

Building and Safety Standards Branch

PO Box 9844 Stn Prov Govt Victoria BC V8W 9T2

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Secondary Suites, Changes to Design and Construction Requirements British Columbia Building Code 2018 Revision 2

The purpose of this bulletin is to provide information about Revision 2 changes to the British Columbia Building Code 2018 (BC Code) for the design and construction of new secondary suites. Changes are effective December 12, 2019 and apply to projects for which a permit is applied for on or after this date.

A separate bulletin B19-04 discusses how the BC Code changes to secondary suite requirements may impact land use planning.

Background

The BC Code introduced requirements for secondary suites in 1995. Therefore, the National Building Code (National Code) provisions were not adopted when they were first published in 2010. The BC Code requirements have not been substantially updated since 1995.

The adopted changes:

- 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 Province of British Columbia (B.C.) is working to remove barriers to secondary housing forms. These mid-cycle revisions to the BC Code aim to increase options for the design and construction of new secondary suites in buildings. Allowing the construction of more secondary suites in more building types helps create more housing units while providing an acceptable level of health and fire safety to occupants. These changes provide local authorities with more options for land use planning.

The definition of secondary suite in the BC Code is not to be equated with similar terms in land use bylaws. Land use bylaws may define or use the term secondary suite to describe housing types. The term might carry a different meaning in bylaw than the meaning assigned in the BC Code. It is often appropriate to set aside the BC Code terms when considering land use and zoning matters.

Including solutions for design and construction of secondary suites in the BC Code does not allow 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, check with the local authority.**

The BC Code governs the design and construction of new secondary suites including alterations to existing buildings to add a secondary suite as well as new work or alterations within a secondary





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suite. It is not intended that the BC Code be used as evaluation metrics or retroactive construction requirements for existing secondary suites.

Changes to the Definition of Secondary Suites

The BC Code previously defined a secondary suite as "a dwelling unit

- having a total floor space of not more than 90 m² in area,
- having a floor space less than 40% of the habitable space of the building,
- located within a building of residential occupancy containing only one other dwelling unit, and
- located in and part of a building which is a single real estate entity."

The **new** definition states that a *secondary suite* means "a self-contained *dwelling unit* located within a *building* or portion of a *building*

- completely separated from other parts of the building by a vertical fire separation that has a
 fire-resistance rating of not less than 1 h and extends from the ground or lowermost
 assembly continuously through or adjacent to all storeys and spaces including service
 spaces of the separated portions,
- of only *residential occupancy* that contains only one other *dwelling unit* and common spaces, and
- where both dwelling units constitute a single real estate entity."

The previous definition placed limits on floor space as a mechanism to moderate fire load and occupant load. This revision **discontinues the prescribed floor space amounts and percentage distribution**. New requirements as well as some existing and revised requirements, moderate risks attributed to fire load and occupant load as compensatory measures. **Check with the local authority on floor space allowances.**

It cannot be assumed that the owner occupies one of the dwelling units, nor that the occupant of the dwelling unit has direct control over the secondary suite or use by its occupants as a means of increasing the level of safety. A secondary suite is not a subordinate suite to a principle suite. However, there are health and safety opportunities and benefits that come with a house with a secondary suite having single ownership that may not be available for units with separate ownership. Typical requirements for separately-owned dwelling units have been adjusted to accommodate the interest, coordination, and maintenance that is available with single ownership.

In addition, this change adopts and adapts permissions in the National Code to allow the construction of secondary suites in a building that may contain more than one dwelling unit or other occupancy. These permissions are limited and only apply where a dwelling unit and its secondary suite are completely separated from other parts of the building with continuous vertical fire-rated construction. These permissions do not apply where any portion of the dwelling unit and its secondary suite are above or below another dwelling unit or other occupancy.

Examples of buildings where the BC Code allows the construction of secondary suites include sideby-side duplexes and also row houses where a vertical fire separation separates the portion with the dwelling unit with the secondary suite from the remainder of the building. Examples where secondary suites are not permitted are up/down duplexes and apartment buildings where dwelling units are above or below other dwelling units.



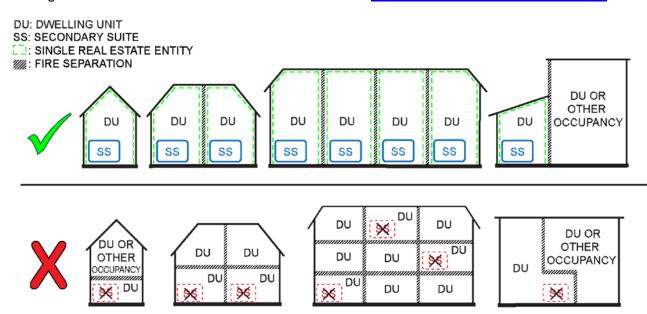
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The following illustration provides examples of the types of buildings in which the BC Code allows the construction of secondary suites and where secondary suites are not permitted. **Before constructing a secondary suite, check with the local authority.**

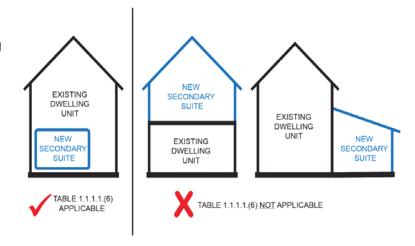
Local government contact information is available here: http://www.civicinfo.bc.ca/directories.



