District of Sooke

December 21, 2020

Construction Industry, Designers, Contractors and Suppliers providing services in Sooke

Advisory #13 – Secondary Suites within a Single-Family Dwelling

The British Columbia Building Code 2018, (BCBC) which is adopted in Sooke, by the District of Sooke Building Bylaw, contains provisions that apply to the development of Secondary Suites within a Single-Family Dwelling. We are alerting you to the need for building owners, as well as their designers, builders, and material suppliers on their behalf, to comply with the requirements of the revised to the 2018 BCBC.

This enclosed Advisory #13 includes a summary of the significant revisions to the 2018 BCBC provisions that apply regarding the development of Secondary Suites within a Single-Family Dwelling.

We hope that this advisory will help eliminate confusion regarding the Intent of what is required when applying the requirements for the construction of Secondary Suites within a Single-Family Dwelling and will encourage conformance with the revised to the 2018 BCBC requirements. Please feel free to make copies of this advisory available to your customers as you see fit. Your assistance in achieving these goals will be greatly appreciated.

The BC Building, Plumbing and Fire Codes are available to read online at:
https://www.bcpublications.ca/BCPublications/

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Compliance with the Building Bylaw are addressed in this advisory.
The British Columbia Building Code 2018, (BCBC) which is adopted in Sooke, by the District of Sooke Building Bylaw.

Words in *italics* are defined in the 2018 BCBC.

Secondary Suites within a Single-Family Dwelling
2018 BC Building Code Requirements

Fire Separations

Revisions to the 2018 Building Code (BCBC) associate the smoke alarms type, location, and interconnection with the requirements for type of fire separation required in exits, suite separation, and public corridors. The code references have been combined below to avoid repetition.

Fire Separation of Exits 9.9.4.2. – Where an exit is located in a house with a secondary suite, including their common spaces, the exit shall be separated from adjacent floor areas with a fire separation.

Fire Separation of Residential Suites 9.10.9.14.(3) – Dwelling units that contain 2 or more storeys including basements as well as houses with a secondary suite including their common spaces shall be separated from the remainder of the building by a fire separation having a fire-resistance rating of not less than 1 h. (See Note A-3.3.4.4.(1).)

Fire Separation of Residential Suites 9.10.9.14.(4) – In a house with a secondary suite, dwelling units shall be separated from each other and from ancillary spaces and common spaces with a fire separation.

In addition to meeting 9.10.9.14.(3) if applicable, the Fire Separations noted in 9.10.9.14.(4), must comply with one of the fire-resistance ratings, applicable smoke alarm installation and sound transmission ratings of A, B, C or D below:

A) having a fire-resistance rating not less than **15 minutes** where all smoke alarms within the house are of photo-electric type and interconnected as described below:

In a house with a secondary suite, including their common spaces, all smoke alarms shall be of photo-electric type and interconnected so that the actuation of any one smoke alarm causes all smoke alarms within the house and within the secondary suite, including their common spaces, to sound (9.10.19.5.(2)(a)). (see also Sentence 9.10.3.1.(2)),

In a house with a secondary suite including their common spaces, where a minimum fire-resistance rating of **15 minutes** is permitted, the construction described in Clause 9.11.1.1.(2)(a) is permitted to be used.

Where a house contains a secondary suite, each dwelling unit shall be separated from every other space in the house in which noise may be transmitted by:
a) construction having
- i) joist spaces filled with sound-absorbing material of not less than 150 mm nominal thickness,
- ii) stud spaces filled with sound-absorbing material,
- iii) resilient channel on one side of the separation spaced 400 or 600 mm o.c., and
- iv) not less than 12.7 mm thick gypsum board on ceilings and on both sides of walls,

b) construction providing an **STC rating of not less than 43**, or
c) a separating assembly and adjoining constructions, which together provide an **ASTC rating of not less than 40**. (See also Sentence 9.10.3.1.(2) and Note A-9.11.1.1.(2).)

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A-9.11.1.1.(2) Sound Transmission in Houses with a Secondary Suite. Controlling sound transmission between dwelling units is important to the occupants' health and well-being. Although this may be difficult to achieve in an existing building, it is nevertheless necessary that a minimum level of sound transmission protection be provided between the dwelling units in a house with a secondary suite. A somewhat reduced level of performance is acceptable in the case of secondary suites because the occupants of the house containing a secondary suite are only affected by the sound of one other unit and, in many cases, it is the owner of the house who will decide on the desired level of protection. Sound resistance can be improved by selecting furnishings and finishings that absorb sound, such as carpet.

