

Home Improvements



Secondary suites



Alberta Building Code Requirements

calgary.ca/secondariesuites
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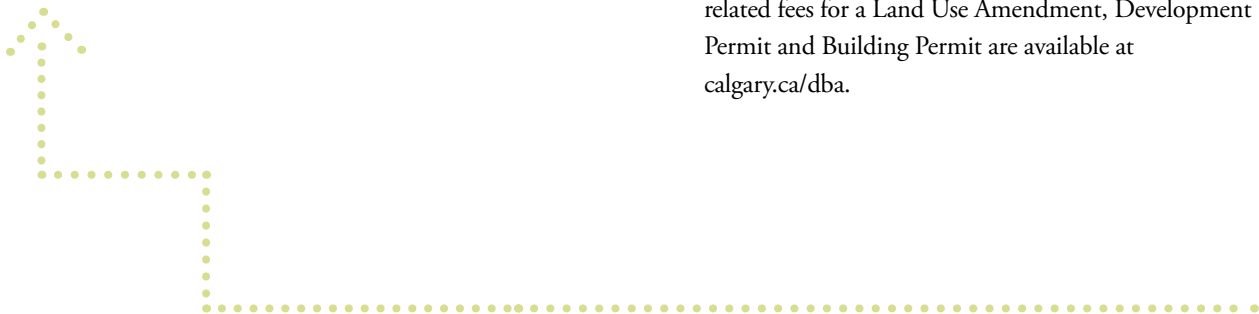
THE CITY OF
CALGARY
DEVELOPMENT &
BUILDING APPROVALS

Secondary suites

There is a new section which has been introduced in the 2006 Alberta Building Code which offers less restrictive requirements for tenancy space in a home that is defined as a secondary suite. Some of these less restrictive requirements include relaxations for fire spread ratings and sound-proofing.

A secondary suite is defined by the Alberta Building Code as, “a self-contained dwelling unit that is located within a primary dwelling unit, where both dwelling units are registered under the same land title.” A dwelling unit, detached from the principal residence, such as a garden suite or a suite above a detached garage, is not defined by the Alberta Building Code as a secondary suite and is subject to more stringent regulations.

The Alberta Building Code notes that a secondary suite is only permitted where approved by the local authority in accordance with municipal land use bylaws. The City of Calgary’s Land Use Bylaw 1P2007 has several requirements and conditions for secondary suites. Site requirements such as land use designation, lot coverage, yard setbacks and minimum lot dimensions must all comply with land use regulations for secondary suites.



Other requirements for a secondary suite under Land Use Bylaw 1P2007 include:

- The maximum, gross-floor area of the suite, excluding stairwell, must not exceed 70m² (753ft²). Suites exceeding this floor area are classified as a duplex dwelling and are subject to different land use requirements.
- The suite must have separate and direct access to ground level. The entrance must not share any entrance or foyer with that of the principle dwelling unit.
- An exterior, private amenity space such as a deck or patio for the suite needs to be provided with a minimum surface area of 7.5m² (80ft²) and no measurement length or width less than 1.5m (5'-0").

Secondary suites must be approved for development in accordance with the Land Use Bylaw prior to making an application for a Building Permit. See our brochure, “A guide to developing a secondary suite” for more information. It’s available online at calgary.ca/secondariesuites.

All application requirements and information on related fees for a Land Use Amendment, Development Permit and Building Permit are available at calgary.ca/dba.

General Building Code requirements for secondary suites

From section 9.37, 2006 Alberta Building Code

The ins and outs:

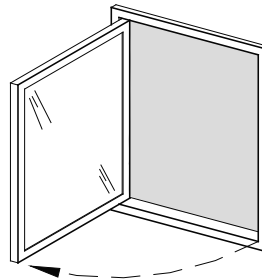
Each dwelling unit must have at least one exit which leads directly outside. Entry doors serving the exit need to be a minimum 810mm (2'-8") wide. A stairway used in an exit shall have a minimum width of 860mm (2'-10") and at least one handrail. Handrails are to be mounted between 800mm & 965mm (31½" and 38") above the front edge of the stair treads. Where an interior stairway is wider than 1,100mm (3'-7"), two handrails are needed. Landings are required at the top and bottom of an exit stair. Landings require a minimum length of 900mm (3'-0") and need to be at least as wide as the stair. An interior stairwell needs to have at least one light fixture that can be switched at both the top and bottom of the stair.

