

2022 New Building Code Requirements for Stairs, Guards & Handrails

As you may be aware, new code requirements come into effect on January 1, 2022 which includes some minor and major changes to stairs, guards and handrails (**OBC Section 9.8**).

Highlights of new requirements:

1. New Definitions:
 - a. *Flight*: means a series of steps between landings.
 - b. *Run*: means the horizontal distance between two adjacent tread nosings on a stair.
 - c. *Tapered tread*: means a tread with non-parallel edges that increases or decreases its run uniformly over its width.

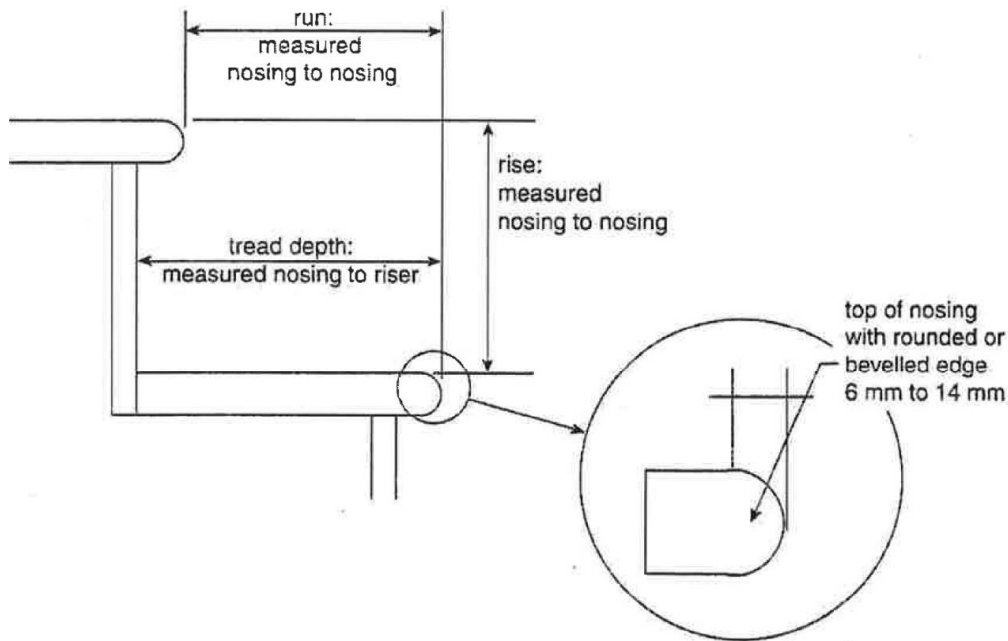


Figure A-9.8.4.B.
Elements of Steps and their Measurement

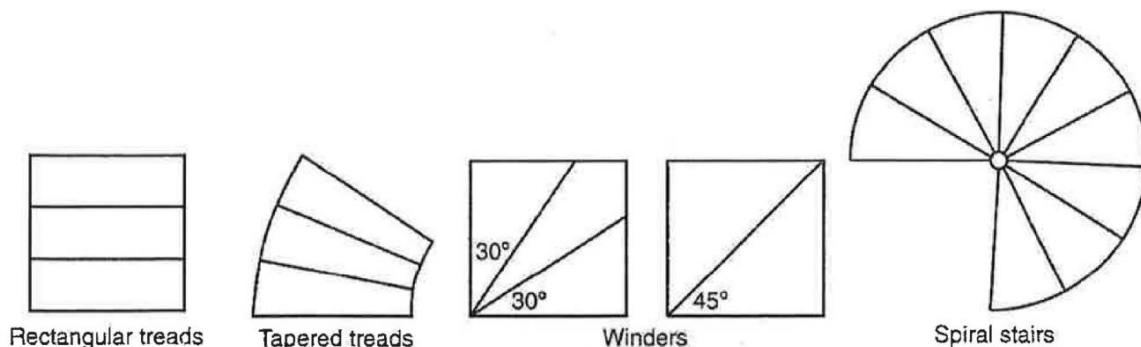


Figure A-9.8.4.A.
Types of Treads

- OBC Table 9.8.4.1** – minimum run for private rectangular treads increased to **255mm (~10")**, previously 235mm (~9.25").

