



Residential Stairs Requirements

2020 MN Residential code [R311.7 + R312](#)

1. Stairs minimum clear width is 36 inches above handrail and 31½ inches at and below handrail. With handrail on both sides, the minimum width at and below the handrails is 27 inches.
2. Stairs minimum headroom: in new buildings 6 feet 8 inches. Alterations to existing basement stairways 6 feet 4 inches, [R305.2.2](#). **Exception:** 4 ¾" floor opening is allowed into clear width.
3. Stairs with four or more risers require a continuous full-length graspable handrail on one side with no open ends or sharp edges located 34 to 38 inches above tread nosing.
4. Open sides of stairs more than 30 inches high require guards at least 34 inches high with less than 4 3/8-inch openings. Guards are measured vertically from tread nosing to top of guard.
5. Treads shall support a 40-pound live load or a 300-pound point load over 4 square inches.
6. Guards and handrails on stairs must support a 200 pound load at any point along the top.
7. Maximum riser height is 7¾ inches. Minimum tread depth is 10 inches measured vertically from the leading edge of tread nosing to the leading edge of adjacent tread nosing's.
8. A nosing ¾ inch to 1¼ inch is required on stairs with solid risers. **Exception:** A nosing is not required with a minimum 11-inch tread depth.
9. Riser heights, tread depths and nosing projections shall not differ more than 3/8 inch.
10. Riser openings are restricted to less than 4 inches on stairs more than 30 inches high.
11. Triangular openings formed by riser, tread and bottom guard rail must be less than 6 inches.
12. A landing is required at the top and bottom of all stairs. It shall be as wide as the stairs and extend at least 36 inches in the direction of travel. **Exception:** A landing is not required at the top of interior stairs or in an enclosed garage if a door does not swing over the stairs.
13. The walking surface of treads and landings shall not exceed a slope of ¼ inch per foot.
14. All stairs require an artificial light source. The light source for exterior stairs and landings shall be controlled from inside the dwelling or continuously illuminated or automatically controlled.

