



2012 Codes

RAMPS

- Ramp surfaces are stable, firm, and slip resistant.
- Exposed exterior ramps and their approaches are constructed to prevent the accumulation of water on walking surfaces.
- Ramps used as part of means of egress have a maximum slope of 1:12..
- The maximum rise for any run is 30 inches.
- Ramp cross slopes are not steeper than 1:48.
- Ramps may not be less than the required exit width, with a minimum dimension of 36" between the handrails for interior ramps, and 44" for exterior ramps..
- Headroom at all parts of the means of egress is not less than 80 inches.

RAMP AND LANDING EDGE PROTECTION

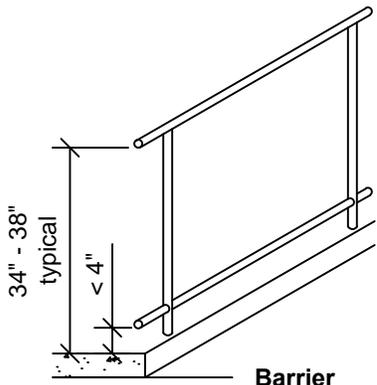
- Any portion of the edge of a ramp with a slope greater than 1:20, or landing which is more than 1/2 inch above the adjacent grade or floor within 10 inches horizontally, requires edge protection.
- Edge protection is required on each side of ramp runs and at each side of ramp landings, by a curb or barrier or by extended floor surface. (An extended floor surface occurs when the surface of ramp or landing extends 12 inches minimum beyond the inside face of a railing.)
Exceptions:
 - Edge protection is not required on ramps not required to have handrails, provided they have flared sides complying with ICC/ANSI A117.1-2003, Section 406.3, Sides of Curb Ramps.
 - Edge protection is not required on sides of ramp serving an adjacent ramp run or stairway.
 - Edge protection is not required on sides of ramp landings with vertical drop-off of not more than 1/2 inch within 10 inches horizontally of the minimum landing area.
- Edge protection options:
 1. A curb or barrier is required that prevents passage of a 4-inch sphere below the height of 4 inches. (See Figure 1.a. and 1.b.)
 2. Railings: When used, railings are required to have one of the following features:
 - a. An intermediate rail mounted 17-19 inches above the ramp or landing surface. (See Figure 1.c.), or
 - b. A guard complying with IBC 1013. See Construction Tipsheet 3, or
 - c. The surface of the ramp or landing extends 12 inches beyond the inside face of the railing. (See Figure 1.d.)
- For curb ramps refer to Construction Tip Sheet 9.

LANDINGS

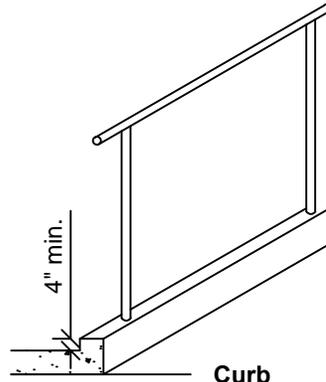
- Ramp surfaces are stable, firm and slip resistant.
- Exposed exterior ramps and their approaches are constructed to prevent the accumulation of water on walking surfaces.
- Ramps within the accessible route of travel have landings at the top and bottom, points of turning, entrance, exits, and doors and at least one intermediate landing for each 30 inches of rise with a minimum dimension of 60 inches in the direction of the ramp run.
- Ramps that change direction at landings have landings sized to provide a 60 inch turning space (60 x 60 inches) or a T-shaped intersection 60 inches long by 36 inches wide (36 inches wide at each arm of T). See Figure 2.
- The minimum width of the landing is as wide as the widest ramp leading to the landing.
Exception: Landings in nonaccessible R-2 and R-3 individual dwelling units may be 36 x 36 inches. (IBC 1010.6.3)
- Landings don't slope more than 1:48.
- Maneuvering clearances for doors can overlap the landing area where doorways are adjacent to the ramp.

GENERAL INFORMATION:

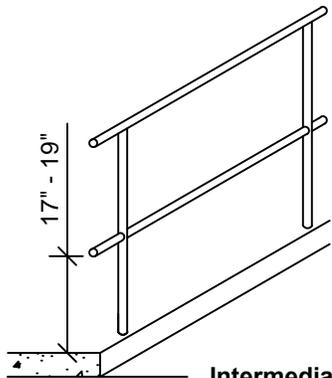
- This tip sheet is intended to show code requirements per the 2012 International Building Code (IBC) 1010 Ramps, 1012 Handrails and ICC/ANSI A117.1-2009.
- The intent of this sheet is to address the basics of ramps and ramp landings only and does not address the subject in great detail. Additional information can be found at your local building department.