B) having a fire-resistance rating not less than **30 minutes** where additional smoke alarms of photo-electric type are installed and interconnected as described below:

In a house with a secondary suite, including their common spaces, an additional smoke alarm of photo-electric type shall be installed in each dwelling unit and common space and be interconnected so that the actuation of one smoke alarm will cause the additional smoke alarms in the other dwelling unit, or common spaces to sound (9.10.19.5.(2)(b)). (see also Sentence 9.10.3.1.(3)),

In a house with a secondary suite including their common spaces, where a minimum fire-resistance rating of **30 minutes** is permitted, it is permitted to use construction having:
a) walls and floor/ceiling assemblies framed with wood studs,
b) joist spaces filled with,
- i) preformed insulation of rock or slag fibres conforming to CAN/ULC-S702, "Mineral Fibre Thermal Insulation for Buildings," having a mass per unit area of not less than 1.22 kg/m² of floor surface, or
- ii) wet-blown cellulose fibres conforming to CAN/ULC-S703, "Cellulose Fibre Insulation for Buildings", having a density of not less than 50 kg/m³ to a minimum depth of 90 mm on the underside of the subfloor and the sides of the structural members,

c) stud spaces of,
- i) non-loadbearing assemblies filled with preformed insulation of glass fibres conforming to CAN/ULC-S702, "Mineral Fibre Thermal Insulation for Buildings," having a mass per unit area of not less than 0.6 kg/m² of wall surface, and
- ii) loadbearing assemblies filled with preformed insulation of rock or slag fibres conforming to CAN/ULC-S702, "Mineral Fibre Thermal Insulation for Buildings," having a mass per unit area of not less than 1.22 kg/m² of wall surface, or filled with insulation of cellulose fibres conforming to CAN/ULC-S703, "Cellulose Fibre Insulation for Buildings," having a density of not less than 50 kg/m³,

d) resilient channel on one side of the fire separation spaced 400 or 600 mm o.c., and
e) not less than 12.7 mm thick gypsum board on ceilings and on both sides of walls.

(See also Clause 9.11.1.1.(2)(a).)

Where a house contains a secondary suite, each dwelling unit shall be separated from every other space in the house in which noise may be transmitted by:
a) construction having,
- i) joist spaces filled with sound-absorbing material of not less than 150 mm nominal thickness,
- ii) stud spaces filled with sound-absorbing material,
- iii) resilient channel on one side of the separation spaced 400 or 600 mm o.c., and
- iv) not less than 12.7 mm thick gypsum board on ceilings and on both sides of walls,

b) construction providing an **STC rating of not less than 43**, or
c) a separating assembly and adjoining constructions, which together provide an **ASTC rating of not less than 40**. (See also Sentence 9.10.3.1.(2) and Note A-9.11.1.1.(2).)

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A-9.11.1.1.(2) Sound Transmission in Houses with a Secondary Suite. Controlling sound transmission between dwelling units is important to the occupants' health and well-being. Although this may be difficult to achieve in an existing building, it is nevertheless necessary that a minimum level of sound transmission protection be provided between the dwelling units in a house with a secondary suite. A somewhat reduced level of performance is acceptable in the case of secondary suites because the occupants of the house containing a secondary suite are only affected by the sound of one other unit and, in many cases, it is the owner of the house who will decide on the desired level of protection. Sound resistance can be improved by selecting furnishings and finishings that absorb sound, such as carpet.

Note: *This option is similar to the 2018 BCBC requirements prior to the December 2019 revision. The December revision to the 2018 BCBC now includes smoke alarms in common areas. The typical smoke alarms conforming to CAN/ULC-S531, required within each of the dwelling units, are not required to be a specific type (they can be ionized). However, they must be interconnected within each unit so that the actuation of any one smoke alarm causes all the smoke alarms within both of the units to sound.*

C) having a fire-resistance rating not less than **45 minutes** when smoke alarms are not installed and interconnected as described in (A) or (B) above:
Additional photo-electric smoke alarms and interconnection of smoke alarms between dwelling units and common spaces in a house with a secondary suite are not required as per 9.10.19.5.(3)(a).

