


BC BUILDING CODE INTERPRETATION COMMITTEE

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

File No: 06-0061

INTERPRETATION

Page 1 of 1

Interpretation Date:	November 16, 2010
Building Code Edition:	BC Building Code 2006, BC Fire Code 2006
Subject:	Fire separation around construction within a partially occupied building
Keywords:	Fire safety, construction sites, fire separation
Building Code Reference(s):	BCBC - 8.1.1.1.(3), 3.3.1.1.(1) BCFC - 5.6.1.14.(1)
Question:	<p>Is a 1 hour fire separation always required between an office tenant space which is being renovated and the remaining portion of the building which is occupied?</p>
Interpretation:	<p>No</p> <p>Sentence 8.1.1.1.(3) of the BC Building Code requires that fire safety at construction sites conform to Section 5.6 of the BC Fire Code.</p> <p>Sentence 5.6.1.14.(1) of the BC Fire Code states that where part of a building continues to be occupied, the occupied part shall be separated from the part being demolished or constructed by a fire separation having a fire resistance rating of not less than 1 hour.</p> <p>Since Sentence 3.3.1.1.(1) of the BCBC does not require any fire separation between suites of business and personal service use (Group D major occupancy), most office buildings have no fire separation walls between adjacent suites or between the suite and the public corridor.</p> <p>In accordance with the attached letter from the BC Fire Commissioner's office, the 1 hour fire separation as described in Sentence 5.6.1.14.(1) is only required when the construction or demolition of the tenant improvements incorporates a "risk from explosion, high flammability or related conditions that create a hazard to life safety". The constructor must contact the authority having jurisdiction to determine in advance of the proposed construction if the proposed renovations include such risks and prepare the appropriate construction fire safety plan to suit.</p> <p>Refer to the attached letter from BCBCI Committee to the BC Fire Commissioners Office dated September 18, 2010, and the response letter from the BC Fire Commissioner's Office dated October 12, 2010.</p> <p> R. J. Light, Committee Chair</p>
<small>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 <i>Authority Having Jurisdiction</i>. The views of the joint committee should not be construed as legal advice.</small>	

BC BUILDING CODE INTERPRETATION COMMITTEE

**A Joint Committee with Members Representing
AIBC, APEGBC, BOABC, POABC**

September 18, 2010

Office of the Fire Commissioner
PO Box 9491 Stn. Prov. Govt.
Victoria B.C. V8W 9N7

**RE: BC Fire Code – Sentence 5.6.1.14.(1)
Construction Hoarding During Renovations Within Partly Occupied Buildings**

Dear Sir:

The BC Building Code Interpretation Committee was formed in November 1999, with a membership from the Architectural Institute of B.C., the Association of Professional Engineers and Geoscientists of B.C., the Building Officials Association of B.C., the City of Vancouver, and the Plumbing Officials Association of B.C.

Our committee received a request for interpretation regarding the requirements for construction hoarding during interior renovations of an existing building where the building remains partly occupied during the renovation.

Sentence 8.1.1.1.(3) of the BC Building Code requires that fire safety at construction sites conform to Section 5.6 of the BC Fire Code.

Sentence 5.6.1.14.(1) of the BC Fire Code states the following:

5.6.1.14 . Fire Separations in Partly Occupied Buildings

- 1) Where part of a *building* continues to be occupied, the occupied part shall be separated from the part being demolished or constructed by a *fire separation* having a *fire-resistance rating* of not less than 1 h.

The Functional and Intent Statements of Article 5.6.1.14. of the BCF state the following:

ATtribution

Functional Statement:

F03

To retard the effects of fire on areas beyond its point of origin.

Objective:

OS1.2

OS1 Fire Safety

An objective of this Code is to limit the probability that, as a result of

- activities related to the construction, use or demolition of the building or facility,
- the condition of specific elements of the building or facility,
- the design or construction of specific elements of the facility related to certain hazards, or
- inadequate built-in protection measures for the current or intended use of the building,

a person in or adjacent to the building or facility will be exposed to an unacceptable risk of injury due to fire. The risks of injury due to fire addressed in this Code are those caused by—

OS1.1 fire or explosion occurring

OS1.2 fire or explosion impacting areas beyond its point of origin

OS1.3 collapse of physical elements due to a fire or explosion

OS1.4 fire safety systems failing to function as expected

OS1.5 persons being delayed in or impeded from moving to a safe place during a fire emergency

AbRICATION

Fire separation between parts of the *building* that are being constructed or demolished, including any incomplete or abandoned parts of the *building*, and parts of the *building* that continue to be occupied during construction or demolition operations.

INTENT

To limit the probability that a fire will spread from parts of the building being constructed or demolished to parts that remain occupied, which could lead to harm to persons.

To limit the probability that a fire will spread from parts of the building that remain occupied to parts being constructed or demolished, which could lead to harm to persons.

Our Committee requests your advice on whether the terms "demolished or constructed" is intended to apply to interior renovations within an existing building where the renovation does not include a building addition or demolition of the existing structure.

As you are likely aware in a typical office building, there is no requirement in the BC Building Code to provide fire separations between adjacent office suites or between office suites and adjacent public corridors.

Interior renovations within existing office suites occur every day in numerous buildings throughout the Province. The standard industry practice is to conduct such interior renovations without any fire separation hoarding between the renovation area and the adjacent occupied suites.