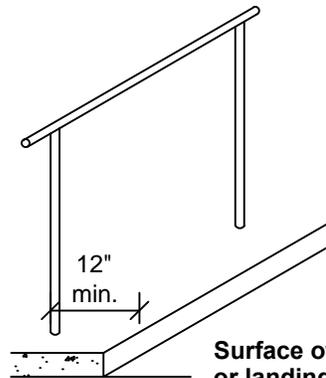
Barrier
Figure 1.a.



Curb
Figure 1.b.

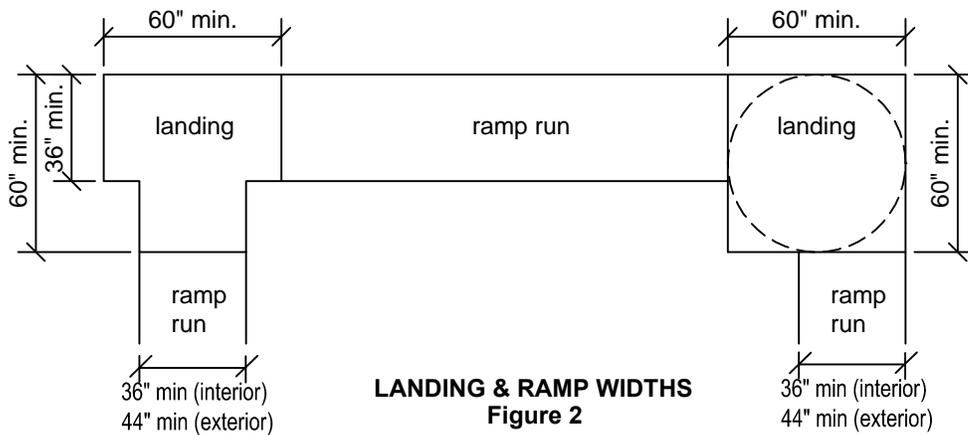


Intermediate rail
Figure 1.c.



Surface of ramp or landing
Figure 1.d.

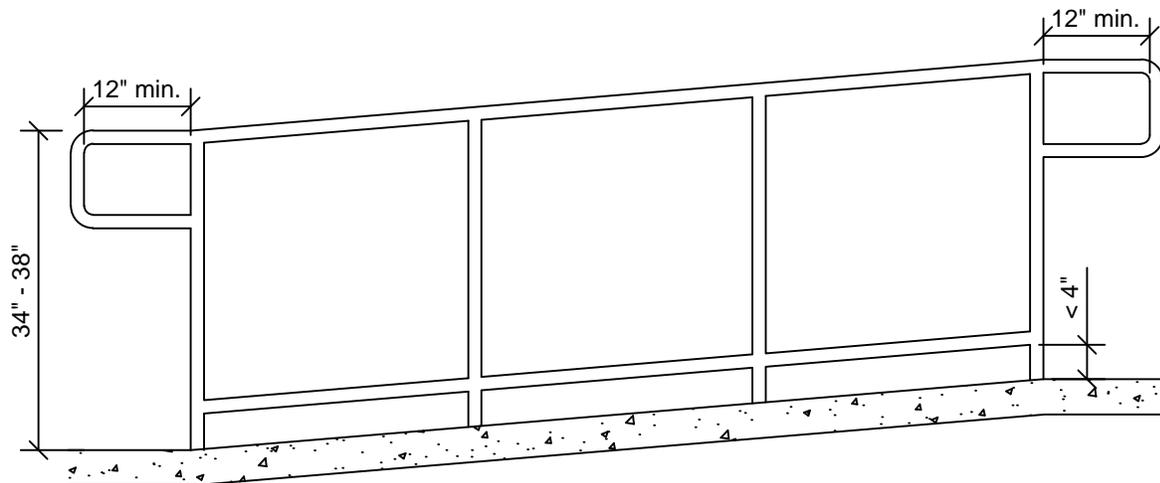
EDGE PROTECTION
Figure 1



LANDING & RAMP WIDTHS
Figure 2

HANDRAILS AND GUARDS

- Ramps having slopes steeper than 1:20 have handrails (see Figure 3).
- Ramps with a rise greater than 6 inches have handrails 34-38 inches in height.
- See Construction Tip Sheet 2 for additional information on handrails.
- Handrails extend at least 12 inches beyond the top and bottom of any ramp run.
- Handrails are continuous except at points of access along the ramp.
- Provide guards for portions of landings or ramp that are more than 30 inches above adjacent grade. For more information see Construction Tip Sheet 3, Guards.
- Guards are minimum 36 inches in height above walking surfaces for dwelling units falling under the International Residential Code.
- Guards are minimum 36 inches in height above walking surfaces within individual dwelling units falling under the International Building Code (IBC) and are 42 inches in height outside individual dwelling units and in all other occupancies falling under the IBC.



RAMP HANDRAIL
Figure 3
(shown with edge protection
detailed in Figure 1.a., page 2)