Note: *Smoke Alarms are still required to be installed as described under 9.10.19.*

9.10.19.1. Required Smoke Alarms
1) Except as permitted by Article 9.10.19.8., smoke alarms conforming to CAN/ULC-S531, "Standard for Smoke Alarms," shall be installed in
a) each dwelling unit,
b) each sleeping room not within a dwelling unit, and
c) ancillary spaces and common spaces not in dwelling units in a house with a secondary suite.
(see 9.10.19.8. for Residential Fire Warning Systems)

D) that the fire separation is not required to have a fire-resistance rating if the building is sprinklered:
Additional photo-electric smoke alarms and interconnection of smoke alarms between dwelling units and common spaces in a house with a secondary suite are not required as per 9.10.19.5.(3)(b).

Note: *Smoke Alarms are still required to be installed as described under 9.10.19.*

9.10.19.1. Required Smoke Alarms
1) Except as permitted by Article 9.10.19.8., smoke alarms conforming to CAN/ULC-S531, "Standard for Smoke Alarms," shall be installed in
a) each dwelling unit,
b) each sleeping room not within a dwelling unit, and
c) ancillary spaces and common spaces not in dwelling units in a house with a secondary suite.
(see 9.10.19.8. for Residential Fire Warning Systems)

Fire Separation of Public Corridor 9.10.9.15. – A public corridor located in a house with a secondary suite shall be separated from the remainder of the spaces in the house with a fire separation.

Smoke Alarms 9.10.19. & 9.32.4.2.

The 2018 BCBC requires smoke alarms (ionization or photo-electric) in each dwelling unit as specified in 9.10.19.3. (below) and also requires additional smoke alarms in common areas and between suites in dwellings with secondary suites. Installation of photo-electric smoke alarms and the type of interconnection affects the fire-resistance rating required between a dwelling and a secondary suite (as detailed under Fire Separation above.

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Carbon monoxide alarms will be required if there is a fuel-burning appliance or a solid fuel-burning appliance or the dwelling contains a storage garage. (see Carbon Monoxide (CO) Alarm below)

Some smoke alarms are combination alarms that include the carbon monoxide alarm.

Note: *Wireless technology is acceptable for interconnecting smoke alarms in houses with secondary suites; however, each smoke alarm must be installed with a permanent electrical connection.*

Location of Smoke Alarms – 9.10.19.3. Within each dwelling unit, sufficient smoke alarms shall be installed:

so that at least one smoke alarm is installed on each storey, including the basement,
on any storey with a sleeping room, a smoke alarm is to be installed in each sleeping room,
in a location between the sleeping rooms and the remainder of the storey, and
if the sleeping rooms are served by a hallway, the smoke alarm shall also be located in the hallway.
Smoke alarms shall be installed on or near the ceiling.

Required Smoke Alarms - 9.10.19.1.(1)(c) Smoke alarms shall also be installed in ancillary spaces and common spaces not within dwelling units in a house with a secondary suite.

Interconnection of Smoke Alarms – 9.10.19.5.(1) Where more than one smoke alarm is required in a dwelling unit, the smoke alarms shall be interconnected so the actuation of one alarm will cause all alarms within the dwelling unit to sound.

Power Supply – 9.10.19.4. Smoke alarms are to be installed with permanent electrical connections, and with a battery alternative power source.

Carbon Monoxide (CO) Alarm – 9.32.4.2

Are required where a residential occupancy is served by a fuel-burning appliance or a solid fuel-burning appliance or contains a storage garage.
Are required for each suite sharing a wall, floor or ceiling assembly with a storage garage or is adjacent to an attic or crawl space.

The Carbon Monoxide (CO) alarms required above are to be located in each bedroom or within 5 m of each bedroom door,

Where a fuel-burning appliance serves a residential occupancy and is installed in a service room that is not in a suite (i.e., in a common area), the CO alarms are to be located in the service room and each bedroom or within 5 m of each bedroom door.
CO alarms are required in rooms with a solid fuel-burning appliance.
In a dwelling unit with a secondary suite and common areas, the CO alarms are to be interconnected so that actuation of any one CO alarm causes all CO alarms to sound.

The interconnection of CO alarms can be accomplished using wireless technology

Note: *Some Smoke Alarms are combination alarms which include the carbon monoxide alarm.*

Fire-Resistance and Fire-Protection Ratings 9.10.3.1.

Required fire-resistance rating shall be determined in conformance with:

- the test methods described in Part 3 of the BCBC,
- the calculation method presented in Appendix D (BCBC), or
- the construction specifications presented in Tables 9.10.3.1.-A and 9.10.3.1.-B. (BCBC).

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The construction specifications described below are permitted for a **15-** and **30-minute** fire-resistance rating.

