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**CITY OF
VANCOUVER**



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BULLETIN 2004-006-BU/EL

June 1, 2004

SECONDARY SUITES IN EXISTING ONE FAMILY DWELLINGS

On March 9, 2004 Council approved changes to the Zoning and Development By-law to permit secondary suites in all RS, RM, and RT zones. On May 18, 2004 Council approved changes to the Building By-law to reduce and simplify the building code requirements pertaining to the installation of a secondary suite in an existing building. These changes to the Building By-law are summarized in Table 10.3.3.1 of the Building By-law attached.

Following is information on some of the more major changes pertaining to approval of a secondary suite in an existing building constructed prior to enactment by Council, which we currently anticipate will occur on June 22, 2004:

1. Sprinklering of a secondary suite, when located in a building constructed prior to implementation of the City's residential sprinkler requirements on April 18th 1990, will not be required provided:-
 - a) there are no major additions to the building,
 - b) the building is currently not sprinklered,
 - c) the cost of the renovations and improvements does not exceed 50% of the replacement cost of the building, and
 - d) the building is provided with interconnected smoke alarms per item 2.
2. Headroom requirements will be relaxed, provided a minimum headroom of 6 ft 6 inches (1980 mm) is provided over 80% of the suite area and all egress routes.
3. Unsafe conditions in the building must be corrected per the Building By-law.
4. Interconnected smoke alarms must be installed throughout the building. Where the building is permitted to remain unsprinklered, these smoke alarms must be provided with a manually operated 10 minute silencing capability and battery back-up.
5. The following circuits and receptacles shall be provided in the secondary suite:

- a) a minimum of two kitchen counter duplex receptacles supplied by two appliance circuits. These receptacles shall be permitted to be wired on a single circuit or a split circuit for both; and
 - b) a minimum of two duplex receptacles located on different walls in each bedroom; and
 - c) a minimum of three duplex receptacles located on different walls in the living room
6. A single existing panelboard shall be permitted to supply electrical loads in the principal dwelling and in the secondary suite. (See also Electrical Requirements - Q & A's attached).

At the same time, Council introduced new requirements for the design and construction of one family dwellings. Termed "Suite Ready", these requirements are designed to facilitate installation of a secondary suite in a new one family dwelling, for which application for building permit was made after enactment (currently anticipated to occur June 22, 2004). Further information on these requirements can be found in our companion Bulletin 2004-007-BU/EL/PL.

Further information on the City's Secondary Suite program may be found on our website at:-

<http://www.city.vancouver.bc.ca/suites>

Bulletins on Building By-law requirements and related issues may be found at:-

<http://www.city.vancouver.bc.ca/commsvcs/licandinsp/bulletins/index.htm>.

For further information on our secondary suite program or enquiries about specific buildings, please call our Secondary Suite Program office at 604-873-7945.

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Table 10.3.3.1.
Fire Safety Requirements
 Forming Part of Article 10.3.3.1.

Item	
Windows In Side Yards	Original openings may remain. New openings to conform to Part 9
Fire Compartmentation Separation between <i>Secondary Suite</i> and Principal Dwelling. Heating ducts that penetrate fire separations Plastic pipes for plumbing and sprinklers Suite entry doors in fire separations	Fire resistant combustible construction (1) No fire dampers or fire stopping required Permitted anywhere if tightly fitted or fire-stopped Existing solid core doors and frames in good condition are acceptable if unglazed or if glazed with wired glass
Exits Egress from each suite Windows adjacent to exits	Minimum of a single conforming exit is required from both the principal dwelling and the <i>secondary suite</i> . No requirements
Flame Spread Rating of Finishes Exits Remainder of building	150 or less No requirements
Heating Systems [See Section 9.33.] Furnace room enclosures	No separation required but provide proper combustion air and required clearances from all equipment
Smoke Alarms	Interconnected smoke alarms shall be provided outside every bedroom, and at least one smoke alarm shall be provided on every storey. Smoke alarms shall be installed by permanent connections to an electrical circuit. (See Subsection 9.10.18.) Smoke alarms for unsprinklered suites shall be provided with battery backup and manual silencing devices which will silence the alarm for a period of 10 minutes, after which the alarm will continue to function.[see Sentence 9.10.18.2.(3)]