Utility rooms such as laundry and furnace rooms require doors with a minimum width of 810mm (2'-8"), as well as any other doors leading from a utility room to the exterior. It is imperative each bedroom has at least one egress window as a means of escape, should the principal exit be obstructed by a fire. An egress window must have an unobstructed opening of 0.35m² (3.8ft²) in area and the minimum height or width of the opening cannot be less than 380mm (15"). Egress windows are to be of either casement or sliding operation. (See illustration on facing page.) Where a window well serves an egress window, it must project out from the wall at least 550mm (22"). Where a casement-type window is used, the window well must also project out enough to allow for the full 90° swing of the window opening. (See floor plans 1a and 1b on following pages.)

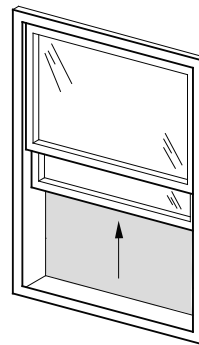
Security bars serving a bedroom window must be removable from the inside without the use of tools, keys or special knowledge. A large majority of security bars do not meet the requirements and are generally not accepted.

Bedroom egress windows

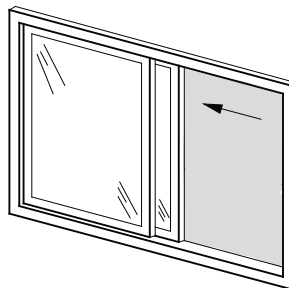
Note: shaded areas indicate the required unobstructed opening where a minimum dimension of 380mm (15") and an area of 0.35m² (3.8ft²) are required.



