

# Lower Mainland Technical Committee of Building Officials

Minutes for September 12<sup>th</sup>, 2018 Meeting  
Hosted by Township of Langley

**Note:** The opinions expressed by this Committee in the Minutes of this meeting may be of assistance in determining the appropriate use of materials, equipment or methods of construction, but should NOT be considered as official Building Code Interpretations.

2018 Chairperson: Trevor Welsh [twelsh@portmoody.ca](mailto:twelsh@portmoody.ca)

2018 Co-Chairperson: Jonathan Mearns [jmearns@richmond.ca](mailto:jmearns@richmond.ca)

LMTC Member contact list Coordinator: Dawn Gillingham [dgillingham@hope.ca](mailto:dgillingham@hope.ca)

Date: September 12<sup>th</sup>, 2018

**Location:** Township of Langley

1.0 **Welcome Attendees:** Trevor Welsh chaired the meeting and welcomed everyone to the Township of Langley and called the meeting to order at 1:05pm

2.0 **Introduction of Members**

3.0 **Appointment of Scribe** Name: Jag Gill AHJ: City of Surrey

4.0 **Attendance:** All members are responsible to record their CPD points on the BOABC web page members section.

Oscar Sieg	City of Langley
David Douglas	City of Abbotsford
Wayne Berg	City of Richmond
Jonathan Mearns	City of Richmond
Jason Stevens	Township of Langley
Andrew Millington	Township of Langley
Rudy Wieller	City of Abbotsford
Evan Barberis	District of North Vancouver
Trevor Welsh	City of Port Moody
Wil Neish	City of Burnaby
Frank Durante	District of Mission
James Hook	City of Vancouver
Dawn Gillingham	District of Hope
Jagdeep Gill	City of Surrey
Henry Kuipers	District of Kent

Perry Halabuza  
Chantal Gemperle

City of Coquitlam  
City of Pitt Meadows

5.0 **Adoption of Minutes:** July 11<sup>th</sup>, 2018 – City of Abbotsford

**Motion to adopt Minutes Moved by:** Wil Neish

**Seconded by:** Oscar Sieg

**Discussion:** Nil.

**Carried:** Yes

6.0 **Review of Agenda.**

7.0 **Additional agenda items.**

8.0 **Old Business**

8.1	PE-RT Piping Update	Jon Milloy
<p>On-going update of potential Building Act application.</p> <p>City of Surrey is awaiting a response from the Province regarding the Building Act Section 8 application.</p>		
8.2	Determination of Fire Resistance Ratings	Jay Klassen
<p>Follow up discussion regarding utilizing Article A-9.10.3.1. Tables versus Appendix D for Fire Resistance Rating. Subsection D-1.1.3., “The ratings shown in this document apply if more specific test values are not available.”. If specific assemblies are either identified in the tables of Article A-9.10.3.1. or listed to CAN/ULC S101, as noted in Subsection D-1.1.5. then the information provided in Appendix D cannot be used for Fire Resistance Ratings.</p> <p>Further discussion is required, examples are to be requested of conflicting assemblies.</p> <p>Original solicited question has not been able to be revisited with initial requestor, therefore item has been removed from future agendas.</p>		
8.3	Combustible Pipe Transitions / Fire Rated Assemblies	Thomas Bradmore
<p>Discussion of the whether plumbing piping that penetrates a rated assembly is permitted to transition between combustible and non-combustible piping. Jurisdictions were to review and research to provide interpretations/comments back.</p>		

Chairperson to contact Building Safety Standards Branch to ask if code change is going to occur based off of Interruption Committees suggestions.

