

GUIDE TO SECONDARY SUITES AND ACCESSORY DWELLING UNITS

INTENT OF THE GUIDE

This guide provides an overview of the BC Building Code requirements to construct a new accessory dwelling unit (ADU), such as secondary suite or detached secondary dwelling or retrofit an existing dwelling to have a code-compliant secondary suite.

Before considering one of the options listed above, the City of Merritt's Planning Department should be consulted regarding site-specific information to determine if a secondary suite or detached secondary dwelling unit is a permitted use on your property.

The Planning Department can be reached by phone at (250) 378-8615 or e-mail at planning@merritt.ca

WHAT IS A SECONDARY SUITE?

A self-contained dwelling unit that is accessory to, and within, a principal single detached, semi-detached, multiple-unit townhome, where both dwelling units constitute a single, undivided real estate entity.

Excludes Apartment Residential, Bed and Breakfast, Boarding, Home Occupation, and Temporary Tourist Accommodation.

WHAT IS A DETACHED SECONDARY DWELLING UNIT?

A detached dwelling unit that is accessory to a principal single detached, semi-detached, multiple-unit dwelling unit on the same lot, where both dwelling units constitute a single, undivided real estate entity.

Excludes Accessory Employee Residential, Accessory Personal Care Residential, Bed and Breakfast, Temporary Tourist Accommodation, and Tourist Accommodation.

Examples include Coach House and Garden Suite.






WHAT ARE THE BC BUILDING CODE REQUIREMENTS?

The BC Building Code provides provisions for fire safety and sound transmission between residential units and around any common spaces. Wall and ceiling separations between a secondary suite, main dwelling, and common spaces are one of the key aspects to creating a safe space for all building occupants.

The construction requirements listed in Tables 1 & 2 are a summary provided as a GUIDE ONLY and shall not be relied upon for a complete list of BC Building Code provisions. There may be requirements that are not specified as every project is unique. Both the current edition of the BC Building Code and the most updated version of the City of Merritt’s Zoning Bylaw should be reviewed before a building permit application is considered.

The construction options that are summarized in Table 1 are for a suite in an existing building, to offer a code-compliant fire-resistant rating and better sound barrier. These requirements are listed in Division A Sentence 1.1.1.1.(6) of the 2024 BC Building Code.

TABLE 1: OPTIONS TO CONSTRUCT A SECONDARY SUITE IN AN EXISTING BUILDING

Regulation	Option 1	Option 2	Option 3
Fire Resistance Rating (FRR in mins)	15 minutes	30 minutes	45 minutes
Sound Transmission Class (STC)	Approximately 32 – 35 STC	Approximately 34 – 37 STC	43 STC
BC Building Code References	9.10.9.16.(4)(a) Table D-2.3.4.-F and, Division A-1.1.1.2. (1)	9.10.9.16.(4)(b) and, Division A-1.1.1.1. (6)	9.10.9.16.(4)(C) and, 9.11.1.1. (2)
What does this mean for your design?			
Wall Construction	Wood studs with ½” gypsum board on both sides	Add a resilient channel and layer of ½” gypsum board to one side	Options for increased fire and sound rating in Subsection 9.10.3. and 9.11.1.
Ceiling Construction	Wood joists with ½” gypsum board on the underside	Add a resilient channel and layer of ½” gypsum board to ceiling	Options for increased fire and sound rating in Subsection 9.10.3. and 9.11.1.
Smoke Alarm Locations	Smoke alarms shall be located and interconnected in each unit – in all bedrooms, between the bedroom door and the remainder of the storey, and in any common areas.		
Smoke Alarm Interconnection	All smoke alarms in both units and common spaces shall be photo-electric type and interconnected.	One additional photo-electric in each dwelling and common spaces shall be interconnected	No interconnection between units and common spaces is required.
Carbon Monoxide Alarms (CO)	Where the home has an attached garage or a fuel-burning appliance, a CO Alarm is required inside each bedroom or within 5 metres of each bedroom door, all interconnected.		

The construction requirements summarized in Table 2 are for new construction. The following should not be relied upon for a list of BC Building Code provisions. There may be requirements that are not listed as each project is unique.

