

Residential Stairways, Ramps, & Guards

Per 2015 IRC Stairways

Width Minimum 36" at all points above the handrail height. Below the handrail minimum width is 31-1/2" with one handrail installed and 27" where 2 handrails are installed.

Handrail Projection May not project more than 4-1/2" on either side of the stairway.

Headroom 6'8" from the sloped plane adjoining the tread nosing or from floor or landing.

Riser Height: 7-3/4" maximum. Riser height may not vary more than 3/8" in a flight of stairs.

Tread Depth Minimum 10" measured from the nosing of adjacent treads. Tread depth may not vary more than 3/8".

Stair Profile Leading edge of the stair tread not to exceed 9/16". Nosing- not less than 3/4" and not more than 1-1/4" Nosing may not vary more than 3/8" between adjacent treads.

Landings A landing is required at the top and bottom of the stairs (*not required at the top provided a door does not swing over the stairs*) Width- not less than the width of the stairs. Dimension in the direction of travel - not less than 36". A landing is required for every 12 feet of vertical stair rise.

Handrails Required - Shall be provided on at least one side of the stairway.

Height - Not less than 34", not more than 38" above a sloped plan adjoining the tread nosing.

Continuity - Handrails must be continuous from lowest riser to highest riser.

Ends - Must return or terminate in newel posts or safety terminals.

Clearance - Handrails adjacent to walls must have a minimum space of 1-1/2".

Grip Size - Circular Handrails - Outside diameter of 1-1/4 - 2 inches. Handrails with perimeter greater than 6-1/4 inches must have a 3/4" wide finger recess on both sides located within 3/4" of the top of the handrail extending down to be within 1 3/4" from the top of the rail.

Illumination Interior and exterior stairways must be illuminated including landings and treads. A light switch shall be provided at the top and bottom of the stairway.

Winder Stairways Tread Depth - A tread depth of 10" must be provided at a point 12" from the side where the tread is the narrowest. Variation between treads may not exceed 3/8". Winder treads may not be less than 6" wide at the narrow side of the stairs.

Spiral Stairways Width - Minimum width of 26 inches

Treads - Minimum tread depth of 7 1/2" at a point 12" from the narrow edge

Rise - Maximum rise 9 1/2"

Headroom - Minimum 6' 6"

Ramps Slope - Maximum slope of one (1) unit vertical to eight (8) unit horizontal.

Landings - Minimum 3 'X 3' landing provided at the top and bottom, at a change of direction, and where a door opens to a ramp.

Handrails - Required on one side of a ramp where the slope exceeds 1 unit vertical to 12 units horizontal. The handrail height and continuity shall comply with the requirements for a stairway.

Guards Required - Porches, balconies and raised floor surfaces must be provided with a guard if located more than 30" above grade or floor below. In addition guards must be provided for porches and decks enclosed with insect screening where the walking surface is more than 30" above grade.

Height – Cannot be less than 36" in height. At open sides of stairways the guard height may be 34" minimum.

Member Spacing - Maximum spacing between members if 4" and 6" at the triangular opening formed where bottom of the guardrail meets the riser and stair tread.