9.0 **New Business:**

9.1	Remote Elevator Recall	<b>Name:</b> Oscar Sieg
<p>I had one instance where an applicant asked if we need a remote recall for elevators. This is not the same as automatic or manual recall in the BC Building Code. Has any other jurisdiction heard of “remote elevator recall”?</p> <p>-Discussion on B44 standard. Most AHJ don’t have any regulation beyond B44.</p>		
9.2	Elevators in Floor Plains	<b>Name:</b> Oscar Sieg
<p>We would like to hear some examples on how other jurisdictions deal with elevators in floodplains.</p> <p>9.2 CONT’D</p> <p>-Nothing in BCBC, some AHJ’s require DP usually see the following:          -Sensors required so elevator won’t open when on flooded level.          -Elevator controls to be above flood plain.          -Dewatering devices and flood covenants.</p>		
9.3	T-Bar Ceiling - NFPA 13 Requirements	<b>Name:</b> Trevor Welsh
<p>If a flexible head is being used NFPA 13 requires the t-bar ceiling to conform to ASTM C 635 and be installed in accordance with ASTM C 636. Are other jurisdictions seeing the flex heads? How are other jurisdictions confirming the standard of the t-bar and installation is in accordance with the applicable ASTM standard?</p> <p>-Flex heads raise water demand.          -Majority of the AHJ’s would rely upon letters of assurance for the T-Bar ceiling</p>		
9.4	Certification: Challenges in online testing (BOABC)	<b>Name:</b> Evan Barberis
<p>-Plan check: Back and forth between drawings and questions, time runs out.          -Significant issues with PRONTO          -Issues logging on.          -Burnaby: wrote online test in HR.</p>		
9.5	Photo Electric Solar Panels	<b>Name:</b> Oscar Sieg
<p>-Some AHJ require P.Eng structural to design and approve point loads from the solar panels.          -Some AHJ have bulletins          -Electrical P.eng not applicable.</p>		

9.6	Limiting distance of two buildings on same property	<b>Name:</b> Henry Kuipers
-The limiting distance line can be moved to accommodate designs as the AHJ sees fit.		
9.7	Rooftop Podium: Exiting	<b>Name:</b> Perry Halabuza
BCBC 3.3.1.3 (2) to 3.3.1.5.(1)– Appropriate egress required, unanimously accepting by the group. A hatch would not be considered as an acceptable means of egress.		
9.8	New BCBC: Any insights on changes?	<b>Name:</b> Jonathan Mearns
A new BCID account can be used to access the BCBC and share it within office. Pages are printable. The new BCBC will be compatible with Apple devices. Mark ups are saved, if you login in each month.		
9.9	Vestibules	<b>Name:</b> Andrew Millington
Discussion occurred around the requirements of when a vestibule is required for a building entrance versus the entrance to a tenant space. Further research and clarification is need. Item is tabled for upcoming meeting. See Annex for background documents.		
9.10	Secondary Suites: SFD OR Multi-fam?	<b>Name:</b> James Hook
Vancouver is looking to update their bylaw and is looking to see how other AHJs view a secondary suite. It is a consensus that a secondary suite is considered an additional dwelling unit in a SFD with all the relaxations of 9.37.		

10.0 **Motion to adjourn meeting moved by:** Jonathan Mearns

**Seconded by:** Henry Kuipers

**Adjournment of Meeting Time:** 3:07 pm

**Location of next meeting:** City of Surrey

**Date of next meeting:** October 10<sup>th</sup>, 2018

**2018 Meeting schedule:**

- October 10<sup>th</sup>, 2018..... City of Surrey
- November 14<sup>th</sup>, 2018..... City of Coquitlam
- December 12<sup>th</sup>, 2018..... District of West Vancouver

# ANNEX A

**Andrew Millington**

---

**From:** Jag Johal  
**Sent:** Tuesday, January 17, 2017 1:49 PM  
**To:** Andrew Millington  
**Subject:** Vestibule

**Categories:** Important

Hi Andrew,

I am attaching part of the LMTC minutes dealing with ASHRAE as per your request.

8.2	ASHREA 90.1-2010: Vestibule requirements for main entrance to new tenant space over1000 sq. ft. in area.	Jag Johal
<p>An interpretation was received and discussed regarding ASHRAE 90.1-2010 and the requirement of a vestibule for a tenant space.</p> <p>Greg McCall from the City of Vancouver was teleconferenced in and provided the following information: <i>A "building entrance" is an entrance that is ordinarily used to gain access to the <u>building</u>. A "building entrance" is eligible for "exception 1" if the <u>building</u> has a gross area less than 1,000 sqft.</i></p> <p><i>Entrances to tenancy spaces only, are not classified as "building entrances", and are eligible for "exception g" if the tenancy has a gross area less than 3,000 sqft.</i></p>		

Thanks,

**Jagdeep Johal, RBO | Building Inspector**  
Permit, Licence & Inspection Services | Township of Langley  
20338 – 65 Avenue, Langley, BC V2Y 3J1  
Direct Line: 604.532.7356

[Web](#) | [Facebook](#) | [Twitter](#) | [YouTube](#)



# ANNEX A

## ASHRAE 90.1 and You

Using 90.1 2007 to 2013

### Vestibule Requirement 5.4.3.4

🕒 May 31, 2014 📁 Building Envelope

I just got off the phone with Greg McCall. He is an energy policy specialist with the City of Vancouver. We were discussing the vestibule requirements of section 5.4.3.4 in 2010 and addendum dm that changed the requirements for the 2013 standard.

