

BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, EGBC, BOABC

File No: 18-0200

INTERPRETATION

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Interpretation Date:	November 22, 2022
Building Code Edition:	BC Building Code 2018
Subject:	Positioning of Bottom Edge of Vision Panel at Doors
Keywords:	Vision Panel, Height, Bottom Edge, Door Hardware, Maximum Area of Wired Glass in a Door, Exit Doors, Fire Department Access, Cross Over Floors
Building Code Reference(s):	3.1.8.18.(1), 3.3.1.13.(5), 3.3.1.19.(6), 3.4.1.8.(1), 3.4.6.18.(4)(b)

Sentence 3.3.1.19.(6) requires that where vision glass is provided in doors, the lowest edge of the glass shall be no higher than 900mm above floor level.

Questions:

1. Sentence 3.3.1.13.(5) requires door release hardware to be installed between 900mm and 1100mm above the finished floor. Does this requirement conflict with the vision panel positioning requirements of Sentence 3.3.1.19.(6)?
2. Sentence 3.1.8.18.(1) limits the area of wired glass permitted at certain fire rated doors. Does this requirement conflict with the vision panel positioning requirements of Sentence 3.3.1.19.(6)?
3. Sentence 3.4.1.8.(1) requires that glass and transparent panels in an exit conform to the "appropriate" requirements in Article 3.3.1.19. Is it appropriate to apply Sentence 3.3.1.19.(6) to exit stair doors?

Interpretation:

1. Yes.
There are likely to be conditions where the positioning of vision panels having the bottom edge at 900mm above the floor will be in conflict with certain types of door hardware, such as panic hardware required to be mounted at a height between 900mm and 1100mm above the finished floor. If possible, an additional vision panel could be installed below the panic hardware. This would be considered a bottom extension of the vision panel provided above the panic or other door hardware, subject to limits on maximum area of wired glass in fire rated doors.



Patrick Shek, P.Eng., CP, FEC, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, EGBC and BOABC, which form the BC Building Code Interpretation Committee. The Building and Safety Standards Branch, Province of BC and the City of Vancouver participate in the committee's proceedings with respect to interpretations of the BC Building Code. The purpose of the committee is to encourage uniform province wide interpretation of the BC Building Code. These views should not be considered as the official interpretation of legislated requirements based on the BC Building Code, as final responsibility for an interpretation rests with the local *Authority Having Jurisdiction*. The views of the joint committee should not be construed as legal advice.

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The related intent statement is: to limit the probability that persons, including children, people of short stature and those using a wheelchair, will not be able to see or be seen through glazing that is too high, which could lead to persons being hit, which could lead to harm to persons; or which could lead to confusion, which could lead to delays in the evacuation or movement of persons to a safe place, which could lead to harm to persons.

2. Yes.

Where there are limits to the area of wired glass permitted in a door, this may be a challenge to manipulate the vision panel height/width, or to locate the bottom edge of the panel at 900mm above the floor, while still attempting to maintain the panel vision at the typical occupant percentile eye level. If the wired glass vision panel is narrowed to lengthen the height of the panel, the resulting width may be too narrow to serve effectively as a vision panel. In addition, the fire department access provisions of Clause 3.4.6.18.(4)(b) could also be compromised if the glass panel is too narrow to allow pass through of an arm. Special listed fire rated glass allowing larger vision panels in fire rated doors is a possible option to resolve the conflict.

3. Yes.

Use of the word "appropriate" in Sentence 3.4.1.8.(1) is interpreted to mean "applicable". However, vision panels are not required for exit doors, unless required under Clause 3.4.6.18.(4)(b) for fire department access at cross over levels.

Where vision panels are incorporated into exit doors, meeting the requirements of Sentence 3.3.1.19.(6) presents challenges that need to be addressed. Exit stair enclosures and protective closures are intended to be effective in maintaining integrity. It may not be appropriate to incorporate designs, such as increased vision panel sizes, that could reduce the effectiveness of exit integrity, including such as during a seismic event.

Manipulating the vision panel height/width or repositioning it, could reduce the effectiveness of the vision panel. Lowering the position of a restricted size vision panel could reduce the percentile of occupants effectively served. If the wired glass panel is narrowed to lengthen the height of the panel, the resulting width may be too narrow to serve effectively as a vision panel. In addition, the fire department access provisions of Clause 3.4.6.18.(4)(b) could also be compromised if the glass panel is too narrow to allow pass through of an arm. See also previous discussions under previous questions 1 and 2.

A Code change proposal may be warranted to resolve these challenges.

Since the building code does not mandate where vision panels are required, the wording of Sentence 3.3.1.19.(6) encourages the elimination of vision panels which directly conflicts with the original intent.

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