This will equate to approximately an additional **10"-12" of length for a flight of stairs in a typical 8' ceiling house with 2x10 joists. Height of walls and floor system will vary additional length of flight.

- Spiral stairs are now permitted with certain restrictions as per **OBC 9.8.4.5A**.

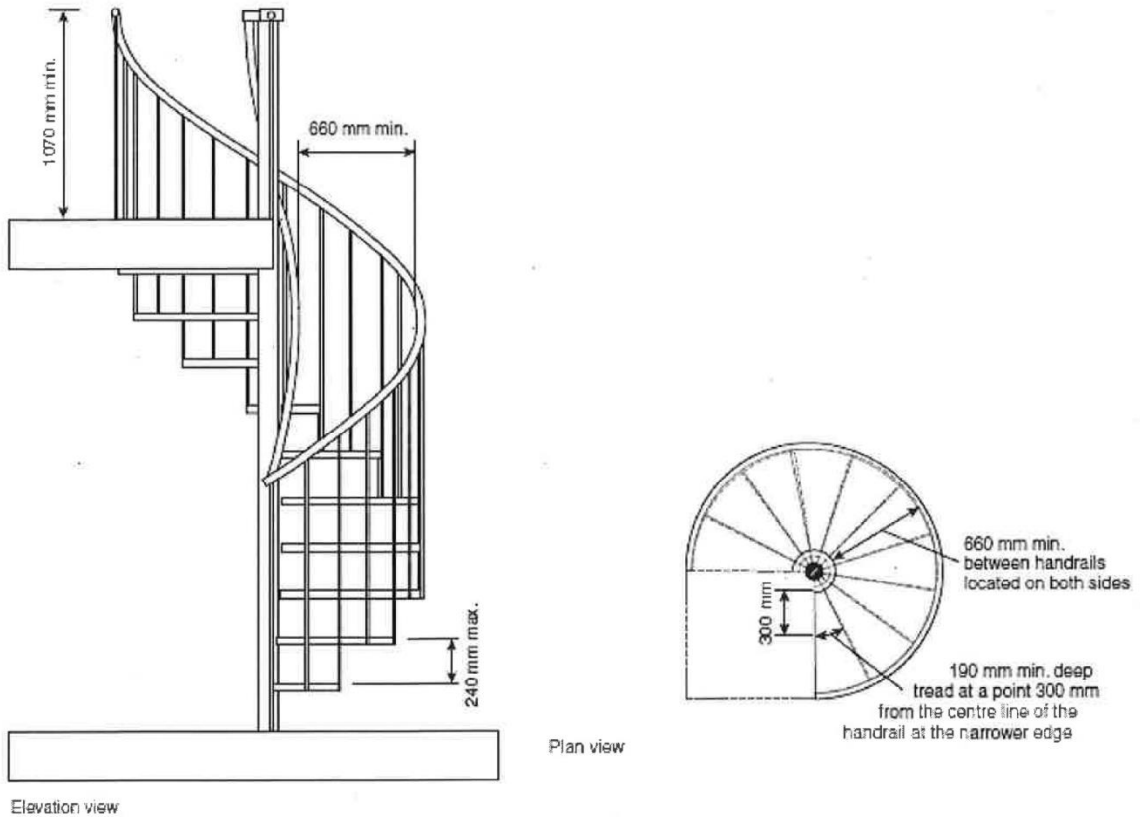
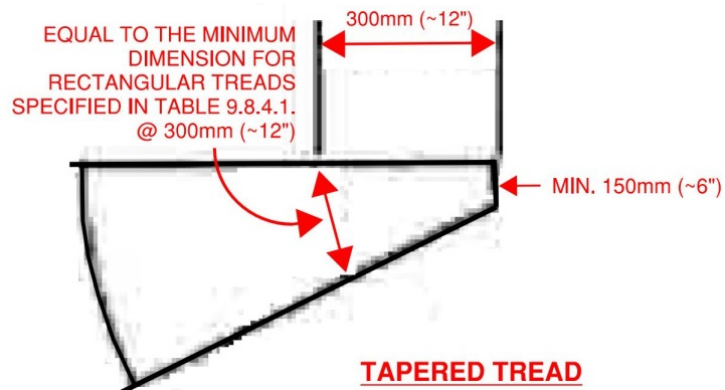


