



Dimensions For Runs And Rectangular Treads - Housing

The Building Standards Department issues Builder Tips as part of our customer service program. They are designed to provide an improved understanding of the Building Code and to reduce the costs associated with correcting infractions. Please contact your area building inspector for further information or call the Building Standards Department at 905.475.4848 extension 2189

9.8.3.1. Straight and Curved Runs in Stairs (See Notes A-9.8.3.1. and A-9.8.4.)

(1) Except as permitted in Sentence (2), stairs shall consist of,

- (a) straight flights,
- (b) curved flights, or
- (c) spiral stairs.

(2) Stairs within dwelling units and houses with a secondary suite, including their common spaces, shall consist of

- (a) straight flights,
- (b) except as provided in Sentence (4), curved flights,
- (c) except as provided in Sentence 9.8.4.7.(2), spiral stairs,
- (d) flights with rectangular treads and winders, or
- (e) flights with a mix of rectangular and tapered treads.

9.8.4.2. Dimensions for Rectangular Treads (See Note A-9.8.4.)

(1) The run for 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.



OBJECTIVE

The objective of this Builder Tip is to ensure the design and construction of rectangular treads conform to the maximum and minimum run dimensions of the Building Code.

As of January 1, 2022, all permits issued for houses and individual dwelling units that include the construction of straight flights of stairs must conform to the dimensional requirements of Table 9.8.4.1. **The minimum run dimension has been increased from 210 mm to 255 mm.** See Diagram no. 1 in this Builder Tip for an illustration on the differences that the 45 mm difference will have on a typical flight of stairs with ceiling height of 2.4 m.

The National Research Council’s Assessment of Health Burdens reported 21% of all unintentional falls resulting in severe injuries are stair-related falls. 82% of stair falls occur in residential homes. This Building Code change addresses the issue involving falls on stairs by increasing the minimum run for flights of stairs as larger runs offer more space for better foot placement and larger foot sizes.

In addition, the increase in run size creates a greater margin of stability. In conclusion, larger runs reduce the risk of falls for all age groups and in all conditions such as poor lighting.

New Definition: *Flight:* Means a series of steps between landings.

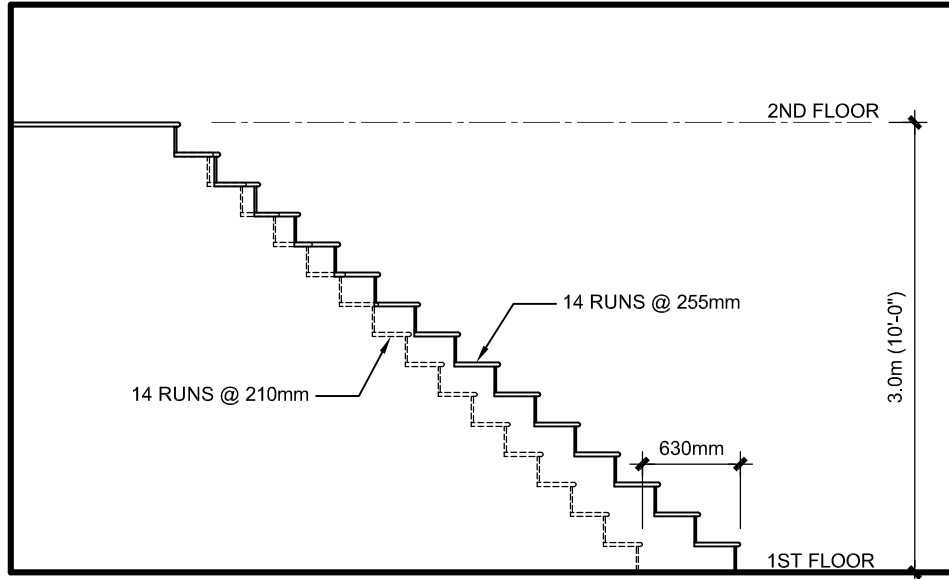
**Applicable Requirements from Table 9.8.4.1.
 Rise for Rectangular Treads, Tapered Treads
 and Winders and Run for Rectangular Treads**

Stair Type	Max. Run, mm, for Rectangular Treads	Min. Run, mm, for Rectangular Treads
Private stairs ⁽¹⁾	355	255

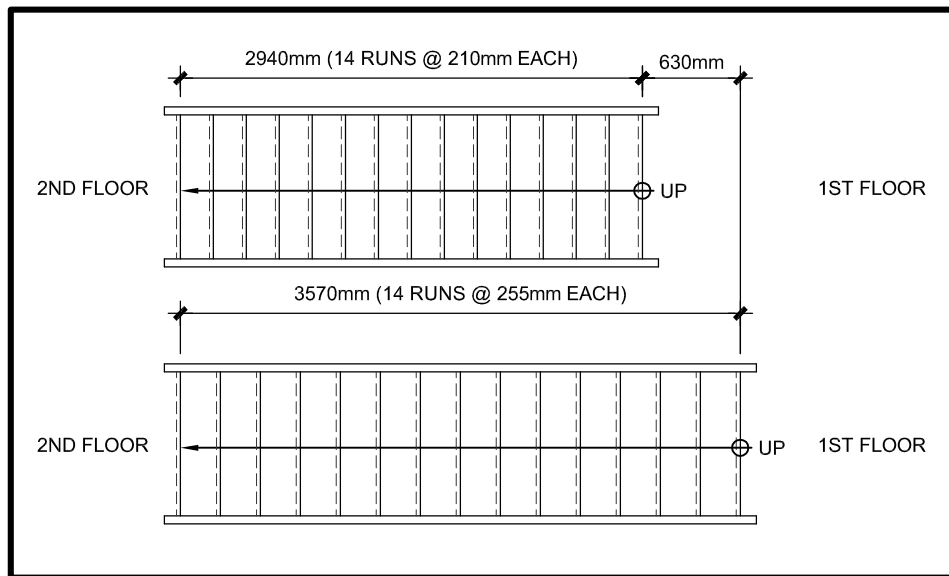
Notes to Table 9.8.4.1.:

(1) Private stairs are:

- (a) interior stairs within a house or an individual dwelling unit,



SECTION



PLAN