

Guideline

Guideline ESP - 26

### **Purpose**

This guideline has been developed to help improve consistency with the education and enforcement of the building code requirements when proposing the creation of a secondary suite as part of the principal residential dwelling unit.

An additional Guideline has been created to address the question of "What is a Secondary Suite?" and the determining factors used to distinguish between a basement development and a Secondary Suite (Accessory Dwelling Unit). This Guideline – What is a Secondary Suite (Accessory Dwelling Unit) can be found on the Building Services website.



### **Code Reference**

Current National Building Code - Alberta Edition. 2015 Illustrated Users Guide – NBC 2015 Part 9 Housing and Small Buildings Rocky View County Land Use Bylaw C-8000-2020



### **Summary**

The requirements within this Guideline are applicable to secondary suites within buildings of residential occupancy, under Part 9 of the current National Building Code – Alberta Edition.



### Interpretation

#### 1. What is a Secondary Suite?

A secondary suite is a self-contained dwelling unit that is part of the principal dwelling unit containing not more than two dwelling units (including the secondary suite) and any common spaces such as common storage, common service rooms, common laundry facilities or common areas used for exit, where both units constitute a single real estate entity.

Secondary suites are typically created within an existing single dwelling unit, (house) either constructed as an addition to an existing house or incorporated during the construction of a new house. A secondary suite may have more than one storey and may be on the same level as the principal dwelling unit of the house or be above or below it.



Current NBC-AE Code definition for Dwelling Unit - *Dwelling unit* means a *suite* operated as a housekeeping unit, used or intended to be used by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

An additional Guideline has been created to address the question of "What is a Secondary Suite?" and the determining factors used to distinguish between a basement development and a Secondary Suite (Accessory Dwelling Unit). This Guideline – What is a Secondary Suite (Accessory Dwelling Unit) can be found on the Building Services website.



Where an additional dwelling unit is constructed as a separate building from the principal dwelling unit, such as a detached garage with a suite or carriage suite, these units would not be considered as secondary suites. These are often referred to as Accessory Dwelling Units or ADU's and require different construction requirements than secondary suites.



Where a building has multiple occupancies, the secondary suite can only be created in a portion of the building that is of residential occupancy. Apartment buildings or row housing having more than two primary dwelling units are not permitted to have secondary suites, unless each two primary dwelling units are separated from the remaining primary dwelling units by a Firewall.





#### 2. Basic Requirements

Before homeowners decide to proceed with the construction of a secondary suite, the following basic requirements should be considered at the planning stage.

a) Direct exit to the outdoors

The secondary suite is to have its own primary exit to the exterior. It is acceptable to have an exit from a basement suite with stairs leading from the basement to a main floor vestibule with a doorway leading directly to the outside. However, the walls and ceiling for such exits must be provided with a smoke tight barrier consisting of not less than 12.7mm ( $\frac{1}{2}$ ") thick gypsum board on all walls and ceilings separating the exit from the remainder of the building. A minimum 45mm (1- $\frac{3}{4}$ ") solid-core weather-stripped door(s) with self-closing device(s) are required at the entrance(s)/exit(s) to both the primary dwelling and secondary suite. A door viewer or sidelight is required on the common door that leads to the exterior.



#### b) Independent heating and ventilation systems

Secondary suites are required to have their own independent heating and ventilation systems. Common ductwork is not permitted to serve the primary dwelling and secondary suites, to prevent smoke, in the instance of a fire, and other common air contaminants, that would move freely between the areas.



#### c) Mechanical Room (a.k.a. Furnace Room)

Gas fired furnaces and water heaters are required to be installed in a smoke sealed room. The mechanical room is required to have sound absorbing materials and ½" drywall installed on all walls and ceiling areas, with all seams and joints taped and mudded.



#### d) Smoke tight seal and sound absorbing materials

Sound absorbing materials as required by Sentence 9.11.1.1.(2) of the current NBC-AE shall be installed in all ceiling and wall assemblies separating the primary dwelling from the secondary suite, including but not limited to all common areas and mechanical rooms. A minimum ½" gypsum drywall board (taped and mudded) is also required on all walls and ceilings to create a smoke tight seal between the primary dwelling unit and the secondary suite.

One common prescriptive used method is the installation of; a minimum 150mm (6") thick sound absorbing insulation fitted between ceiling joist spaces, sound absorbing insulation installed between stud spaces, resilient channel installed on one side of the separation, and  $\frac{1}{2}$ " gypsum drywall attached to the ceiling and both sides of walls which is mudded and taped. Alternative options can be found in Sentence 9.11.1.1(2).