As I travel around the country, I find that the wording of the exceptions to the vestibule requirements cause some trouble. Exception “e” excludes doors from having vestibules. The wording changed in 2013 in this way. “Building entrances in buildings that are: located in climate zone 3, ~~that are~~ less than four stories above grade, and less than 10,000 ft<sup>2</sup> in *gross conditioned floor area*.” The words underlined were added and crossed out removed. The italics represent a word that is defined in the Standard; in this case, gross conditioned floor area, which can be found in section 3 of the standard under floor area.

Climate zone 3 is cooling dominated. This exception has a sister requirement, f, for more northern climate zones. “Building entrances in buildings that are: located in climate zone 4, 5, 6, 7, or 8 and ~~that are~~ less than 1,000 ft<sup>2</sup> in *gross conditioned floor area*.” When I traveled to these climate zones, places such as Alaska, I was told that the 1,000 ft<sup>2</sup> referred to the area for the entrance not the building. **The changes in language are supposed to make it clear that it is the building that is less than 1,000 ft<sup>2</sup>.** If you look at the definition of *gross conditioned floor* it certainly does make it clear. Greg is not so certain that the new wording will be understood. Many designers in northern climates have interpreted this to mean the door area has to be more than 1,000 ft<sup>2</sup> before a vestibule is needed.

He also has a problem with exception g. “Doors that open directly from a space that is less than 3,000 ft<sup>2</sup> in *gross conditioned floor area* and is separate from the building entrance.” This exception is for tenant spaces that might be on the ground floor of a large office building or hotel and open to the street. If these tenant spaces are less than 3,000 ft<sup>2</sup> they do not need a vestibule. His question is, **why do freestanding stores of 1,000 ft<sup>2</sup> need a vestibule when these tenant spaces do not?** Canadians like consistency.

Another change from the 2010 standard is for large buildings with entrance levels of greater than 40,000 ft<sup>2</sup>. The vestibules of these buildings, when the doors are self-closing, must have a travel distance between doors of 16 ft or more. The total area of a vestibule must be less than “50 ft<sup>2</sup> or 2% of the *gross conditioned floor area* for that level of the building.”

# ANNEX A

## INTERPRETATION IC 90.1-2007-10 OF ANSI/ASHRAE/IESNA STANDARD 90.1-2007 Energy Standard for Buildings Except Low-Rise Residential Buildings

**Date Approved:** March 30, 2012

**Request from:** M. Greg McCall ([gregory.mccall@vancouver.ca](mailto:gregory.mccall@vancouver.ca)), City of Vancouver, British Columbia, Canada, 453 West 12<sup>th</sup> Avenue, Vancouver, BC V5Y 1V4.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IESNA Standard 90.1-2007, Section 5.4.3.4, regarding vestibules and Exceptions f and g.

**Background:** Vestibule criteria Exceptions f and g to Section 5.4.3.4 seem to contradict each other, in some instances, when dealing with identical spaces.

Section 5.4.3.4 states:

**5.4.3.4 Vestibules.** Building entrances that separate *conditioned space* from the exterior shall be protected with an enclosed vestibule, with all *doors* opening into and out of the vestibule equipped with self-closing devices. Vestibules shall be designed so that in passing through the vestibule it is not necessary for the interior and exterior *doors* to open at the same time. Interior and exterior *doors* shall have a minimum distance between them of not less than 7 ft when in the closed position. The exterior envelope of conditioned vestibules shall comply with the requirements for a conditioned space. The interior and exterior envelope of unconditioned vestibules shall comply with the requirements for a semiheated space.