In a house with a secondary suite, including their common spaces, where a minimum fire-resistance rating of **15 minutes** is permitted, the construction described in 9.11.1.1(2)(a) is permitted.

Note: *Sound Transmission Assembly meets the 15-minute fire-resistance rating.*

In a house with a secondary suite, including their common spaces, where a minimum fire-resistance rating of **30 minutes** is permitted, it is permitted to use construction having
walls and floor/ceiling assemblies framed with wood studs and joists,
joist spaces filled with

preformed insulation of rock or slag fibres conforming to CAN/ULC-S702, "Mineral Fibre Thermal Insulation for Buildings", having a mass per unit area of not less than 1.22 kg/m² of floor surface, or wet-blown cellulose fibres conforming to CAN/ULC-S703, "Cellulose Fibre Insulation for Buildings", having a density of not less than 50 kg/m³ to a minimum depth of 90mm on the underside of the subfloor and the sides of the structural members.

stud spaces of

non-loadbearing assemblies filled with preformed insulation of glass fibres conforming to CAN/ULC-S702, "Mineral Fibre Thermal Insulation for Buildings", having a mass per unit area of not less than 0.6 kg/m² of wall surface, and

loadbearing assemblies filled with preformed insulation of rock or slag fibres conforming to CAN/ULC-S702, "Mineral Fibre Thermal Insulation for Buildings", having a mass per unit area of not less than 1.22 kg/m² of wall surface, or filled with insulation of cellulose fibres conforming to CAN/ULC-S703, "Cellulose Fibre Insulation for Buildings," having a density of not less than 50 kg/m³,

resilient channel on one side of the fire separation spaced 400mm or 600mm (16" or 24") o.c., and not less than 12.7mm (1/2") thick gypsum board on ceilings and on both sides of walls.

Fire-Resistance Ratings for Walls, Columns, and Arches 9.10.8.3.

All load-bearing walls, columns, and arches in the storey immediately below a floor or roof assembly shall have a fire-resistance rating of not less than that required for the supporting floor or roof assembly.

Floors of Exterior Passageways 9.10.8.8.

Except as provided below, the floor assembly of every exterior passageway used as part of a means of egress shall have a fire-resistance rating of 45 minutes or be non-combustible.

No fire-resistance rating is required for exterior passageways serving a single dwelling unit where no suite is located above or below another dwelling unit.

Sound Transmission Assembly and 15-minute Fire Resistance Rating 9.11.1.1

For occupants' health and well-being, a required Sound Transmission Class (STC rating) of 43 has been added to the secondary suite requirements. This can be accomplished with the assembly listed below, or other construction assemblies found in Tables 9.10.3.1.-A and 9.10.3.1.-B. or Apparent Sound Transmission Class (ASTC rating) not less than 40. Details of how to achieve an ASTC rating can be found in the Notes to Part 9 of the 2018 BCBC.

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9.11.1. Protection from Airborne Noise
9.11.1.1. Required Protection
1) Except as provided in Sentences (2) and (3), a dwelling unit shall be separated from every other space in a building in which noise may be generated by
a) a separating assembly and adjoining constructions, which together provide an apparent sound transmission class **(ASTC) rating of not less than 47**, or
b) a separating assembly providing a sound transmission class **(STC) rating of not less than 50** and adjoining constructions that conform to Article 9.11.1.4. (See Note A-9.11.1.4.)

2) Where a house contains a secondary suite, each dwelling unit shall be separated from every other space in the house in which noise may be transmitted by:
a) construction having:
i) joist spaces filled with sound-absorbing material of not less than 150 mm nominal thickness,
ii) stud spaces filled with sound-absorbing material,
iii) resilient channel on one side of the separation spaced 400 or 600 mm o.c., and
iv) not less than 12.7 mm thick gypsum board on ceilings and on both sides of walls,
b) construction providing an **STC rating of not less than 43**, or
c) a separating assembly and adjoining constructions, which together provide an **ASTC rating of not less than 40.**
(See also Sentence 9.10.3.1.(2) and Note A-9.11.1.1.(2))
3) Construction separating a dwelling unit from an elevator shaft or refuse chute shall have an **STC rating of not less than 55.**

Note: *Common spaces must also have a sound separation from the dwelling units.*

Door Openings to be Protected with Closures 9.10.9.3. & 9.10.13.3.

