PROPOSED CHANGE: Required Handrails in Curved Stairs

CHANGE NUMBER: 2018-BCBC-13-Handrails in Curved Stairs

CODE REFERENCE: 2015 National Building Code - Division B - Article 3.3.1.16.

RELATED CODE REFERENCE(S): 2015 National Building Code - Division B - Articles 3.3.1.14., 3.3.4.7., and 3.4.6.9.

DESCRIPTION OF THE PROPOSED AMENDMENT:

It is proposed to delete the redundant requirement for two handrails on a curved stair.

PROBLEM/GENERAL BACKGROUND:

The British Columbia Building Code (BCBC) is based substantially on the model National Building Code of Canada (NBC). The NBC is updated about every five years and British Columbia adopts most of the NBC requirements into the next edition of the BCBC. The 2018 BCBC will be based on the 2015 NBC with some changes specific to British Columbia.

Clause 3.3.1.16.(1)(c) was inserted in response to confusion as to whether the requirement for two handrails applies for curved stairs. In order to harmonize with the NBC, and because this requirement is redundant, it is proposed to be deleted.

The code language shown below is the proposed final code language that will appear in the 2018 BCBC. Comments submitted should focus on the changes noted. Changes from the 2012 BCBC to the 2015 NBC are not identified.

2018 PROPOSED BRITISH COLUMBIA CODE LANGUAGE (Deleted text / Added text)**:**

3.3.1.14. Ramps and Stairways

1) Except as permitted by Sentence (2), Article 3.3.1.16., Article 3.3.4.7. and Subsection 3.3.2., ramps and stairways that do not serve as *exits* shall conform to the requirements for *exit* ramps and stairways stated in Sentence 3.4.3.2.(8) and Articles 3.4.3.4., and 3.4.6.1. to 3.4.6.89.

2) Ramps and stairways that serve *service rooms*, *service spaces* or *industrial occupancies* need not comply with Sentence (1), provided

a) they are intended only for occasional use for servicing equipment and machinery, and

b) they do not serve as *exits*.

3.3.1.16. Tapered Treads in a Curved Flight

1) *Flights* of stairs shall consist solely of

a) straight *flights*, or

b) curved *flights* complying with Sentence (2)., and

~~c) a handrail on each side~~

(See also Articles 3.3.1.14. and 3.4.6.9.)

2) *Tapered treads* in a curved *flight* that is not required as an *exit* shall have

a) a minimum *run* of 150 mm,

b) a *run* not less than 280 mm when measured at a point 300 mm from the centre line of the handrail at the narrow end of the tread, and

c) a riser conforming to Sentence 3.4.6.8.(2).

3) *Tapered treads* shall have a consistent angle and uniform *run* and rise dimensions in accordance with the construction tolerances stipulated in Article 3.4.6.8. when measured at a point 300 mm from the centre line of the handrail at the narrow end of the tread.

4) All *tapered treads* within a *flight* shall turn in the same direction.

RATIONALE FOR CHANGE:

The requirement for two handrails on a curved stair is redundant and conflicts with Part 9 requirements for dwelling units.

JUSTIFICATION/EXPLANATION:

Article 3.3.1.14. has been changed to refer to Article 3.4.6.9., Curved Flights in Exits. This reference was omitted in error from the 2012 BCBC. Article 3.4.6.9. requires a handrail on each side of a curved exit stair. Since Article 3.3.1.14. also applies the requirements for exit stairs to stairs not used as an exit, this effectively means that curved stairs, whether used as an exit or not, are required to have a handrail on each side.

This also means the requirement for two handrails in Article 3.3.1.16. is redundant. To help ensure this requirement is not missed as a result of this deletion, a pointer is provided to Articles 3.3.1.14. and 3.4.6.9. to clarify that proposed requirements also apply, including the requirement for two handrails in both curved exit stairs (3.4.6.9.), and curved stairs that do not serve as exits (3.3.1.14.).

The deletion in Article 3.3.1.16. also clarifies that, for curved stairs in a dwelling unit (required by Article 3.3.4.7. to conform to Section 9.8), a handrail on each side is not required. This aligns with the handrail requirements in Section 9.8. (Table 9.8.7.1.).