

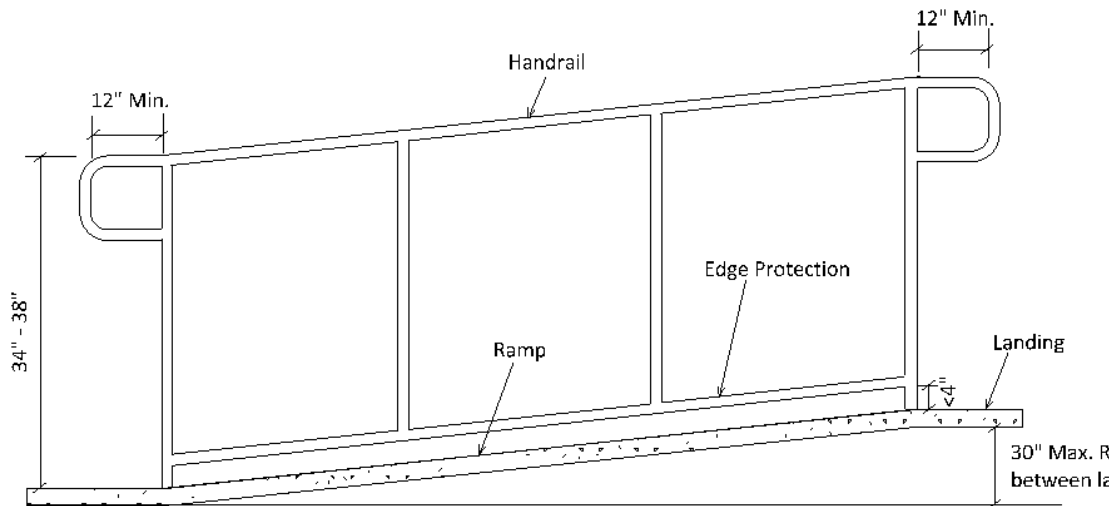


Accessible Ramps and Landings

Section 11B-206 of the 2016 California Building Code requires that at least one accessible route be provided within a site from accessible parking spaces and passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve. Where more than one route is provided, all routes must be accessible.

Exception: an accessible route is not required between site arrival points and the building or facility entrance; or between accessible buildings, facilities, elements or spaces, if the only means of access between them is a vehicular way not providing pedestrian access.

Ramps are a common means of facilitating changes of elevation in an accessible route. This Job Aid provides information on the construction of ramps and landings as part of an accessible route and means of egress where compliance with CBC Ch. 11 is required.



Ramps

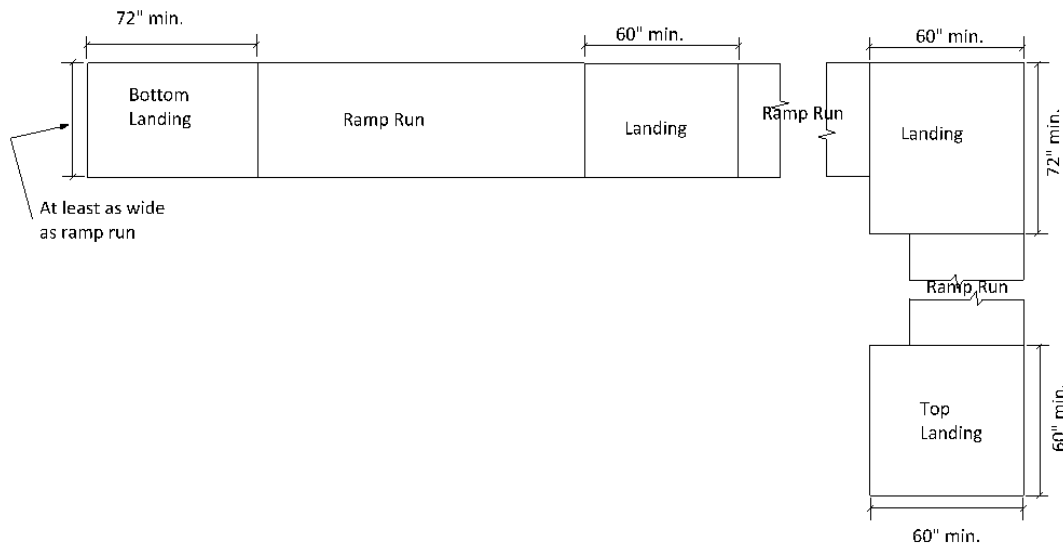
- ✓ **Slope:** Ramps shall have a maximum slope of 1:12
- ✓ **Rise:** The maximum rise for any ramp run is 30"
- ✓ **Width:** The clear width of a ramp run shall be 48" min. except the clear width in residential uses serving 50 or less occupants may be 36" min. between handrails
- ✓ **Surface:** Ramp surfaces shall be stable, firm, and slip resistant
- ✓ **Drainage:** Exposed exterior ramps and their approaches shall be constructed to prevent the accumulation of water on walking surfaces
- ✓ **Cross slope:** Ramp cross slopes shall not be steeper than 1:48
- ✓ **Headroom:** Headroom shall not be less than 80"