Doors in a fire separation with a required fire-resistance rating of 45 minutes or less need not have a fire-protection rating (FPR; i.e., no CAN/ULC rating required) provided that they are:
• at least 45 mm (1-3/4") thick solid core wood doors
• have a self-closing device, and
• hung in a wood door frame 38 mm (1-1/2") thick

Note: *A 45 mm door is deemed to provide a 20-minute fire-protection rating (FPR) and is not required to be marked with a CAN/ULC rating.*

Exit Protection
Openings Near Unenclosed Exterior Exit Stairs and Ramps 9.9.4.4.

Unprotected openings in exterior walls of the building shall be protected with wired glass in fixed steel frames or glass block conforming to Articles 9.10.13.5. and 9.10.13.7., where
an unenclosed exterior exit stair or ramp provides the only means of egress from a suite and is exposed to fire from unprotected openings in the exterior walls of:
another fire compartment, or
another dwelling unit, ancillary, or common space in a house with a secondary suite; and
unprotected openings in the exterior walls of the building are within 3 m (9' 10-1/8") horizontally and less than 10 m (32' 9-11/16") below or less than 5 m (16' 4-7/8") above the exit stair or ramp.

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Openings Near Exit Doors 9.9.4.6.

Where an exterior exit door in one fire compartment is within 3 m (9' 10-1/8") horizontally of an unprotected opening in another fire compartment and the exterior walls of these fire compartments intersect at an exterior angle of less than 135°, the opening shall be protected with.
• wired glass in fixed steel frames conforming to Article 9.10.13.5., or
• glass block conforming to Article 9.10.13.7.

Ancillary Rooms 9.9.5.9.

Ancillary rooms such as storage rooms, washrooms, toilet room, laundry rooms, and service rooms shall not open directly into an exit.

Note: *In a dwelling unit with a secondary suite, this may be an issue where both the secondary suite and the dwelling unit exit through one common space within the building.*

Safety
Two Separate Exits 9.9.9.2.

For dwelling units in a house with a secondary suite, it may not be required to go in more than one direction to an exit from the location where the egress door opens onto a public corridor or exterior passageway when the building is sprinklered or if each dwelling unit has its own separate and direct access from each storey to
• a balcony, or
• an openable window that is:
not less than 1 m (3' 3-3/8") in height and 0.55 m (21-5/8") in width, and
located so the sill is not more than 1 m (3' 3-3/8") above the floor and 7 m (23') above adjacent ground level.

Shared Egress Facilities 9.9.9.3.

Where a dwelling unit is located above another dwelling unit or common space in a house with a secondary suite, the upper dwelling unit shall be provided with a second and separate means of egress where an egress door from that dwelling unit opens onto an exterior passageway that
• has a floor assembly with a fire-resistance rating less than 45 minutes,
• is served by a single exit stairway or ramp, and
• is located more than 1.5 m (4' 11-1/16") above adjacent ground level.

For dwelling units in a house with a secondary suite where an egress door from either dwelling unit opens onto a shared egress facility served by a single exit stairway or ramp, other than as described above, a second and separate means of egress need not be provided if the building is sprinklered or if the dwelling units have separate and direct access from each storey to
• a balcony, or
• an openable window
not less than 1 m (3' 3-3/8") in height and 0.55 m (21-5/8") in width and
located so the sill is not more than 1 m (3' 3-3/8") above the floor and 7 m (23') above adjacent ground level.

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Egress from Bedrooms 9.9.10.

Each bedroom shall have a window with an unobstructed opening of not less than 0.35 m2 (3.77 sq ft) in area with no dimension less than 380 mm (15"). Where a window requires a window well, a clearance of not less than 760 mm (2' 6") shall be provided in front of the window.

Plumbing
Combustible Drain, Waste, and Vent Piping 9.10.9.7.

Note: *The December 2019 revision to the 2018 BCBC removed the Article permitting a penetration of combustible piping in a vertical assembly protected with 12.7 mm (1/2") gypsum board for a dwelling unit with a secondary suite. The Article 9.10.9.7. now applies, which includes the use of combustible pipe, fire stopped with the appropriate F-rating at the fire separations.*

Combustible drain, waste, and vent piping not located in a vertical shaft is permitted to penetrate a fire separation required to have a fire-resistance rating, provided the piping is sealed at the penetration by a fire-stop that has an F rating not less than the fire-resistance rating required for the fire separation.