#### e) Smoke and carbon monoxide alarms

Smoke alarms shall be installed in conformance with installation standard CAN/CSA-S531. Smoke alarms installed in a secondary suite are required to be interconnected with the alarms in the primary dwelling unit, so that the activation of one smoke alarm causes all smoke alarms to activate in both the primary dwelling and the secondary suite. Smoke alarms are required to be installed in each bedroom and each hallway serving bedrooms. Common areas such as a stairwell or mechanical room serving both the secondary suite and primary dwelling are required to have an interconnected smoke alarm installed at the highest point of the ceiling.



Carbon monoxide alarms installed in residential buildings shall conform to CAN/CSA-6.19. Carbon monoxide alarms installed in secondary suites shall be interconnected with the alarms in the primary dwelling unit, so that the activation of one carbon monoxide alarm causes all carbon monoxide alarms to activate in both the primary dwelling and the secondary suite. Carbon monoxide alarms are required to be installed inside each bedroom, or outside each bedroom within 5m of the door.

You may also refer to our guideline on smoke alarm installation on the Rocky View County Website or by clicking on the following link.

https://www.rockyview.ca/Portals/0/Files/BuildingPlanning/Building/Guideline-Smoke-Alarms-Residential-Dwelling-Units.pdf



#### f) Bedroom egress

Each bedroom shall have at least one window or exterior door openable from the inside without the use of keys, tools or special knowledge and without the removal of sashes or hardware. Where a window is used as a means of egress the following criteria shall apply:

- i) The window shall provide a clear opening width of at least 0.35m<sup>2</sup> (3.75sq ft) with no dimension less than 380mm (15") and must be able to remain open during an emergency without the need for additional support.
- Where a window well is provided outside the bedroom window, a clearance of a minimum 760mm (30") is required from the face of the window to the window well. Where the sash of a window opens into the window well, the sash shall not reduce the required clearance in a manner that would restrict escape in an emergency.





#### g) Ceiling and door heights

Ceiling heights in secondary suites shall not be less than 1.95m (6'5"). The minimum height may be reduced to 1.85m (6'1") under ducts or beams. Where the ceiling height is a minimum 1.95m (6'5"), the doorway heights in a secondary suite may be reduced to 1.89m (6'2") where required.

#### h) Separation of a secondary suite from a storage garage

When a storage garage attached to the primary dwelling unit is being shared by the secondary suite, and does not house more than 5 motor vehicles, it shall be separated from the dwelling unit by a 1 hour fire separation. If the secondary suite portion is built above the storage garage, the loadbearing walls, columns and arches supporting the rated floor assembly must also carry the 1 hour fire separation. A building is considered attached if it shares a common wall, roof or foundation connecting the two buildings.

i) Protection of unprotected openings near unenclosed exit stairs and ramps

Where an unenclosed exit stair or ramp provides the only means of egress from the secondary suite, then that stair or ramp must be protected from all windows located within 3m (10ft) horizontally or less than 10m (32'10") above or 5m (16'5") below the exit stair or ramp. This may be achieved by installed wired glass in fixed steel frames or glass blocks conforming to Articles 9.10.13.5 & 9.10.13.7. of the current NBC-AE. This option only applies to fixed non-openable windows. Bedroom egress windows must remain openable. A 20-minute fire-protection rated labeled closure (rated windows, doors or shutters tested in accordance with Sentence 9.10.3.1. of the current NBC-AE and installed and maintained per NFPA-80 and the manufacturer installation instructions) is also acceptable.



These illustrations show the vertical and horizontal dimensions required from unprotected openings to exit stairs as per Article 9.9.4.4. of the current NBC-AE.



j) Protection of unprotected openings near exterior exit doors

Where an exterior exit door <u>provides the only means of egress</u> from the secondary suite, then that door must be protected from unprotected openings, which are part of the primary dwelling or common spaces, located within 3m (10') horizontally or less than 2m (6'6") above the exit on exterior walls that intersect the exterior walls of the building at an angle of 135° or less. These openings may be protected in the same manner as mentioned previously in the section on protection on unprotected openings near unenclosed exit stairs and ramps. (Section i).



### Additional Information

- Further information on secondary suites can be found on the Safety Codes Council website or by following the link below. <u>https://ebs.safetycodes.ab.ca/documents/webdocs/PI/safety-tips\_secondary-</u> <u>suites\_april2021.pdf</u>
- An additional guideline clarifying what a Secondary Suite (Accessory Dwelling Unit) is, versus a basement development, can be found on the Building Services website.