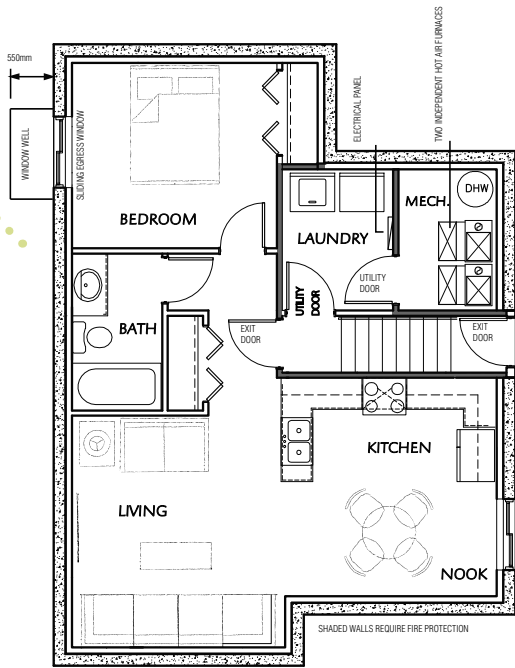
Casement window



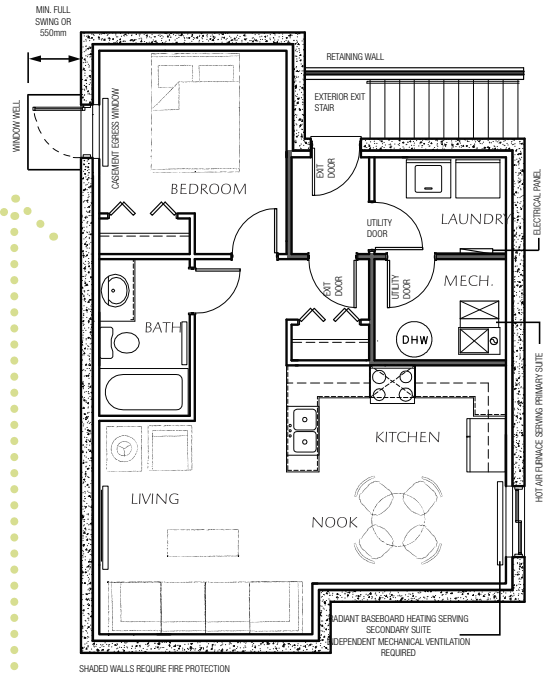
Vertical sliding window



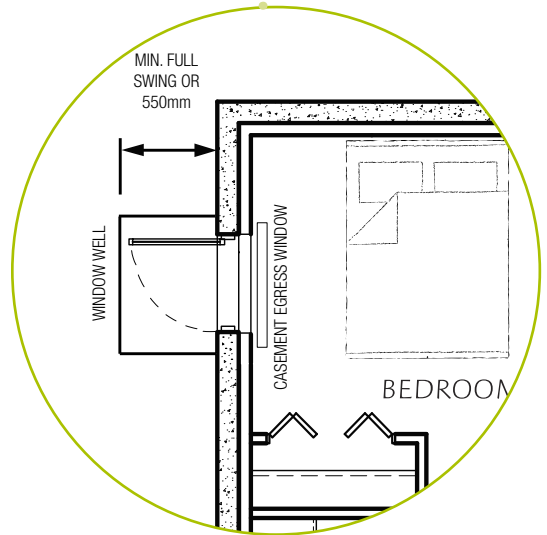
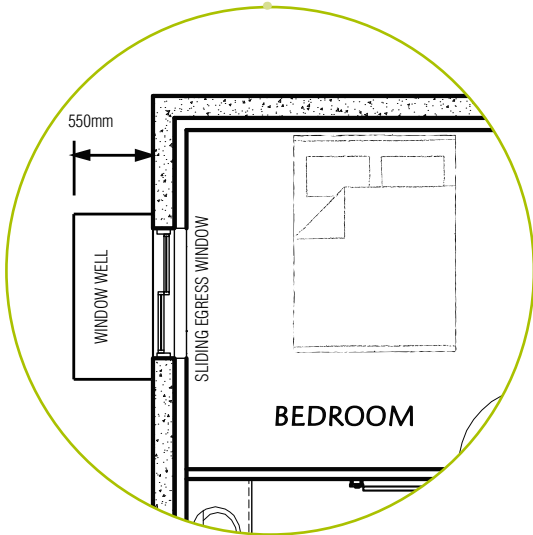
Horizontal sliding window



Floorplan 1a



Floorplan 1b



Heads up

The Building Code regulates a minimum 1.95m (6'-5") floor-to-ceiling height for a secondary suite. Especially in basements, ductwork, beams and drop floors above can reduce ceiling heights to less than code minimum. Portions of a room's ceiling height are permitted to be less than 1.95m, provided the minimum ceiling height is maintained over a minimum floor area as indicated in the table below and is continuous through the entry point of the room or space. If the floor area of a room is less than what is indicated in the table, the entire room needs to meet the minimum ceiling height requirements. Exit doors are required to be a minimum 1980mm (6'-8") in height. However, interior doors within a secondary suite may be reduced to 1.95m where a lower ceiling height does not allow for a full-height door.

Living room	10m ² (108ft ²)
Dining room	5.2m ² (56ft ²)
Kitchen	3.2m ² (35ft ²)
Master bedroom	4.9m ² (53ft ²)
Secondary bedroom	3.5m ² (38ft ²)
Laundry, utility or unfinished bathroom	Continuous along the path of travel
Hallway or entry stair	2.2m ² (8ft ²)
	Entire floor area

Table 1:

Minimum floor area over which a ceiling height of 1.95m is required.

Where there's smoke, there's fire (and vice versa)

A means of protection against the spread of smoke and fire from one dwelling unit to the other is essential. Also, any common space or rooms containing heating equipment must be protected from the remainder of the building. This is achieved by providing a layer of a typical ½" drywall on the ceiling and on both sides of wall studs which separate different spaces. All drywall joints must be taped and filled with a drywall compound. Any services such as pipes or ductwork which pass through a protective separation need to be tightly fitted and sealed with a drywall compound.

Smoke alarms need to be installed at or near the ceiling of every floor of each dwelling unit and are required within 5m (16'-5") of each bedroom entry and in a common utility room. Smoke alarms must be interconnected so the activation of one alarm causes all alarms in both dwelling units to sound.