Note: *Many types of fire-stop systems are permitted if tested to the CAN/ULC-115-M standard. Fire-stop systems are designed for specific wall or ceiling construction, types of penetration, and specific fire-resistance rating. Only the appropriate type of listed fire-stop systems should be used. Typical systems used with combustible pipe are Intumescent Sealants and Fire-Stop Collars or Sleeves.*

Ventilation and Heating
Required Ventilation 9.32.1.2.

Ventilation for Smoke Control – The control of smoke transfer between dwelling units in a house with a secondary suite, or between the dwelling units and other spaces in the house, is a critical safety issue. Providing a second ventilation system to serve the two dwelling units is an ideal solution for achieving a minimum acceptable level of fire safety. Other solutions to providing separate ventilation systems for the dwelling units must address smoke control.

Ventilation for Air Exchange – The provision of a ventilation system for the purpose of maintaining acceptable indoor air quality is a critical health issue. However, Sentence 9.32.1.2.(3)&(4) allows exits, public corridors, and common areas in houses with a secondary suite to be unventilated. Lack of active ventilation of these spaces is considered acceptable because occupants do not spend long periods of time there and because exits are somewhat naturally ventilated when doors are opened

A self-contained heating-season ventilation system serving a single dwelling unit or a house with a secondary suite, including their common spaces, shall comply with Subsection 9.32.3.

• In houses that contain a secondary suite including their common spaces, heating-season ventilation need not be provided for

Exits,
public corridors, and
ancillary spaces that are not within a dwelling unit, except as provided below:

Were ancillary spaces described above contain exhaust devices, these spaces shall be provided with make-up air in accordance with Subsection 9.32.4.

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Design and Installation 9.32.3.2.

Heating and ventilation systems between suites must be separate or be designed and inspected by a Mechanical Engineer.

In a house with a secondary suite, including their common spaces, where a heating or ventilation system serves more than a single dwelling unit, the system shall be designed and installed to prevent the circulation of smoke upon a signal from a duct-type smoke detector.

Except as provided in Sentence 9.10.9.6.(14), ducts penetrating fire separations shall be equipped with fire dampers in conformance with Article 3.1.8.10.

Duct Penetration of Fire Separations 9.10.9.6.(14)

In a house with a secondary suite, including their common spaces, ducts penetrating fire separations need not be equipped with fire dampers in conformance with Article 3.1.8.10. provided they are non-combustible with all openings in the duct system serving only one fire compartment.

Note: *Common areas require fire separations from the dwelling unit and the secondary suite. Consideration is required in the design of the heating system of the common areas to ensure the fire separation remains intact.*

Heating System Controls 9.33.4.3.(1)

Where a single heating system serves two dwelling units and common spaces in a house with a secondary suite, it must be possible for the occupants to control the temperature in their own suites.

Note: *This Sentence, which applies only to electric, fuel-fired, or unitary heaters and hydronic heating systems, specifies that separate temperature controls must be provided in each dwelling unit in a house with a secondary suite; however, the controls for shared spaces may be located in those spaces or in one of the suites.*

Room / Egress Dimensions 9.5.3.1., 9.9.3.3. & 9.9.3.4. Height of Rooms and Spaces Table 9.5.3.1.

The minimum height of rooms or spaces in a secondary suite shall be not less than 2.1m (6' 10-11/16") in height over the lesser of area of the space, or as identified below for each type of room.

Room or Space	Minimum Area over which Ceiling Height Required	Room or Space	Minimum Area over which Ceiling Height Required
Living room	10. m² (107.6'²)	Bathroom	2.2m² (23.7'²)
Dining room	5.2 m² (56'²)	Laundry area above Grade	2.2m² (23.7'²)

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Room or Space	Minimum Area over which Ceiling Height Required	Room or Space	Minimum Area over which Ceiling Height Required
Kitchen	3.2 m² (34.5'²)	Passage, hall, main entrance	All area
Master bedroom	4.9 m² (52.7'²)	Habitable rooms not identified	2.2m² (23.7'²)
Other bedroom	3.5 m² (37.7'²)	Unfinished basement & laundry within	2m² (6' 6-3/4") under beams

Width and Height of Corridors 9.9.3.3. & 9.9.3.4.

The clear width and height of a public corridor and exit corridor that serve only a house with a secondary suite, including common spaces, shall be not less than 860mm (2' 9-7/8") and 2m (6 '6-3/4") respectively.

Door Sizes 9.5.5.1.

Swing-type doors in an entrance, vestibule and utility doors, in a dwelling unit or house with a secondary suite, including common spaces, must be 810mm (2' 7-7/8") wide by 1.98m (6' 6") high.

