

BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, APEGBC, BOABC, POABC

File No: 06-0089

INTERPRETATION

Page 1 of 1

Interpretation Date: September 27, 2011

Building Code Edition: BC Building Code 2006

Subject: Fire-resistance rating of supporting assemblies for fire separations

Keywords: Fire separation, fire-resistance rating, supports

Building Code Reference(s): 3.1.3.1.(1), 3.1.7.3., 3.1.7.5.(1), 3.1.10.

Question:

Should all assemblies that are required to be a fire separation be supported by assemblies having the same fire-resistance ratings?

Interpretation:

Yes for horizontal fire separations

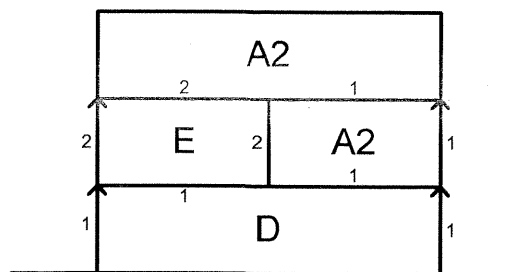
If a floor assembly is acting as a fire separation Sentence 3.1.7.3.(1) requires that such floor assembly shall be rated for exposure to fire on the underside only. Sentence 3.1.7.5.(1) requires that only those loadbearing walls, columns and arches in the storey immediately below such a floor assembly shall have the same fire-resistance rating as the supported floor assembly. It is not required to carry the same fire-resistance rating for all supporting assemblies all the way down to foundations.

No for vertical fire separations except for firewalls

If a vertical wall is acting as a fire separation Sentence 3.1.7.3.(2) requires that such wall assembly shall be rated for exposure to fire on each side. There is no requirement to rate the wall for exposure to fire from the floor below; therefore, it is not required to rate the floor assembly that supports the wall with the same fire-resistance rating as the wall.

The sketch below demonstrates these requirements by showing the required ratings of the floors and the supporting walls (with arrows).

If such vertical fire separation is a firewall Section 3.1.10. requires the supporting assemblies to have the same fire-resistance rating as the firewall.




R. J. Light, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, APEGBC, BOABC, and POABC, which form the BC Building Code Interpretation Committee. 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.