

HANDICAPPED RAMP – COMMERCIAL

1003.3.4 Ramps. Ramps used as a component of a means of egress shall conform to the provisions of Sections 1003.3.4.1 through 1003.3.4.9.

Exceptions:

1. Ramped aisles within assembly rooms or spaces shall conform to the provisions in Section 1008.9.
2. Curb ramps shall comply with ICC A117.1.

1003.3.4.1 Slope. Ramps used as a 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 ramps shall not be steeper than one unit vertical in eight units horizontal (12.5-percent slope).

Exception: Aisle ramp slope in occupancies of Group A shall comply with Section 1008.9.

1003.3.4.2 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).

1003.3.4.3. Rise. The rise for any ramp shall be 30 inches (762 mm) maximum.

1003.3.4.4. Minimum dimensions. The minimum dimensions of means of egress ramps shall comply with Section 1003.3.4.4.1 through 1003.3.4.4.3.

1003.3.4.4.1 Width. The minimum width of a means of egress ramp shall not be less than that required for corridors by Section. 1004.3.2.2. The clear width of a ramp and the clear width between handrails, if provided, shall be 36 inches (914 mm) minimum.

1003.3.4.4.2 Headroom. The minimum headroom in all parts of the means of egress ramp shall not be less than 80 inches (2032 mm).

1003.3.4.4.3 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).

1003.3.4.5 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 1003.3.4.5.1 through 1003.3.4.5.5.

1003.3.4.5.1 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.

1003.3.4.5.2 Width. The landing shall be at least as wide as the widest ramp run adjoining the landing.

1003.3.4.5.3 Length. The landing length shall be 60 inches (1525 mm) minimum.

Exception: Landings in nonaccessible Group R-2 and R-3 individual dwellings units, as applicable in Section 101.2, are permitted to be 36 inches (914 mm) minimum.

1003.3.4.5.4 Change in direction. Where changes in direction of travel occur at landings provided between ramp runs, the landing shall be 60 inches (1524 mm) minimum by 60 inches (1524 mm) minimum.

Exception: Landings in nonaccessible Group R-2 and R-3 individual dwellings units, as applicable in Section 101.2, are permitted to be 36 inches (914 mm) by 36 inches (914 mm) minimum.

1003.3.4.5.5 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.

1003.3.4.6 Ramp construction. All 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. Ramps used as an exit shall conform to the applicable requirements of Sections 1005.3.2. and 1005.3.4 for vertical exit enclosures.

1003.3.4.6.1 Ramp surface. The surface of ramps shall be of slip-resistant materials that are securely attached.

1003.3.4.6.2 Outdoor conditions. Outdoor ramps and outdoor approaches to ramps shall be designed so that water will not accumulate on walking surfaces. In other than occupancies in Group R-3, and occupancies in Group U that are accessory to an occupancy in Group R-3, surfaces and landings which are part of exterior ramps in climates subject to snow or ice shall be designed to minimize the accumulation of same.

1003.3.4.7 Handrails. Ramps with a rise greater than 6 inches (152 mm) shall have handrails on both sides complying with Section 1003.3.3.11.

1003.3.4.8 Edge protection. Edge protection complying with Section 1003.3.4.8.1 or 1003.3.4.8.2 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 not required to have handrails, provided they have flared sides that comply with the ICC A117.1 curb ramp provisions.
2. Edge protection is not required on the sides of ramp landings serving an adjoining ramp run or stairway.
3. Edge protection is not required on the sides of ramp landings having a vertical dropoff of not more than 0.5 inch (12.7 mm) within 10 inches (254 mm) horizontally of the required landing area.

103.3.4.8.1 Railings. A rail shall be mounted below the handrail 17 to 19 inches (432 to 483 mm) above the ramp or landing surface.

103.3.4.8.2 Curb or barrier. A curb or barrier shall be provided that prevents the passage of a 4-inch-diameter (102 mm) sphere, where any portion of the sphere is within 4 inches (102 mm) of the floor or ground surface.

103.3.4.9 Guards. Guards shall be provided where required by Section 1003.2.12 and shall be constructed in accordance with Section 1003.2.12.

1003.3.5. Turnstiles. Turnstiles or similar devices that restrict travel to one direction shall not be placed so as to obstruct any required means of egress.

Exception: Each turnstile or similar device shall be credited with no more than a 50-person capacity where all of the following provisions are met:

1. Each device shall turn free in the direction of egress travel when primary power is lost, and upon the manual release by an employee in the area.
2. Such devices are not given credit for more than 50 percent of the required egress capacity.
3. Each device is not more than 39 inches (991 mm) high.
4. Each device has at least 16.5 inches (419 mm) clear width at and below a height of 39 inches (991 mm) and at least 22 inches (559 mm) clear width at heights above 39 inches (991 mm).

Where located as part of an accessible route, turnstiles shall have at least 36 inches (914 mm) clear at and below a height of 34 inches (864 mm), at least 32 inches (813 mm) clear width between 34 inches (864 mm) and 80 inches (2032 mm) and shall consist of a mechanism other than a revolving device.

1003.3.5.1 High turnstile. Turnstiles more than 39 inches (991 mm) high shall meet the requirements for revolving doors.

1003.3.5.2 Additional door. Where serving an occupant load greater than 300, each turnstile that is not portable shall have a side-hinged swinging door which conforms to Section 1003.3.1 within 50 feet (15 240 mm).