Where doors in an exit or access to exit serve more than a single dwelling, they shall comply with the following Articles in 9.9.6.:

- The exit width shall not be decreased by more than 100mm (4") in exit corridors and 50mm (2") for other exit facilities,
- The swing of doors shall not reduce the width of the path of travel to less than the required width in exit corridors and passageways, and 750 mm (2' 5-1/2") on exit stairs or landings,
- The clear opening height of doors providing exit or access to exit shall be not less than 1.98 m (6'6") high.
- The clear opening width of doorways in an exit or access to exit from a suite shall be not less than 800 mm (2' 7-1/2") wide,

Note: *Minimum door size will be 864mm (2' 10") to meet this requirement.*

- The distance between a stair riser and leading edge of a door during its swing shall be not less than 360 mm (14-3/16"),
- An exit door may open onto not more than one step provided the riser of the step does not exceed 150 mm (6"),

Note: The exit doors serving a house with a secondary suite are permitted to swing inward all other exit doors are required to swing outward in direction of exit travel.

Stairs 9.8.2. & 9.8.4.

Exit stairs within or serving a building that contains a secondary suite, shall:

- have a minimum width, measured between wall faces or guards of not less than 860mm (2' 9-7/8"),
- height over the stairs of 1.95m (6' 4-3/4"), and
- conform with Private stair requirements.

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minimum	rise: 125mm (5") run: 255mm (10-1/16") tread width: 280mm (11")	maximum	rise: 200mm (8") run: 355mm (14") tread width: 380mm (15")

Prevention of Fire Spread at Exterior Walls
Exterior Walls Meeting at an Angle 9.10.12.3.

Where exterior walls of a building meet at an external angle of 135° or less, the horizontal distance from an unprotected opening in one exterior wall to an unprotected opening in the other exterior wall shall be not less than 1.2 m (4') where the opening are in different fire compartments or in different dwelling units, ancillary spaces or common spaces in a house with a secondary suite.

Exterior walls of each fire compartment within the distance as described above needs a fire-resistance rating not less than the ones required between the fire compartments.

Spatial Separations 9.10.15.

The Fire Department Response Time to any address in Sooke exceeds the 10-minute response time in 10% or more of all calls to any building within the District of Sooke. see Sentence 9.10.15.3.(1), which is inserted below:

9.10.15.3. Limiting Distance and Fire Department Response

1) Except for the purpose of applying Sentences 9.10.15.2.(2), 9.10.15.4.(3) and 9.10.15.5.(13), a limiting distance equal to half the actual limiting distance shall be used as input to the requirements of this Subsection, where

a) the time from receipt of notification of a fire by the fire department until the first fire department vehicle arrives at the building exceeds 10 min in 10% or more of all calls to the building, and

b) any storey in the building is not sprinklered. (See Notes A-3.2.3. and A-3.2.3.1.(8).)

For your Limiting Distances please ensure that you are following the Limiting Distance definition in the 2018 BCBC – means the distance from an exposing building face **to a property line**, the centre line of a street, lane, or public thoroughfare, **or to an imaginary line between 2 buildings or fire compartments on the same property**, measured at right angles to the exposing building face.

Therefore, the exposing building face requires a fire-resistance rating of not less than 45 minutes where the limiting distance is less than 2.4 m (8 ft) and must be clad with non-combustible material.

Window openings in the exposing building face referred to above shall not be permitted if the limiting distance is less than 2.4 m (8 ft) and shall be limited in conformance with the requirements for unprotected openings in Article 9.10.15.4. where the limiting distance is 2.4 m or greater, 7% openings are permitted at 2.4 m (8 ft).

*Window openings in a wall having a limiting distance of less than **2.4 m** shall be **protected by closures**, whose fire-protection rating is in conformance with the fire-resistance rating required for the wall. (See Table 9.10.13.1.) Except for buildings that are **sprinklered throughout and for openable windows having an unobstructed opening equal to 0.35 m²** installed in bedrooms in accordance with Sentences 9.9.10.1.(1) and (2).*

District of Sooke

Building Safety – Advisory #13 December 21, 2020

Secondary Suites within a Single-Family Dwelling

Therefore, a limiting distance equal to half the actual limiting distance shall be used for any building within the District of Sooke, as input to these requirements, **unless the building is sprinklered throughout.**

Below is a link to Information Bulletin No. B19-05 from the BC Building and Safety Standards Branch which is dated, December 12, 2019. It covers the "Changes to Design and Construction Requirements of the British Columbia Building Code 2018, Revision 2, regarding "Secondary Suites".