### Exceptions:

- a. *Building entrances* with revolving *doors*.
- b. *Doors* not intended to be used as a *building entrance*.
- c. *Doors* opening directly from a *dwelling unit*.
- d. *Building entrances* in buildings located in climate zone 1 or 2.
- e. *Building entrances* in buildings located in climate zone 3 or 4 that are less than four stories above grade and less than 10,000 ft<sup>2</sup> in area.
- f. *Building entrances* in buildings located in climate zone 5, 6, 7, or 8 that are less than 1000 ft<sup>2</sup> in area.
- g. *Doors* that open directly from a *space* that is less than 3000 ft<sup>2</sup> in area and is separate from the *building entrance*.

Question: Do the vestibule requirements for the same 2,500 ft<sup>2</sup> space differ if it is a stand-alone facility ("building") versus a multi-use facility where the same retail space ("tenant") is connected with a residential tower, but with separate entrances?

Example: It appears that under Exception f a stand-alone "Safeway" of 2,500 ft<sup>2</sup> would require a vestibule (being a "building", over 1,000 ft<sup>2</sup>), but under Exception g, the identical 2,500 ft<sup>2</sup> "Safeway" on the ground floor of a residential tower would qualify as a "small retail space" (under 3,000 ft<sup>2</sup> and separate from the *building entrance* (tower lobby)) and the vestibule would not be required.

# ANNEX A

IC 90.1-2007-10

(If this is about stack effect in either case, then can this be clarified because limiting a "building" to 1,000 ft<sup>2</sup> would automatically limit its height, but a 3,000 ft<sup>2</sup> ground floor retail space can have a 30 foot high ceiling, resulting in the same stack effect as a 1,000 ft<sup>2</sup> (2-3 storey) building.)

**Interpretation:** The vestibule requirements for identical 2,500 ft<sup>2</sup> facilities differ under exceptions f and g. Under exception f, when a 2,500 ft<sup>2</sup> facility is a stand-alone facility, it is deemed a "building", therefore requiring a vestibule, but under exception g, when the identical facility is attached to a residential tower for example, it appears to be deemed a "tenant" and a vestibule is not required.

**Question:** Is this interpretation correct?

**Answer:** Yes, for buildings in climate zones 5 through 8.



# ANNEX A

INTERPRETATION IC 90.1-2010-25 OF  
ANSI/ASHRAE/IES STANDARD 90.1-2010  
Energy Standard for Buildings Except Low-Rise Residential Buildings

Date Approved: June 27, 2015

**Request from:** Branislav Cvijetinovic, Prism Engineering, 3605 Gilmore Way, Burnaby, BC V5G4X5.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2010, Section 5.4.3.4, regarding vestibules.

**Background:** ASHRAE/IES Standard 90.1, Section 5.4.3.4, states requirements for vestibules in buildings and provides related exemptions. Previously, Interpretation IC 90.1-2007-10 clarified the requirements for an identical space either attached to a residential tower or as a stand-alone building. The 2500 ft<sup>2</sup> “tenant” space would not require a vestibule if attached to a building under Exemption g.

Example: A 13,000 ft<sup>2</sup> building consists solely of a single story of tenant spaces separated from each other with demising walls, with their own individual entrances, no access between spaces and a separate Roof Top Unit for each space. There are no additional sections to the building other than a Mechanical room and an Electrical room. The building is located in Climate Zone 5. Exemption f would not apply in this situation since the building is larger than 1000 ft<sup>2</sup>; therefore vestibules are required in all building entrances. However, all building entrances are either to “tenant” spaces or a mechanical/electrical room.

**Interpretation:** A tenant space in the building described above with total floor area less than 3000 ft<sup>2</sup> would not require a vestibule for its entrances as it falls under Exemption g to Section 5.4.3.4.

**Question:** Is this interpretation correct?

**Answer:** No.

**Comments:** Exception g only applies to a door that is separate from the building entrance. The definition of a “building entrance” is a doorway that is ordinarily used to gain access to the building. Based on your description, each tenant space has a “building entrance” as it has a doorway that is ordinarily used to gain access to the building. (Note that a building can have multiple “building entrances”. A full block development could well have “building entrances” on all four sides.) Consequently, the entrances to each of the tenant spaces are required to have vestibules in the building which you described. These doors are “building entrances” (they are not “separate from the building entrance”). Thus, these doors do not qualify for exception g.