

# Residential Stair Requirements

## Winder and Spiral Stair Systems

### Kandiyohi County Building Department (2020 MRC)

#### 2020 Minnesota State Building Code

**R311.7.5.2 Treads.** The minimum tread depth shall be 10 inches (254 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the treads leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

**R311.7.5.2.1 Winder treads.** Winder treads shall have a minimum tread depth of 10 inches (254 mm) measured as above at a point 12 inches from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the largest winder tread depth at the 12 inch (305mm) walk line shall not exceed the smallest by more than 3/8 inch (9.5 mm).

**R311.7.8 Handrails.** Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers. See the 2020 Minnesota state Building Code section **R311.7.8.2 for handrail continuity** and **R311.7.8.3 for grip-size**.

**R311.7.8.1 Height.** The handrail height is measured vertically from the sloped plane adjoining the tread nosing, or finish surface of a ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) to the top of the railing.

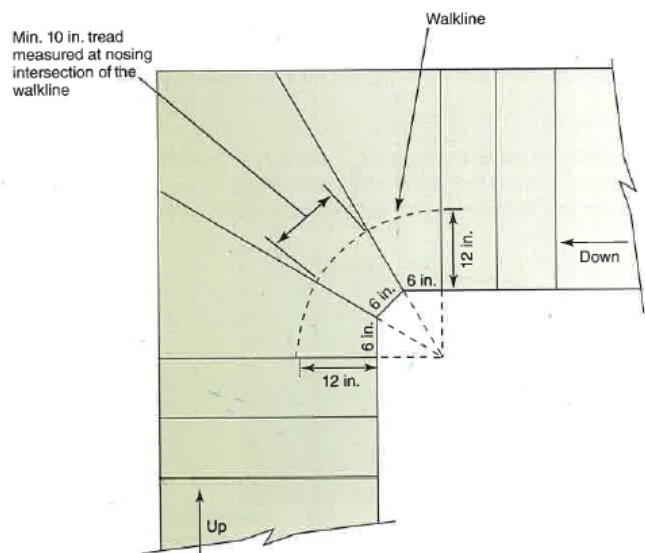
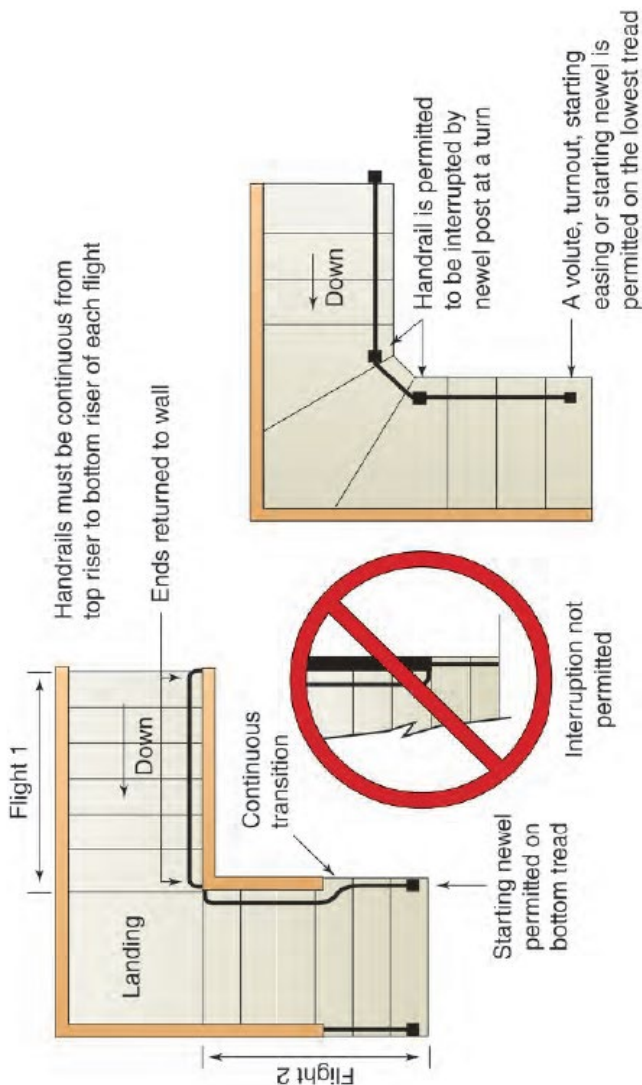


FIGURE 8-9 Winders are permitted in the same flight of stairs as rectangular treads.

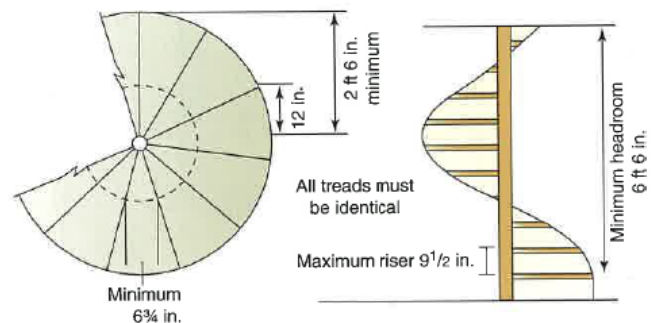


FIGURE 8-10 Spiral stair