The purpose of this bulletin was 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.

Secondary Suites, Changes to Design and Construction Requirements (PDF)

Also attached is a copy of this Information Bulletin No. B19-05 from the BC Building and Safety Standards Branch which is dated, December 12, 2019. It covers the "Changes to Design and Construction Requirements of the British Columbia Building Code 2018, Revision 2, regarding "Secondary Suites".

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.

Please see the attached copy of the Information Bulletin No. B19-05 from the BC Building and Safety Standards Branch regarding illustration that provide 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 District of Sooke, Building Safety Branch.**

Check with the Planning Department and the Zoning Bylaw requirements regarding allowable floor space allowances.

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No. B19-05
December 12, 2019

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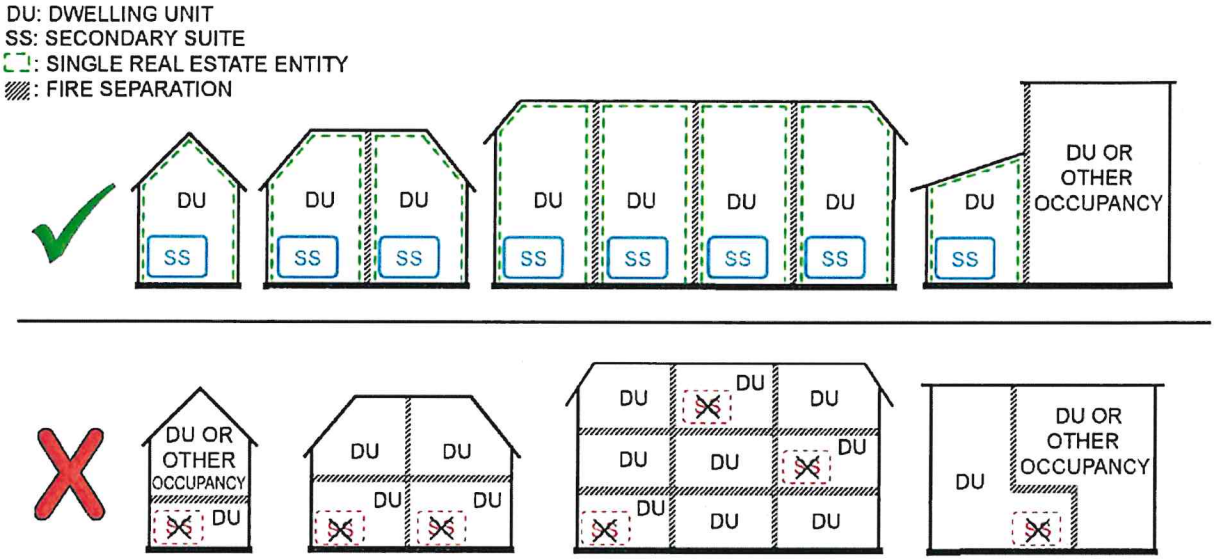
The following illustration provides examples of the types of buildings in which the BC Code allows the construction of secondary suites and where secondary suites are not permitted. **Before constructing a secondary suite, check with the local authority.**

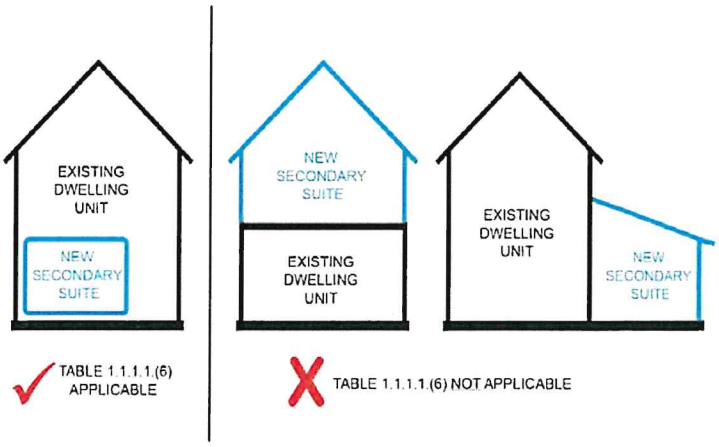
Local government contact information is available here: http://www.civicinfo.bc.ca/directories.



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 BC Building Code and the BC Fire Code is available on the BC publications website. In addition, Revision 2 content changes are summarized in the online BC Building Code and the BC Fire Code 2018, 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