Changes to Alterations to Existing Buildings to Add a Secondary Suite

Some previous requirements were based on the premise of 'finishing' an unfinished basement and dealing with the hardships that may exist when working within the confines of an existing home. Some accommodation for when existing construction poses a practical or financial hardship is necessary to avoid abandoning projects or creating disincentives to permits and inspections.

This change distinguishes requirements for new construction - with no existing construction imposing hardship - from requirements for alterations to existing buildings where existing construction poses a hardship. Division A provides Table 1.1.1.1.(6) containing Alternative Compliance Methods that are considered adequate but may only be used where existing construction acts as a practical barrier to compliance with the acceptable solutions in Division B of the BC Code.





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Similar to the alternative compliance methods available to heritage buildings, the alternative compliance methods in Table 1.1.1.1.(6) may be substituted for the requirements contained elsewhere in the BC Code. The owner may choose any or a combination of these options:

- apply acceptable solutions in Division B,
- apply alternative solutions under Division A, or
- apply alternative compliance methods in Table 1.1.1.1.(6) of Division A.

Changes to Design and Construction Requirements (Division B)

This change adopts the form and approach of the National Code with regards to secondary suites. Requirements specific to secondary suites are found along side those for dwelling units throughout Part 9 and B.C.'s unique Section 9.37. is deleted.

A table providing references to secondary suite-specific content as it appears throughout Part 9 of Division B is included in the Appendix to this bulletin.

Many provisions are carried over and/or adapted from B.C.'s previous Section 9.37., however there are some provisions that are new. Examples are as follows (references are to Division B):

Examples of New Secondary Suite Provisions

Means of Egress Section 9.9.

A second and separate means of egress may be required depending on the design and risk to the first means of egress. Sprinklered buildings and access to balconies provide some alternatives. Where an openable window is relied upon as a second means of egress, it must meet certain conditions; it must have a larger opening (at least 1 m high by 0.55 m wide) than a bedroom egress window, and the sill height is limited to 1 m above the floor and 7 m above adjacent ground level.

Fire Protection Section 9.10.

Within a house with a secondary suite, the dwelling units and the common spaces are required to be separated from each other by a fire separation that acts as a continuous barrier to the spread of smoke and fire. Fire separations in a house with a secondary suite must have a fire-resistance rating unless the house is fully sprinklered. As previous, a 45-minute fire-resistance rating is required if smoke alarms are not interconnected (smoke alarms are still required) and a 30-minute fire-resistance rating is permitted where additional photo-electric smoke alarms are installed in each unit and the additional smoke alarms are interconnected. A new 15-minute fire-resistance rating is now permitted where every smoke alarm in the house (secondary suite and the other dwelling unit including their common spaces) are interconnected. A 15-minute rating can be based on testing described in Part 3, calculated using the component additive method in Appendix D, or the designer can follow the construction specifications detailed in Clause 9.11.1.1.(2)(a). There are also construction specifications detailed in Sentence 9.10.3.1.(3) that the designer can use where a 30-minute fire-resistance rating is required. The construction specifications for both the 15-minute assembly and the 30-minute assembly permit the use of 12.7 mm regular gypsum board and satisfy the sound transmission requirements as well.



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Examples of New Secondary Suite Provisions (continued)

Fire Protection (continued)

Section 9.10.

Doors as closures in fire separations do not need to be labelled or tested, provided they are designed to specific criteria such as having a 45 mm thickness of solid wood and be provided with a self-closing device.

Assemblies that separate houses with secondary suites need not be constructed as a firewall but shall be constructed as fire separations with not less than a 1-hour fire-resistance rating. The assembly must be continuous from the top of footings to the underside of the roof deck and may not at any point be horizontal. A house with a secondary suite may not be above or below any other unit or occupancy.

Interconnected smoke alarms must be photo-electric type as they are less susceptible to nuisance alarms and may now rely on wireless technology for interconnection.

Windows or access panels for firefighting are not required for houses with secondary suites, nor is firefighting access to basements required.

Sound Transmission Section 9.11.

Controlling sound transmission is important to occupant health and well-being. The separation between a secondary suite and the other dwelling unit within a house has a reduced apparent sound transmission class (ASTC 40 from 47) and reduced sound transmission class (STC 43 from 50). There is an additional option in lieu of a rating of a prescriptive assembly that is considered acceptable. Sound resistance can be further improved by selecting furnishings and finishing materials that absorb sound such a carpet.

Carbon Monoxide Alarms

Article 9.32.4.2.

All carbon monoxide alarms installed in a house with a secondary suite including their common spaces must be interconnected and may rely on wireless technology for interconnection.