Figure A-9.8.4.5A.
Spiral Stairs

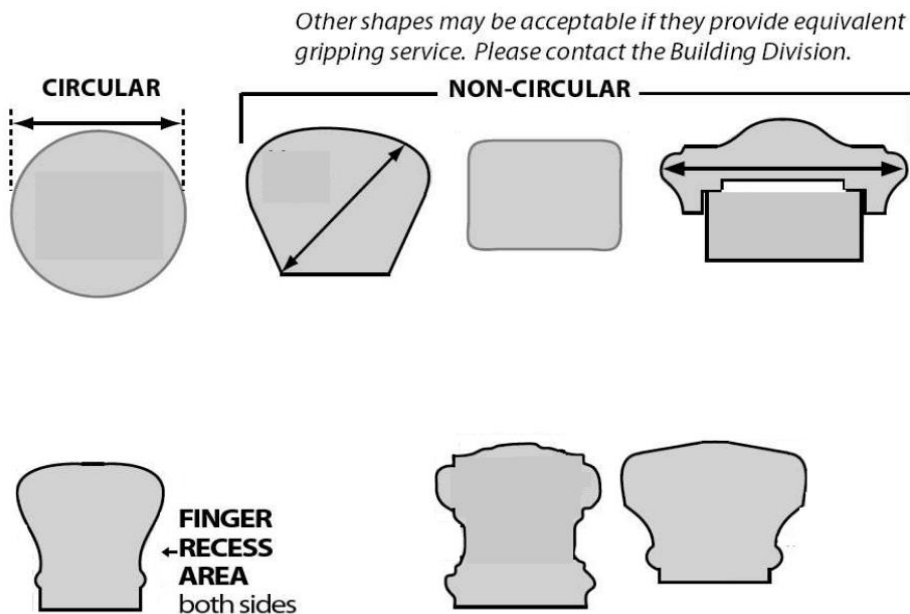
- Requirements for *Tapered Tread* stairs have changed as per **OBC 9.8.4.3**



- Minimum widths of ramps have increased to 1100mm, except for houses. **OBC 9.8.5.2.**

6. Changes to the minimum width and length of Landings, see **OBC 9.8.6.3**.
- (1) Landings shall be, at least as wide and long as the width of the stair or ramp in which they occur.
 - (2) Where the landing in a stair or ramp does not turn or turns less than 90°, the length of the landing shall not be less than the lesser of,
 - a) The required width of the stair ramp, or
 - b) 1 100mm
 - (3) The length of the landing described in Sentence (2) shall be measured perpendicular to the nosings of adjacent treads or to the end of the ramp, at a distance equal to half the length required by Sentence (2) from the narrow edge of the landing.
7. New requirement for a handrail to be installed on the **inside** of flight of stairs that include tapered treads and a combination of tapered treads and rectangular treads.
OBC 9.8.7.1 (5)
8. Maximum height of handrails has been increased to 1070mm, to match height of guards.
OBC 9.8.7.4. (2)
9. New wording for the definition of what is considered an acceptable “Graspable Handrail” section: **OBC A-9.8.7.5(2)**
Handrails are intended to provide guidance and support to stair users. To fulfill this intent, handrails must be “graspable” The graspable portion of a handrail should allow a person to comfortably and firmly grab hold by allowing their fingers and thumb to curl under part or all of the handrail. Where the configuration or dimensions of the handrail do not allow a person’s fingers and thumb to reach the bottom of it, recesses that are sufficiently wide and deep to accommodate a person’s fingers and thumb must be provided on both sides of the handrail, at the bottom of the graspable portion, which must not have sharp edges.

EXAMPLES OF ACCEPTABLE HANDRAIL SECTIONS



You will notice that the changes in the code will be marked with [11.2] immediately to the left of the affected provision.

Please note that all new permit applications submitted and received after January 1, 2022 will be subject to the new building code provisions noted above in addition to the other revision which come into effect. Also note, if the permit was applied for and issued prior to December 31, 2021 but construction has not commenced for 6 months then the permit may be revoked and the new requirements would then apply if the permit is re-issued.

Please feel free to contact me if you have any questions.

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