Carbon monoxide alarms are required within 5m (16'-5") of each bedroom entry whenever a residential building has an attached garage or contains a fuel-burning appliance. A carbon monoxide alarm also needs to be installed within a common utility room which contains a fuel-burning appliance. A carbon monoxide alarm shall be mechanically fixed at a height specified by its manufacturer and may be battery operated or permanently wired.

Thinking outside the box

There are additional requirements to consider when the only exit for a secondary suite is served by an exterior stair. Where the exterior exit stair is not enclosed, the stairwell must be protected against fire hazards from exposing windows of the primary dwelling unit.

Exposing windows are directly adjacent to the exit stair. The openings need to be protected by either using glass blocks or wired glass in fixed steel frames. Where the exit stair is enclosed by a roof and side walls, protection of exposing windows is not needed. The building code requires a foundation wall extend at least 1.2m (4'-0") below ground. This provision is typically compromised when excavating a stairwell for a basement suite entry. When such a condition arises, a registered engineer must be consulted to provide recommendations for shallow foundation design. Retaining walls are often needed along the side of a stairwell opening. The City of Calgary policy is: when a retaining wall supports greater than 1m (3'-9") of soil retention, it must be designed by a registered engineer. Adding new windows or increasing the size of existing windows in the basement can have a negative impact on the foundation wall's ability to resist soil pressure. The Building Code allows for window openings in foundation walls up to 1.2m (4'-0") in width and a maximum of 25 per cent of the wall's length may be used for window openings. When openings in the wall exceed these values, a registered engineer's review is required. Note: when two windows are spaced apart less than their average width, they shall be considered as one large opening.

If a safety code officer deems the size or complexity of a project give rise to any special safety concerns, they may require that the services of a registered engineer be retained at their discretion. This could include the alteration of any structural beams or posts.

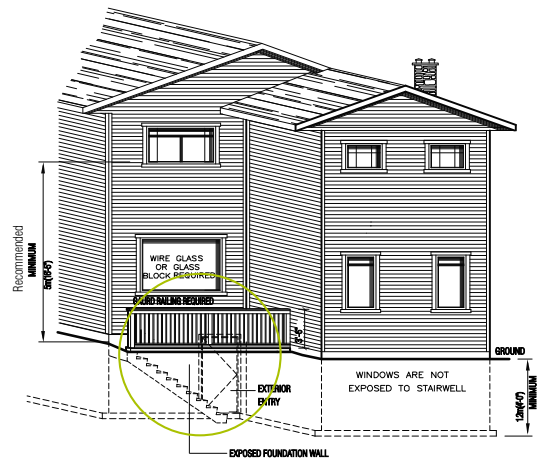


Figure 1

Heating and ventilation

Each dwelling unit shall have an independent heating and ventilation system each with independent furnaces and ductwork. There are several other heating systems to accomplish this other than forced air, such as electric baseboard or hydronic radiant heating. Where a non-ducted heating system is used, an independent ventilation system is also required. Where hydronic heating is used for both units, a single boiler may be used, provided there is separate zone control for each unit. A heating system which serves more than one dwelling unit shall be designed and installed under the supervision of a registered engineer. Heating equipment requires provisions for access for inspection, maintenance and cleaning. See our brochure “Residential Heating and Ventilation” for more information.

