## Dwelling Stairways

314.1 Width. Stairways shall not be less than 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. The minimum width at and below the handrail height, including treads and landings, shall not be less than 32 inches where a handrail is installed on one side and 28 inches where handrails are provided on both sides.

Exception: Where a floor is served by more than one stairway, stairways other than the first stairway may have a clear width of not less than 30 inches. Any handrail may encroach a maximum of 4 inches into the clear width.
314.2 Treads and risers. The maximum riser height shall be 8 inches and the minimum tread depth shall be 9 inches. The riser height shall be measured vertically between the top surfaces of adjacent treads. The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads. The walking surface of treads and landings of a stairway shall be sloped no steeper than one unit vertical in 48 units horizontal (2-percent slope). The greatest riser height within any flight of stairs shall not exceed the smallest by more than $3 / 8$ inch. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than $3 / 8$ inch.
314.2.1 Profile. The radius of curvature at the leading edge of the tread shall be not greater than $9 / 16$ inch. A nosing not less than $3 / 4$ inch but not more than $11 / 4$ inches shall be provided on stairways with solid risers. Solid risers shall be vertical or sloped from the underside of the leading edge of the tread above at an angle not more than 30 degrees form the vertical.

Exception: A nosing is not required where the tread depth is a minimum of 10 inches.
314.3 Headroom. The minimum headroom in all parts of the stairway shall not be less than 6 feet 8 inches measured vertically from the sloped plane adjoining the tread nosing or from the floor surface of the landing or platform.
314.4 Winders. Winders are permitted, provided that the tread depth at a point not more than 12 inches from the narrower end of the tread is not less than 9 inches and the minimum depth of any tread at the narrow end is not less than 6 inches. The continuous handrail required by Section 315.1 shall be located on the side where the tread is narrower.
314.5 Spiral stairs. Spiral stairways are permitted, provided the minimum width shall be 26 inches with each tread having a $71 / 2$ inch minimum tread depth at 12 inches from the narrow edge. All treads shall be identical, and the rise shall be no more than $91 / 2$ inches. A minimum headroom of 6 feet 6 inches shall be provided.
314.6 Circular stairways. Circular stairways shall have a minimum tread depth at a point not more than 12 inches from the side where the treads are narrower of not less than 9 inches and the minimum depth of any tread shall be 6 inches.



