

3.8.3.4. Ramps

- (1) Ramps located in a barrier-free path of travel shall,
- (a) have a minimum width of 900 mm between handrails,
 - (b) have a maximum gradient of 1 in 12,
 - (c) have a level area of at least 1 670 mm by 1 670 mm at the top and bottom of a ramp and where a door is located in a ramp, so that the level area extends at least 600 mm beyond the latch side of the door opening, except that where the door opens away from the ramp, the area extending beyond the latch side of the door opening may be reduced to 300 mm,
 - (d) have a level area at least 1 670 mm long and at least the same width as the ramp,
 - (i) at intervals of not more than 9 m along its length, and
 - (ii) where there is a change of 90 degrees or more in the direction of the ramp,
 - (e) except as provided in Sentence (2), be equipped with handrails on both sides that shall,
 - (i) be continuously graspable along their entire length and have circular cross-section with an outside diameter not less than 30 mm and not more than 40 mm, or any non-circular shape with a graspable portion that has a perimeter not less than 100 mm and not more than 155 mm and whose largest cross-sectional dimension is not more than 57 mm,
 - (ii) be not less than 865 mm and not more than 965 mm high, measured vertically from the surface of the ramp, except that handrails not meeting these requirements are permitted provided they are installed in addition to the required handrail,
 - (iii) be terminated in a manner that will not obstruct pedestrian travel or create a hazard,
 - (iv) extend horizontally not less than 300 mm beyond the top and bottom of the ramp,
 - (v) be provided with a clearance of not less than 50 mm between the handrail and any wall or guard to which it is attached, and
 - (vi) be designed and constructed such that handrails and their supports will withstand the loading values obtained from the non-concurrent application of a concentrated load not less than 0.9 kN applied at any point and in any direction for all handrails and a uniform load not less than 0.7 kN/m applied in any direction to the handrail,
 - (f) except as provided in Sentence (2), have a wall or a guard on both sides and where a guard is provided the guard shall,
 - (i) be not less than 1 070 mm measured vertically to the top of the guard from the ramp surface, and
 - (ii) be designed so that no member, attachment or opening located between 140 mm and 900 mm above the ramp surface being protected by the guard will facilitate climbing,
 - (g) be provided,
 - (i) with a curb at least 50 mm high on any side of the ramp where no solid enclosure or solid guard is provided, and
 - (ii) with railings or other barriers that extend to within 50 mm of the finished ramp surface or have a curb not less than 50 mm high, and
 - (h) except as provided in Sentence (2), where the ramp is wider than 2 200 mm, have an intermediate handrail with a clear width of 900 mm between the intermediate handrail and one of the handrails described in Clause (e).
- (2) Where a ramp serves as an aisleway for fixed seating, the requirements for handrails in Clauses (1)(e) and (h) and for walls or guards in Clause (1)(f) need not apply.
- (3) Floors or walks in a barrier-free path of travel having a slope steeper than 1 in 20 shall be designed as ramps.

3.3.1.17. Guards

- (4) Openings through any guard that is not required by Sentence (1) and that serves a building of other than industrial occupancy, shall be of a size that,
- (a) will prevent the passage of a sphere having a diameter more than 100 mm, or
 - (b) will permit the passage of a sphere having a diameter more than 200 mm unless it can be shown that the location and size of openings that exceed these limits do not represent a hazard.

Barrier Free Ramp Requirements

The following illustrations are examples which meet the requirements for ramps contained in **2012 OBC Div. B 3.8.3.4.**

