

**PROPOSED CHANGE:** Area Calculation of Exposing Building Face

**CHANGE NUMBER:** 2018-BCBC-02-Area Calculation of Exposing Building Face

**CODE REFERENCE:** 2015 National Building Code – Division B – Article 9.10.14.2., Article 9.10.15.2

**DESCRIPTION OF THE PROPOSED AMENDMENT:**

It is proposed to clarify the requirements in Part 9 for calculation of the area of an exposing building face.

**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.

The language of Subclauses 9.10.14.2.(1)(b)(ii) and 9.10.15.2.(1)(b)(ii) was not clear as it was being interpreted that if a building is divided into fire compartments, then the requirements of these Subclauses must be applied.

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):

**9.10.14.2. Area and Location of Exposing Building Face**

- 1) Except as permitted by Sentence (2), the area of an exposing building face shall be
  - a) taken as the exterior wall area facing in one direction on any side of a *building*, and
  - b) calculated as the total area measured from the finished ground level to the uppermost ceiling, ~~or~~
    - 2) ii) ~~the area for each fire compartment, where~~ if a *building* is divided into fire compartments by fire separations into fire compartments, the area of exposing building face is permitted to be calculated for each fire compartment provided the fire separations have a with fire-resistance ratings not less than 45 min.

**9.10.15.2. Area and Location of Exposing Building Face**

- 1) Except as permitted by Sentences (2) and (3), the area of an *exposing building face* shall be
  - a) taken as the exterior wall area facing in one direction on any side of a *building*, and
  - b) calculated as
    - i) the total area measured from the finished ground level to the uppermost ceiling, or

~~ii) the area for each fire compartment, where if a building is divided into fire compartments by fire separations into fire compartments, is permitted to be calculated for each fire compartment provided the fire separations have a fire-resistance rating not less than 45 min, or~~

ii) except as provided in Sentence (23), where Table 9.10.15.4. is used to determine the maximum aggregate area of glazed openings, the area of any number of individual vertical portions of the wall measured from the finished ground level to the uppermost ceiling. (See Note A-9.10.15.4.(2).)

2) If a building is divided by fire separations into fire compartments, the area of exposing building face is permitted to be calculated for each fire compartment provided the fire separations have a fire - resistance rating not less than 45 min.

#### **RATIONALE FOR CHANGE:**

The language of Subclauses 9.10.14.2.(1)(b)(ii) and 9.10.15.2.(1)(b)(ii) was not clear as it was being interpreted that if a building is divided into fire compartments, then the requirements of these Subclauses must be applied. The proposed clarification aligns the language and intent with Part 3; where, if a building is divided into fire compartments, it is permitted but not mandatory to calculate the area of the exposing building face for each fire compartment.

The proposed change aligns the requirements of Part 9 with those of Part 3.

#### **JUSTIFICATION/EXPLANATION:**

The above noted change is considered a clarification of the existing requirements in Part 9 for calculation of the area of an exposing building face.