Revision 2 to the British Columbia Building Code 2018

The purpose of this bulletin is to provide information about Revision 2 changes to the British Columbia Building Code (BC Code). Changes are effective December 12, 2019 and apply to projects for which a permit is applied for on or after this date.

Background

Revision 2 updates to the BC Code include:

- Changes to harmonize the BC Code with the National Building Code (National Code) to provide greater flexibility for the construction of new secondary suites;
- Early adoption of the National Code requirements for encapsulated mass timber to enable the construction of 12-storey tall wood buildings within the jurisdictions that opted-in;
- New carbon monoxide alarm requirements for stores, offices, classrooms, and recreation centres;
- Preliminary BC Energy Step Code requirements for schools, libraries, colleges, recreation centres, hospitals and care centers, and new requirements for residential and office buildings, to support the CleanBC commitment;
- Increased requirements for lighting in recycling rooms; and
- Additional requirements for fire alarms and egress to increase safety on occupied roofs.

Secondary Suites

The Province is working to remove barriers to secondary housing forms. These revisions aim to increase options for the design and construction of new secondary suites, in more building types, while providing an acceptable level of health and fire safety to occupants.

Revision 2 updates:

- harmonize with the form and approach of the National Code, and most of its technical requirements;
- incorporate historical requirements from the BC Code that provide a higher level of health and safety; and
- adapt some requirements based on application to existing buildings and to coordinate with other requirements.

The definition of a secondary suite in the BC Code has been updated to discontinue prescribed maximum total floor space amounts and percentage distribution.

The BC Code requirements for the design and construction of new secondary suites do not permit owners to contravene land use bylaws. Land use bylaws govern where secondary suites are permitted, whereas the BC Code governs how they are to be built. Before constructing a secondary suite, owners must check with their local authority.
Bulletin B19-05 contains more information about these changes. In addition, bulletin B19-04 explains how the changes provide local authorities with more options for land use planning.

**New Provisions for Encapsulated Mass Timber Construction (EMTC)**

EMTC provisions to permit the construction of 12-storey buildings are in the final stages of National Code development for publication in the 2020 National Code. Revision 2 incorporates the early and localized adoption of the National EMTC provisions with minor changes specific to British Columbia (B.C.), in qualifying local authority jurisdictions, prior to province-wide adoption anticipated in 2022.

There are currently 13 local authorities enrolled, including:

1. board of Governors of the University of British Columbia,
2. City of Abbotsford,
3. City of Campbell River,
4. City of Colwood,
5. City of Kelowna,
6. City of Langford,
7. City of North Vancouver,
8. City of Richmond,
9. City of Surrey,
10. City of Victoria,
11. District of Mission,
12. District of Saanich, and
13. Township of Langley.

The participating local authorities will provide feedback, to enhance provisions, during the initial roll-out. A second intake period is anticipated for local authorities that would like to join this initiative.

Although EMTC provisions are visible to all code users, the requirements only apply to EMTC projects within the jurisdictions of the local authorities listed.

More information about this code change is available in bulletin B19-07. Revision 2 content changes are summarized on the Building and Safety Standards Branch website.

Associated changes to the BC Fire Code have also been adopted within Revision 1 to the BC Fire Code. Code updates are summarized and available on the Building and Safety Standards Branch website.

**Carbon Monoxide Alarms**

Carbon monoxide presents lethal risks to occupants of buildings that are served by a fuel-burning appliance or those with attached garages. Recent carbon monoxide related incidents have highlighted the need for carbon monoxide alarms to detect and notify commercial building occupants when there is a risk of carbon monoxide poisoning, so they may safely evacuate.

Revision 2 to the BC Code includes provisions that require carbon monoxide alarms in Group A assembly occupancy (e.g., schools and places of worship); Group D business and personal services occupancy (e.g., offices); and Group E mercantile occupancy (e.g., retail stores) where they are served by a fuel-burning appliance or where they are adjacent to a storage garage.
The use of carbon monoxide alarms conforming to CAN/CSA-6.19 Residential Carbon Monoxide Alarming Devices are permitted in assembly, business and personal services, and mercantile occupancies.

Carbon monoxide detectors are permitted to be installed in lieu of carbon monoxide alarms in complex buildings (Part 3) if they conform to CAN/ULC-S524 Installation of Fire Alarm Systems and also form part of the fire alarm system.

A minor revision has been adopted to remove specific installation location instructions and instead, point to the manufacturer’s recommended installation location specifications in residential buildings.

**BC Energy Step Code**

In locations where the Degree-Days Below 18°C is greater or equal to 3000, Revision 2 includes changes to the BC Energy Step Code with regards to the Thermal Energy Demand Intensity (TEDI) and Total Energy Use Intensity (TEUI) requirements for certain complex buildings consisting of residential, business and personal services, and mercantile occupancies.

The revised energy targets were established to provide more flexibility that would be appropriate for colder climates as well as new energy requirements for certain assembly, treatment and care occupancies, such as schools, libraries, colleges, recreation centres, hospitals and care centres. These additions are part of an ongoing effort to align with the CleanBC commitment to achieve high levels of energy efficiency in buildings.

Further changes to residential buildings (Part 9) include:

- allowance for the use of adjusted TEDI requirements based on Degree-Days Below 18°C; and
- the introduction of an alternative compliance path demonstrating a % improvement over the EnerGuide Reference House.

More information about this code change is available in bulletin B19-08.

**Lighting in Garbage and Recycling Rooms**

The lighting requirements in Table 9.34.2.7. now address lighting in garbage and recycling rooms, in response to requests from local authorities. The same lighting provisions for service rooms and laundry areas apply to rooms used for the storage of combustible refuse.

**Roof-top Enclosures and Roof-top Occupancies**

Revision 2 includes requirements to increase the level of safety for roof-top occupancies, as well as permission to exempt certain roof-top enclosures from being counted as a storey in building height.

An exemption for roof-top enclosures from being counted as a storey in building height is permitted if they are used only for access and egress. Required means of egress from the roof level have some new requirements so that they effectively function as exit facilities serving the roof. The change includes requirements for exit signs and audibility of fire alarms to be provided at the roof level.
More Information

BC Codes are Now Available Free Online

Free online access to the BC Building Code and the BC Fire Code is available on the BC Publication’s website.

Revision 2 content changes are available on the Building and Safety Standards Branch website.

Links

- Codes Canada: (volunteer & attend) https://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes_centre_index.html
- Ministry website: https://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards

Contact the Building and Safety Standards Branch

- General inquiries can be sent to building.safety@gov.bc.ca
- Technical Code inquiries can be sent to codequestion@gov.bc.ca

The Building and Safety Standards Branch does not enforce compliance with the BC Building Code. Local authorities are authorized to enforce the BC Code through the Local Government Act and the Community Charter.

The contents of this Bulletin are not intended to be provided as legal advice and should not be relied upon as legal advice. For further information, contact the Building and Safety Standards Branch.