TABLE 2: DESIGN CONSIDERATIONS FOR A NEW SECONDARY SUITE OR ACCESSORY DWELLING UNIT

Code Reference	Requirement
<p>Separation of Residential Suites 9.10.9.16</p> <p>Notes</p>	<p>Dwelling units shall be separated from each other and from ancillary spaces and common spaces with a fire separation.</p> <ul style="list-style-type: none"> having a fire-resistance rating not less than 15 minutes when all smoke alarms within the house are of photo-electric type and interconnected, having a fire-resistance rating not less than 30 minutes when additional smoke alarms of photo-electric type are installed and interconnected, or having a fire-resistance rating of not less than 45 minutes when smoke alarms are not installed and interconnected as listed in the bullets directly above. <p><i>Interconnected smoke alarms within individual dwelling units are required</i></p> <p>A fire separation without a fire-resistance rating is permitted where the building is sprinklered. (Clause 9.10.9.16.(4)(d))</p>
<p>Fire Separation Construction 9.10.3.1.</p> <p>Notes</p>	<p>15 Minute Fire Separation:</p> <ul style="list-style-type: none"> joist spaces filled with sound-absorbing material of not less than 150mm nominal thickness; stud spaces are filled with sound-absorbing material; resilient channel on one side of the separation spaced 400 or 600mm o.c., and; not less than 12.7mm (1/2”) gypsum board on ceilings and on both sides of walls. <p>30 Minute Fire Separation:</p> <ul style="list-style-type: none"> walls, floor, and ceiling assemblies framed with wood studs; joist spaces filled with rock/slag insulation or wet-blown cellulose fibre insulation; non-load bearing stud spaces filled with preformed fiberglass insulation; load bearing stud spaces filled with preformed rock/slag or cellulose fiber insulation; resilient channel on one side of the fire separation spaced 400 or 600mm o.c., and; not less than 12.7mm (1/2”) thick gypsum board on ceilings and both sides of walls. <p>45-Minute Fire Separation:</p> <ul style="list-style-type: none"> the test methods described in Part 3; the calculation method presented in Appendix D; the construction specifications presented in Tables 9.10.3.1.-A and 9.10.3.1.-B <p>The construction methods provided are an example of how to achieve the required fire-resistance rating between the primary dwelling unit and secondary suite.</p> <p>There may be alternative assemblies not listed that could achieve the minimum fire-resistance rating required. If used, these alternative methods are required to be appropriately referenced and detailed.</p> <p>The fire resistance rating of a ceiling is from the underside.</p> <p>The walls requiring a fire resistance rating separating the dwelling units are rated from each side.</p>

Code Reference	Requirement
<p>Fire Separation of Service Rooms 9.10.10.3 & 9.10.10.4.</p> <p>Notes</p>	<p>The service room (mechanical room) can serve both dwelling units and requires the common wall between the spaces to be constructed as a fire separation with the same fire-resistance rating as the assembly separating dwelling units.</p> <p>When designing your secondary suite, consider fire separation continuity and ratings which are required from each side of the assembly.</p>
<p>Fire Resistance Rating of Loadbearing Elements 9.10.8.3.</p> <p>Notes</p>	<p>All loadbearing 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 supported floor or roof assembly.</p> <p>A 30-minute fire-resistance rating requires ½” Type X gypsum board A 45-minute fire-resistance rating requires 5/8” Type X gypsum board</p>
<p>Fire Separation Continuity and Permitted Openings in Wall and Ceiling Membranes 9.10.5.1., 9.10.9.2., and 9.10.9.9.</p>	<p>A wall or ceiling membrane forming part of a fire-rated assembly is required to maintain the continuity of the separation. This is typically achieved by the installation of gypsum board.</p> <p>Penetrations of the continuous membrane in horizontal applications such as exhaust fans required the joist space to be lined with gypsum board. Vertical separation continuity is required in spaces such as behind bathtubs, showers, laundry boxes, and electrical boxes set into the wall assembly.</p> <p>In a house with a secondary suite, including their common spaces, ducts penetrating fire separations need not be equipped with fire dampers, provided they are non-combustible with all openings in the duct system serving one fire compartment.</p>
<p>Piping Penetrations 9.10.9.7.</p> <p>Notes</p>	<p>Drain, waste, vent, and central vacuum system piping that is not located in a vertical shaft is permitted to penetrate a fire separation required to have a fire-resistance rating or a membrane that forms part of an assembly provided either;</p> <ul style="list-style-type: none"> • the piping is non-combustible, and the penetration is either sealed by a firestop that has a fire-resistance rating not less than the required assembly, the piping is tightly fitted or cast in place (provided the material is steel, ferrous, copper, concrete, or masonry), or sealed to maintain the integrity of the fire separation. • the piping is combustible, and the penetration is sealed by a firestop conforming to CAN/ULC S115. <p>The Canadian Fire Test Standard (CAN/ULC-S115) is used to provide fire resistance ratings to materials, or assemblies of materials, that provide continuity of fire separation at discontinuities (i.e. joints).</p>