Handrails

- ✓ Ramps having slopes steeper than 1:20 require handrails
- ✓ Ramps with a rise greater than 6" require handrails
- ✓ Handrails must be 34"-38" in height measured above the walking surface
- ✓ Handrails must extend at least 12" beyond the top and bottom of any ramp run
- ✓ Handrails must be continuous except at points of access along the ramp
- ✓ Handrails may project into the required clear width at each side of the ramp by 3 ½" max.

Guards

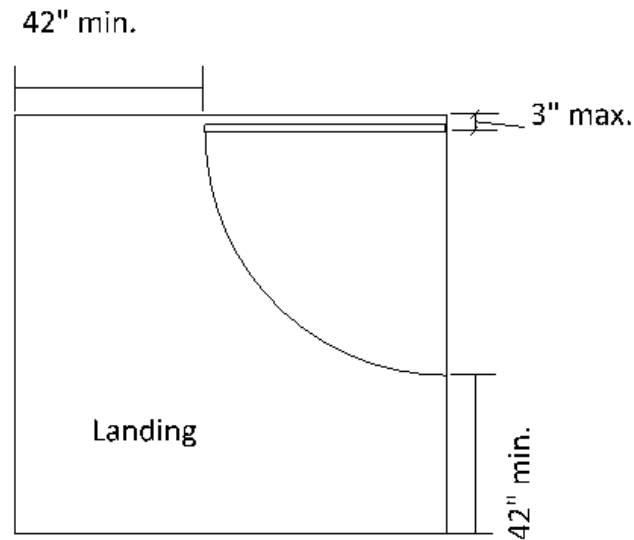
- ✓ Provide guards for portions of landings or ramps that are more than 30" above adjacent grade
- ✓ Guards must be a minimum of 42" in height above the walking surface of the ramp



Landings

- ✓ **Surface:** Landing surfaces shall be stable, firm and slip resistant
- ✓ **Drainage:** Exposed exterior ramps and their approaches shall be constructed to prevent the accumulation of water on walking surfaces
- ✓ **Intermediate Landing:** Ramps within the accessible route of travel shall have landings at the top and bottom, points of turning, entrance, exits, and doors and at least one intermediate landing for each 30" of rise with a minimum dimension of 60" in the direction of the ramp run
- ✓ **Turning Space:** Ramps that change direction at landings shall have:
 - Landings sized to provide a circular 60" turning space (60"x60"); or
 - A T-shaped intersection 60" long by 36" wide (interior) or 44" wide (exterior)
- ✓ **Width:** The minimum width of the landing shall be as wide as the widest ramp leading to the landing
- ✓ **Cross slope:** Landings shall not slope more than 1:48

- ✓ **Doors:** Maneuvering clearances for doors may overlap the landing area where doorways are adjacent to the ramp. Doors when fully open shall not reduce the required ramp landing width by more than 3". Doors in any position shall not reduce the minimum dimension of the ramp landing to less than 42"