A house with a secondary suite may contain common spaces such as common storage, common service rooms, common laundry facilities, and common areas used for egress. Common spaces that are part of a shared means of egress must be separated from the dwelling units with a fire separation and have available controls such as for lighting.



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More Information

BC Codes are Now Available Free Online

Free online access to the <u>BC Building Code</u> and the <u>BC Fire Code</u> is available on the BC publications <u>website</u>. In addition, Revision 2 content changes are summarized in the online <u>BC Building Code</u> and the <u>BC Fire Code 2018</u>, for convenience.

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
- National Code Change Request: https://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes_centre/code_change_request.html

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

Contact the Local Authority

 Local authority contact information is available online at http://www.civicinfo.bc.ca/directories.

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



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Appendix A

British Columbia Building Code 2018 Revision 2 References to Secondary Suite Provisions

The following table provides references to secondary suite-specific content as it appears throughout Part 9 of Division B.

Secondary Suite Provisions in Part 9		
Reference	Application	Provision
Article 9.5.3.1.	Ceiling Heights of Rooms or Spaces	Ceiling and clear heights in secondary suites shall be the same as for all other dwelling units
Article 9.5.5.1.	Doorway Opening Sizes	Doorway opening sizes shall be the same as for all other dwelling units
Section 9.8.	Stairs, Ramps, Landings, Handrails and Guards	Stairs, ramps, landings, handrails and guards shall be the same as for those serving single dwelling units
Article 9.9.2.4.	Principal Entrances	Exemption from requirements for exits
Article 9.9.3.3.	Width of Corridors	Minimum width for public corridors and exit corridors serving a house with a secondary suite including its common spaces
Article 9.9.3.4.	Clear Height	Minimum clear height for public corridors and exit corridors serving a house with a secondary suite including its common spaces
Subsection 9.9.4.	Fire Separations for Exits	Exits shall be separated by a fire separation with a fire-resistance rating corresponding to the interconnection of smoke alarms and the presence of sprinklers
Subsection 9.9.6.	Doors in a Means of Egress	Limits on obstructions of doors and at doorways in a means of egress
Article 9.9.9.2.	Two Separate Exits	Permitted alternatives from providing a second and separate exit
Article 9.9.9.3.	Shared Egress Facilities	Permitted alternatives from providing a second and separate means of egress
Subsection 9.9.11.	Signs	Exemption from requirements for signage
Subsection 9.9.12.	Lighting	Exemption from requirements for lighting in a means of egress
Article 9.10.3.1.	Fire-Resistance and Fire-Protection Ratings	Permitted assemblies where a fire-resistance rating is required
Article 9.10.9.2.	Continuous Barrier	Sealing of joints in fire separations
Article 9.10.9.3.	Openings to be Protected with Closures	Permitted alternative for doors where a fire- protection rating is required





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Secondary Suite Provisions in Part 9 (continued)		
Reference	Application	Provision
Article 9.10.9.6.	Penetrations of Fire Separations	Permitted alternative to providing fire dampers
Article 9.10.9.14.	Separation of Residential Suites	Dwelling units shall be separated by a fire separation with a fire-resistance rating corresponding to the interconnection of smoke alarms and the presence of sprinklers
Article 9.10.9.15.	Separation of Public Corridors	Public corridors shall be separated from the remainder of the building by a fire separation with a fire-resistance rating corresponding to the interconnection of smoke alarms and the presence of sprinklers
Article 9.10.10.4.	Location of Fuel- Fired Appliances	Permitted alternative for the separation of service rooms containing a fuel-fired appliance
Article 9.10.11.2.	Firewalls Not Required	Permitted alternative to the requirement for a firewall on a property line
Article 9.10.12.3.	Exterior Walls Meeting at an Angle	Required distance between unprotected openings
Subsection 9.10.15.	Spatial Separation Between Houses	Application of Subsection 9.10.15. to houses with a secondary suite
Article 9.10.19.1.	Required Smoke Alarms	Smoke alarms required in ancillary spaces and common spaces
Article 9.10.19.5.	Interconnection of Smoke Alarms	Options for interconnection of smoke alarms corresponding with the fire-resistance rating of fire separations and the presence of sprinklers
Subsection 9.10.20.	Firefighting	Exemption from providing access panels and basement access
Subsection 9.11.1.	Protection from Airborne Noise	Requirement for protection from airborne noise, and permitted assemblies where an apparent sound transmission class rating or a sound transmission class rating are required
Section 9.32.	Ventilation	Permitted alternative to a self-contained mechanical ventilation system serving only one dwelling unit
Article 9.32.4.2.	Carbon Monoxide Alarms	Carbon monoxide alarms shall be interconnected
Section 9.33.	Heating and Air- Conditioning	Permitted alternative to a heating system or air- conditioning system serving only one dwelling unit
Article 9.33.4.3.	Heating System Control	Individual temperature controls shall be provided in each dwelling unit
Subsection 9.34.2.	Lighting Outlets	Requirement for stairways to be lighted