Code Reference	Requirement
<p>Headroom 9.5.3.1.</p> <p>Notes</p>	<p>The minimum height of rooms and spaces, and access to the rooms and spaces, is minimum 2.1m (6’11”).</p> <p>The minimum clear height over stairs serving a single dwelling unit or a house with a secondary suite is 1950mm (6’5”) (Article 9.8.2.2.)</p>
<p>Entrance Door 9.9.6.4. and 9.7.2.1.</p> <p>Notes</p>	<p>Entrance doors shall swing on a vertical axis and be provided with one of the following:</p> <ul style="list-style-type: none"> • a door viewer. • transparent glazing in the door, or; • a sidelight. <p>The use of sliding glass doors is not permitted as the entrance to a Secondary Suite.</p>
<p>Exit Stairs 9.8.2.1.</p> <p>Notes</p>	<p>Exit stairs serving a single dwelling unit or a house with a secondary suite, including their common spaces, shall have a width of not less than 860mm (34”).</p> <p>Additional information on fire separations for exits, openings near unenclosed exterior exit stairs, and shared egress facilities can be found in Articles 9.9.4.2., 9.9.4.4., and 9.9.9.3.</p>
<p>Stairs, Landings, Handrails, and Guards 9.8.</p> <p>Notes</p>	<p>The dimension and height requirements for stairs, landings, handrails, and guards shall comply with Section 9.8.</p> <p>Risers shall be of uniform rise and run in any one flight of stairs.</p>
<p>Dimensions of Means of Egress 9.9.3.3.</p> <p>Notes</p>	<p>The means of egress for a Secondary Suite shall be a minimum of 860mm (34”) wide.</p> <p>Consideration should be given to the means of egress from the Secondary Suite to the parking area. Pathways and stairways need to meet the egress route requirements.</p>
<p>Bedroom Windows 9.9.10.1.</p> <p>Notes</p>	<p>Except where the suite is sprinklered, each bedroom shall have at least one outside window or exterior door openable from the inside with a minimum area of 0.35m² (3.77ft²) and no dimension less than 380mm (15”).</p> <p>Where a bedroom window required for egress opens into a window well, a clearance of not less than 760mm shall be provided in front of the window.</p>

Code Reference	Requirement
Heating System 9.32.3.2.	<p>9.32.3.2. (4) - 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.</p> <p>9.32.3.2. (5) – Ducts penetrating fire separations shall be equipped with a fire damper.</p> <p>9.33.4.3. (1) – Where a single heating system serves a house with a secondary suite, individual temperature controls shall be provided in each dwelling unit served by the system.</p>
Ventilation 9.32.3.4 and 9.32.3.5	<p>9.32.3.4 of the BCBC requires every dwelling unit be provided with a mechanical ventilation system, which includes a Principal Exhaust Fan (PEF). The PEF shall be designed to run continuously and be sized according to the area of the dwelling unit and number of bedrooms.</p> <p>Ventilation supply requirements can be satisfied using a HRV / CRV / ERV system or a furnace air circulating fan set to run continuously.</p>
Notes	
Kitchen and Bathroom Fans 9.32.3.6.	A dwelling unit requires the installation exhaust fans in every kitchen and every bathroom or water-closet room.
Smoke Alarms 9.10.19.1.	<p>Each suite requires the installation of interconnected smoke alarms in each sleeping room, located between the sleeping rooms and the remainder of the storey.</p> <p>An additional photo-electric smoke alarm is required where the fire separation between suites has a 30-minute fire-resistance rating.</p> <p>All smoke alarms shall be interconnected photoelectric type where the fire separation between suites has a 15-minute fire-resistance rating.</p>
Notes	<ul style="list-style-type: none"> • Smoke alarms are typically ionization type and are interconnected within each suite. • Where photoelectric smoke alarms are installed, they are interconnected between suites. • Smoke alarms shall be provided in ancillary and common spaces. (9.10.19.1.(1)(c))
Carbon Monoxide Alarms 9.32.4.2.	Where a building contains a fuel fired appliance or attached garage, a carbon monoxide alarm shall be installed in each bedroom, or within 5m of a bedroom, and interconnected throughout.
Water Service Shut Offs	Shut offs for dwelling units shall be arranged to ensure that the water service to one unit is not interrupted when the other is shut off. Each suite of occupancy requires its own accessible shut off.
Sound Rating 9.11.1.1.	<p>A sound rating separating the principal dwelling unit from a Secondary Suite is required as follows:</p> <ol style="list-style-type: none"> Construction having: <ul style="list-style-type: none"> » Joists filled with 150mm sound absorbing material (insulation); » Studs filled with sound absorbing material (insulation); » Resilient metal channel one side at 400mm or 600mm on centre; » Minimum ½” gypsum wall board on ceilings and both sides of walls, or; Construction having a minimum STC rating of not less than 43, or Separating assembly and adjoining construction with an ASTC rating or not less than 40.

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