

INSTALLATION OF STAIRS ON CERAMIC, PORCELAIN OR MARBLE FLOORING

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 (3/16 in) between adjacent treads or landings, and
 - (b) 10 mm (3/8 in) between the tallest and shortest risers in a flight.
- (2) Except for required exit stairs, where the top or bottom riser in a stair adjoins a sloping finished walking surface such as a garage floor, drive way or sidewalk, the height of the riser across the stair shall vary by not more than 1 in 12.
- (3) The treads have uniform run with the maximum tolerance of,
 - (a) 5 mm (3/16 in) between adjacent treads , and
 - (b) 10 mm (3/8 in) between the deepest and shallowest treads in a flight.
- (4) Where angled treads or winders are incorporated into a stair, the treads in all sets of angled treads or winders within a flight shall turn in the same direction.
- (5) The slope of treads shall not exceed 1 in 50

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.

OBJECTIVE

In today's homes it has become common practice to install ceramic, porcelain or marble flooring in vestibules, hallways and kitchens.

When installing stairs in areas with ceramic, porcelain or marble flooring, provisions must be taken to satisfy the requirements of the Building Code for uniform rise and run. The first riser of stairs becomes critical in these installations. Proper detailing will ensure equal riser dimensions.

Good construction practices are to oversize the first riser or provide suitable shimming under the stairs to allow for the total thickness of the ceramic, porcelain or marble flooring installation.

The detail below illustrates the most common method to level stairs adjacent to ceramic tile flooring.

Refer also to the Builder Tip No. 54 for tolerances in any one flight.