Before our Committee issues a building code interpretation on this matter, we request your responses to the following questions:

1. Is Sentence 5.6.1.4.(1) intended to apply to interior renovations within partly occupied buildings where there are no additions or major structural demolition involved?
2. How extensive does the "construction and demolition" have to be to warrant a 1 hour fire rated hoarding between construction/demolition zones and occupied zones?
3. Who is the "authority having jurisdiction" for the 1 hour fire rated hoarding?
4. Who is expected to review the drawings for the 1 hour fire rated hoarding?
5. Who is expected to inspect the installation of the 1 hour fire rated hoarding?
6. Is there any regulatory process in place to fulfill the requirements of Items 4 & 5 above.
7. Is there any documentation that clearly explains the appropriate application of Sentence 5.6.1.4.(1)?

Thank you for your assistance in this matter.

We look forward to your prompt response.

Yours truly,

A handwritten signature in black ink, appearing to read 'B. Thorson', written over the typed name.

Barry Thorson, P.Eng., CP, FEC

Committee Member representing APEGBC

Please reply to:

Committee Secretary's Office
City of Richmond
6911 No. 3 Road,
Richmond B.C., V6Y 2C1
Att'n: Ernie Nishi



October 12, 2010

File No. 135-45/FSER2
Cliff No. 388560

Mr. Ernie Nishi, Secretary
Committee Secretary's Office
City of Richmond
6911 No. 3 Road
Richmond BC V6Y 2C1

Dear Mr. Nishi:

**Re: BC Fire Code – Sentence 5.6.1.14.(1)
Construction Hoarding During Renovations within Partly Occupied
Buildings**

I am responding to the letter from the BC Building Code Interpretation Committee, sent by Barry Thorson on September 18, 2010.

The letter requests responses to 7 questions in regards to BC Fire Code, Division B, Sentence 5.6.1.14. (1). requirement for fire separations in partly occupied buildings.

In exercising judgement, the Scope of Division B, Part 5, Subsection 5.1.1. is taken into consideration. The Scope focuses the application of Part 5 on operations that involve a risk from explosion, high flammability or related conditions that create a hazard to life safety.

In the opinion of the Office of the Fire Commissioner, a part of a building being demolished or constructed is to be separated from the occupied portions with a fire separation having a fire resistance rating of 1 hour, whenever there is a risk from explosion, high flammability or related conditions that create a hazard to life safety.

This means that there will most likely be site specific instances where if an owner (or owners authorized agent, such as a registered professional) can show that there is no risk from explosion, high flammability or related conditions that create a hazard to life safety, then the requirement for the 1 hour fire separation may not be applicable as it will be outside the Scope of Part 5 of the BC Fire Code.

Here are our answers to the questions:

1. Yes, whenever there is a risk from explosion, high flammability or related conditions that create a hazard to life safety.
2. When there is a risk from explosion, high flammability or related conditions that create a hazard to life safety, the 1hour fire separation is required.
3. Under the BC Fire Code the authority having jurisdiction is defined as the Fire Commissioner, Fire Commissioners' Inspectors, and Local Assistants to the Fire Commissioner.
4. The only requirements in the BC Fire Code regarding the review of drawings are found in Division C, Section 2.4. Permits, for bulk plants, process plants, distilleries, and retail fuel dispensing stations.
5. Sections 21 and 24 of the *Fire Services Act* allow the Fire Commissioner, Fire Commissioners' Inspectors, and Local Assistants to the Fire Commissioner to inspect any premises upon complaint, or where believed advisable without complaint, to ascertain if certain conditions exist that would endanger life or property if a fire started on the premises.
6. The BC Fire Code is enforced by the Fire Commissioner, Fire Commissioners' Inspectors, and Local Assistants to the Fire Commissioner who have the authority to write orders under the *Fire Service Act* or BC Fire Code to enforce compliance.
7. The next edition of the BC Fire Code will have the following Appendix Note added for clarification:

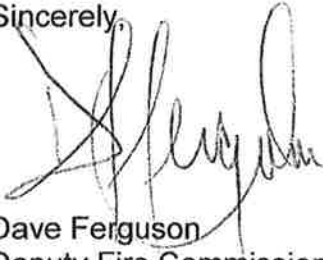
A-5.6.1.1. The degree of application should be determined in advance in conjunction with the authority having jurisdiction. In construction, alteration or demolition operations that do not pose an exposure hazard to other buildings, or to occupants, the degree of application of Section 5.6. may be minimal.

The degree of application of Section 5.6. to each operation should be determined in advance, as part of the fire safety plan for the operation, taking into consideration such issues as the size of the operation, exposure of adjacent buildings or facilities to hazards, and the site conditions. Operations can range from large multi-storey buildings to small

single-storey residences and may include additions or alterations to existing buildings.

I trust your Committee will find the preceding information useful for your subsequent building code interpretation.

Sincerely,

A handwritten signature in black ink, appearing to read "Dave Ferguson". The signature is written in a cursive style with a large, prominent initial "D".

Dave Ferguson
Deputy Fire Commissioner
Emergency Management BC

pc: Lyle Kuhnert, Senior Codes Administrator, Building and Safety Standards Branch
Ministry of Housing and Social Development