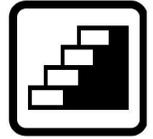




Stairways, Handrails & Guards

One and Two Family Residential Dwellings



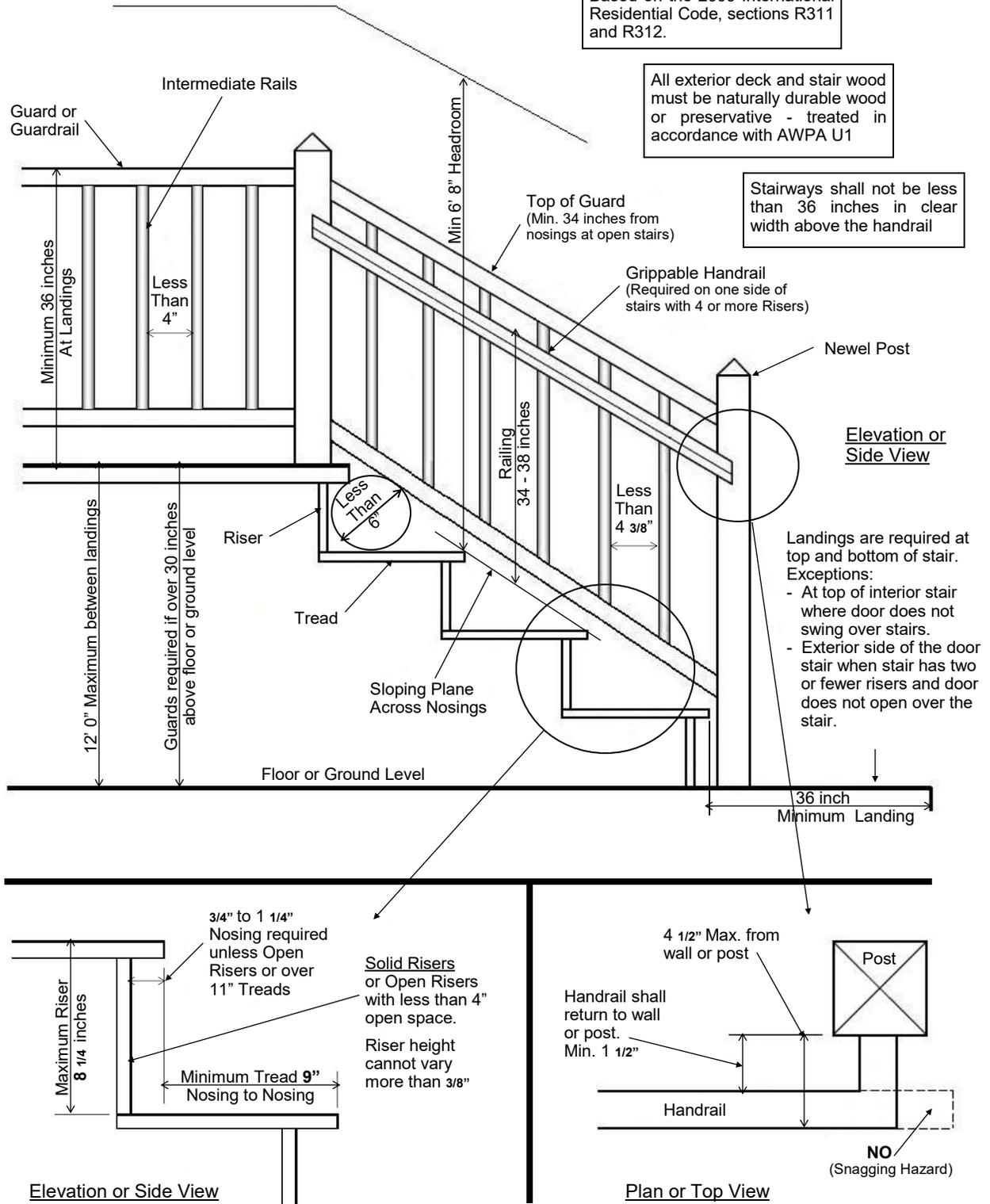
CITY OF WARREN - BUILDING CODE DEPARTMENT
318 W. Third Avenue, Warren, PA 16365 · (814) 723-6300 · www.cityofwarrenpa.gov

This brochure briefly describes the code requirements for new residential stairs, handrails and guards. Each situation has unique conditions, so please refer to the Residential Code (IRC) for the exact requirements or contact the Building Code Department with any questions before you proceed with your project.

Based on the 2009 International Residential Code, sections R311 and R312.

All exterior deck and stair wood must be naturally durable wood or preservative - treated in accordance with AWPA U1

Stairways shall not be less than 36 inches in clear width above the handrail



- Landings are required at top and bottom of stair. Exceptions:
- At top of interior stair where door does not swing over stairs.
 - Exterior side of the door stair when stair has two or fewer risers and door does not open over the stair.

HANDRAILS

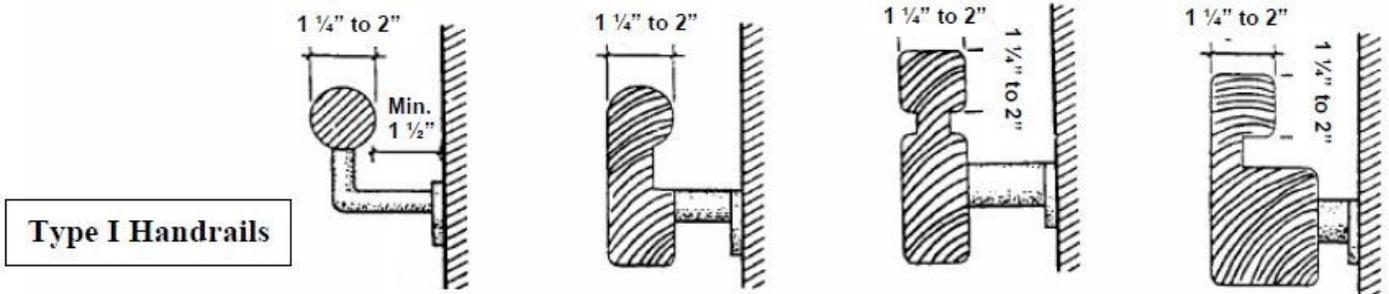
IRC 311.7.7 Handrails. Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.

IRC 311.7.7.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches and not more than 38 inches.

IRC R311.7.7.2 Continuity. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1 1/2 inch between the wall and the handrails."

IRC R311.7.7.3 Grip-size. All required handrails shall be of one of the following types or provide equivalent graspability.

Type I. Handrails with a circular cross section shall have an outside diameter of at least 1 1/4 inches and not greater than 2 inches. If the handrail is not circular it shall have a perimeter dimension of at least 4 inches and not greater than 6 1/4 inches with a maximum cross section of dimension of 2 1/4 inches. Edges shall have a minimum radius of 0.01 inches."



Type I Handrails

Type II. Handrails with a perimeter greater than 6 1/4 inches shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch within 7/8 inch below the widest portion of the profile. This required depth shall continue for at least 3/8 inch to a level that is not less than 1 3/4 inches below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 1/4 inches to a maximum of 2 3/4 inches. Edges shall have a minimum radius of 0.01 inches."



Type II Handrails

Examples of Unacceptable Handrails

