provided on each side of *ramp* runs and at each side of *ramp* landings.

### Exceptions:

1. Edge protection is not required on *ramps* that are not required to have *handrails*, provided they have flared sides that comply with the ICC A117.1 curb ramp provisions.