BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing AIBC, EGBC, BOABC

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May 18, 2021
BC Building Code 2018
Fire Separation of Rooftop Exit Enclosures
Exit, Fire Separation
3.1.7.3.(3), 3.2.1.1.(1), 3.4.4.1.(1)

Question:

Are the exterior walls of an exit stair enclosure at an occupied roof required to be constructed as fire separations?

Interpretation:

No, provided the roof has no adjoining enclosures, and provided there are no applicable spatial separation conditions that would fire-resistance ratings for stair exterior walls.

Sentence 3.4.4.1.(1) requires an exit to be separated from the remainder of the building by a fire separation with a minimum fire-resistance rating not less 45 min and at least equal to the separation required by Subsection 3.2.2 for the floor assembly above the storey, or for the floor assembly below the storey if there is no floor assembly above.

Sentence 3.2.1.1.(1) states that a rooftop enclosure for a stairway used for no purpose other than access or egress shall not be considered as a storey. Since an exit stair enclosure at a roof would be used for no purpose other than access or egress, it would not be considered as a storey. If there are no other rooftop enclosures that would be considered as a storey, the references in Sentence 3.4.4.1.(1) to the floor assemblies above or below the storey are not applicable to an exit stair at a roof.

However, the minimum required exit fire separation of 45 min is not specifically related to the floor assembly above or below the storey. The intent of an exit fire separation is to protect the exit from a fire in the building, but an open rooftop is an exterior area of a building. The walls of the rooftop exit stair would be exterior walls, and Sentence 3.1.7.3.(3) states "Exterior walls shall be rated for exposure to fire from inside the building". Constructing exit stair exterior

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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walls as fire separations rated from inside the exit would provide minimal protection to the exit. Therefore, it is interpreted that exit stair exterior walls at a roof are not required to be fire separations. This is applicable regardless of whether the roof is occupied or unoccupied, where the roof is not considered to be a storey.

Note that this interpretation addresses only the exterior walls of a rooftop exit stair. The discussion above does not apply to a rooftop exit stair wall that is not an exterior wall, such as between the exit stair and a rooftop service room. A rooftop service room is not required to be considered as a storey in calculating building height, as stated in BCBC Sentence 3.2.1.1.(1). However, if such a room has a common wall with a rooftop exit stair, the required exit fire separation must be provided between the exit stair and the service room.

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