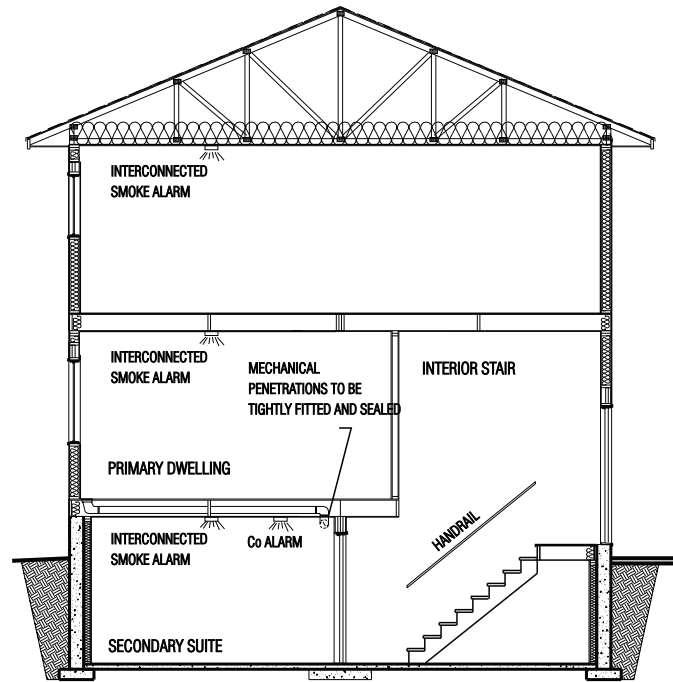


Figure 2

Plumbing

Every suite of residential occupancy shall have a supply of hot water and at least one kitchen sink, a bathtub or shower, a lavatory (bathroom sink) and a water closet (toilet). Space for laundry facilities shall be provided in each dwelling unit or in a common location conveniently accessible to the occupants of each unit. The sanitary line leaving the house requires back-flow prevention at branch drain of each unit.

Electrical

A common electrical panel is permitted to serve both units, provided there are no shared branch circuits between the suites and the suites are not individually metered. Electrical panels must be located where they are not subject to mechanical damage and are readily accessible to both units.



Documentation required when applying for a building permit for a secondary suite

A Real Property Report or Surveyor's Certificate of the property including:

- The distances from the house foundation to all property lines.
- The locations of any easements and utility right-of-ways.
- North arrow.
- Legal description and municipal address.
- The location of all decks, exterior stairs, retaining walls, and building projections.

A floor plan of the entire floor where the secondary suite is located including:

- The designated use of all rooms.
- The location and size of all windows
- The location of the exit stair and number of steps (where applicable).
- The location of all mechanical equipment and laundry facilities.

A main floor plan may be required.

Elevation drawings are required when any exterior work is proposed and should include:

- The size and location of all windows including glass doors.
- The location of the secondary suite entry including an outline of any exterior stairs.

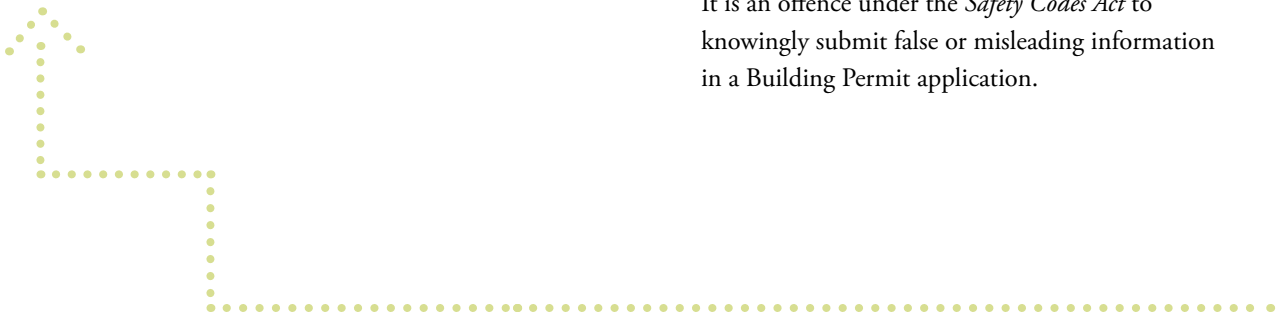
Cross sectional drawings including:

- The ceiling height of the secondary suite.
- An outline of any interior stairwells including headroom clearances.
- The vertical distances from grade at the point of entry to the underside of footing and to the suite floor level.

Any required engineering documentation bearing the engineer's seal, signed and dated.

All drawings need to be legible and prepared to industry standards, at a minimum scale of 1:75 (3/16" = 1'-0"). The exception is a Real Property Report or Surveyor's Certificate, which may be at a minimum scale of 1:200.

It is an offence under the *Safety Codes Act* to knowingly submit false or misleading information in a Building Permit application.



Permit applications are accepted
Monday to Friday, 8 a.m. to 4:30 p.m.

The City of Calgary

Development & Building Approvals
Third Floor, Calgary Municipal Building
800 Macleod Trail S.E.
Calgary, Alberta T2P 2M5

For the status of your application call: 403-268-5311

To book an inspection call: 3-1-1

For more information visit: calgary.ca/dba



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Revised March 2009

