

UNIFORM RISERS AND TREADS

ONTARIO BUILDING CODE

9.8.4.4. Uniformity and Tolerances for Risers and Treads

- (1) Except as provided in Sentence (2), risers shall have uniform height in any one flight with a maximum tolerance of,
 - (a) 5 mm between adjacent treads or landings, and
 - (b) 10 mm between the tallest and shortest risers in a flight.
- (2) Except for required exits stairs, where the top or the bottom riser in a stair adjoins a sloping finished walking surface such as a garage floor, driveway or sidewalk, the height of the riser across the stair shall vary by not more than 1 in 12.
- (3) Treads shall have a uniform run with a maximum tolerance of,
 - (a) 5 mm between adjacent treads, and
 - (b) 10 mm between the deepest and shallowest treads in a flight.

9.8.4.1. Dimensions for Risers

- (1) The rise, which is measured as the vertical nosing to nosing distance, shall conform to Table 9.8.4.1.

9.8.4.2. Dimensions for Rectangular Runs and Treads

- (1) The run, which is measured as the horizontal nosing to nosing distance, and tread depth of rectangular treads, shall conform to Table 9.8.4.1.

- (2) The depth of a rectangular tread shall be not less than its run and not more than its run plus 25 mm.

9.8.4.3. Dimensions for Angled Treads

- (2) Except as provided in Article 9.8.4.5., angled treads in other than required exit stairs shall have an average run which is measured as the horizontal nosing to nosing distance, of not less than 200 mm and a minimum run of 150 mm.

OBJECTIVE

Within a dwelling unit the Building Code allows three types of stair treads: rectangular treads used in straight run flights; angled treads used in curved flights; and winders used to reduce the amount of floor area devoted to stairs.

Stair treads in a straight run flight must be of uniform run and the tread depth must have a maximum tolerance of 5 mm between adjacent treads and 10 mm between the deepest and shallowest run and treads in a flight run.

The minimum run must be 210 mm with a maximum of 355. The minimum tread must be 235 mm with a maximum of 355 mm.

In angled treads or winders the average run of each tread must be not less than 200 mm and a minimum run of 150 mm.

The risers of all stairs in a dwelling unit must be of uniform height in any one flight with a maximum tolerance of 5 mm between adjacent treads or landings and 10 mm between the tallest and shortest risers in a flight. Refer to the illustration below for treads and risers tolerances in one flight.