Landing Door
Encroachment

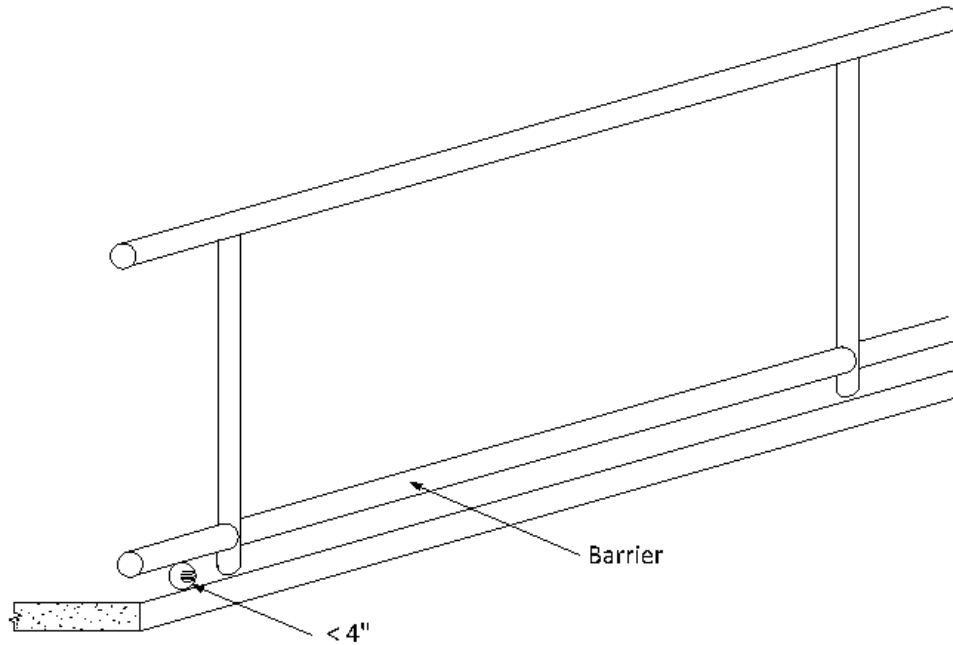
Edge Protection

- ✓ **Where required:** Edge protection is required on each side of ramp runs and at each side of ramp landings

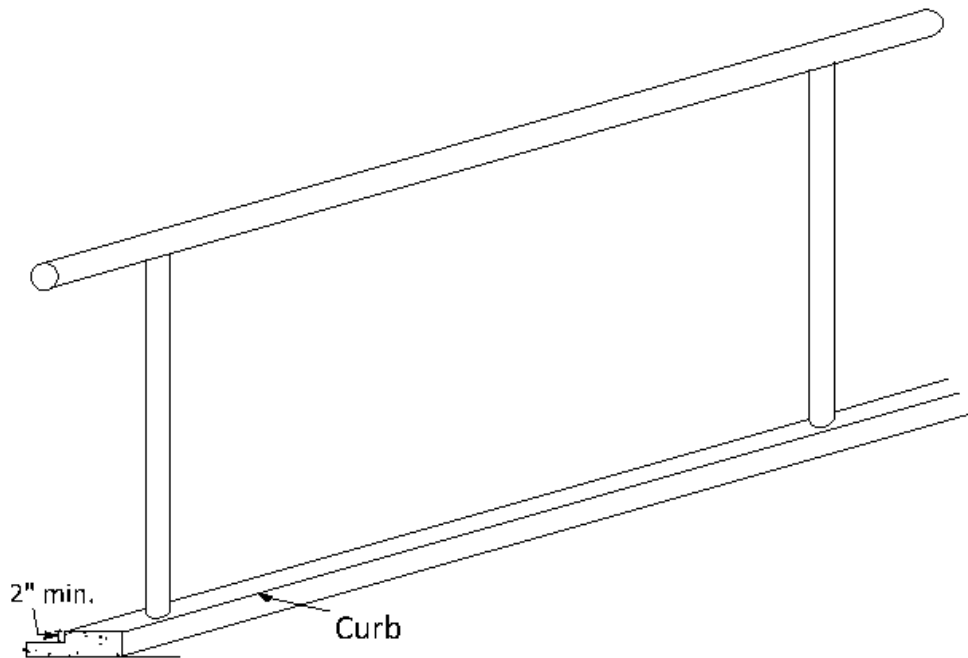
Exceptions:

- Edge protection is not required on ramps that are not required to have handrails, provided they have flared sides provided with a slope no steeper than 1:10 (CBC 11B-405.9, 406.2.2)
 - Edge protection is not required on the sides of ramp landings serving an adjoining ramp run or stairway
 - Edge protection is not required on the sides of ramp landings having a vertical drop-off of ½ " maximum within 10 inches horizontally of the minimum required landing area
- ✓ **Forms of Edge Protection:**
 - A curb: Create a curb that is a minimum of 2" high continuous and uninterrupted along the length of the ramp.

- A barrier: Construct a barrier to prevent the passage of a 4" diameter sphere between the ramp surface and barrier



Edge Protection - Barrier



Edge protection - Curb