Stairs	<p>Stair treads, rise and run shall to be reconstructed or modified to conform to Subsection 9.8.3. when</p> <p>(a) the existing stairs are considered to present an unsafe condition as determined by the <i>Chief Building Official</i>.</p> <p>All existing stairs shall have at least one handrail meeting the requirements of Subsection 9.8.7.</p>
Guardrail Protection	<p>Guards shall be provided around all stairways, balconies, landings, decks, and porches in accordance with Subsection 9.8.8. and Article 4.1.10.1. Existing guards may remain where they are structurally sound and a minimum of 900 mm high.</p>
Existing Headroom	<p>May be reduced to 1980 mm over 80% of the suite area and all egress routes.</p>
Unsafe Conditions	<p><i>Any condition that could cause undue hazard or risk to life, limb or health of any person authorized, expected or anticipated to be on or about the premises shall be corrected as required by the Chief Building Official.</i></p>
<p>NOTES TO TABLE 10.3.3.1.</p> <p>(1) “Fire resistant combustible construction” shall mean existing lath and plaster in good condition, or minimum ½ inch gypsum wallboard on wood studs at maximum 600 mm on centre.</p>	

**SECONDARY SUITE PROGRAM
ELECTRICAL REQUIREMENTS - Q&A's**

Clarification paper (Questions and Answers) on electrical requirements outlined in Table 4 of the Report approved by Council on March 23, 2004:

1. Electrical service capacity for one-family dwelling including one secondary suite:

Q. What does it mean for **new construction** of a one-family dwelling that is intended to incorporate a Secondary Suite?

A. A panel board that provides electrical service to the main dwelling and to the secondary suite, would have to meet all applicable requirements of the Canadian Electrical Code, Part I (City of Vancouver Electrical By-law). In accordance with these requirements, the service panel board would have to be located so as to be readily accessible to the occupants of the main dwelling and the secondary suite.

This panel board would have to be sized to accommodate all electrical loads connected to the panel board, such as ranges, washers, dryers, etc. of the main and the secondary suites.

Q. What is required for an **existing building** converted to include a secondary suite?

A. Requirements for the panelboard in the existing building are similar to those requirements for a newly constructed dwelling, except that the existing panelboard may be retained at its current location.

Q. How much would it cost to install the service panel board that meets all requirements of the Electrical By-law?

A. Currently, a typical upgrade of the existing panel board and its relocation to make it accessible to all occupants of the building should be within a range of \$800.00 - \$1000.00.

2. Electrical outlet provisions

Q. What are the requirements for **new construction** of a one-family dwelling that is intended to incorporate a secondary suite?

A. All provisions of the Canadian Electrical Code, Part I (City of Vancouver Electrical By-law) would apply in regards to the location of electrical outlets in the dwelling and the number of these outlets, and to a selection of branch circuits supplying these outlets. Where a ground fault circuit interrupter of the Class A is provided for protection of a receptacle in accordance with the requirements of the City of Vancouver Electrical By-law, access must be provided to the ground fault circuit interrupter device for the purpose of its periodic testing.

(I.e. if the GFCI protection of a receptacle installed in a bathroom of the secondary suite is provided from the GFCI device installed in the bathroom of the main dwelling, access to this GFCI device must be made available to the occupant of the secondary suite for the testing purposes of the device, or the receptacle installed in a bathroom of the secondary suite must contain a ground fault circuit interrupter of the Class A)

Q. What is required for an **existing building** converted to include a secondary suite?

A. A number of the electrical outlets and their location would not have to meet all applicable requirements of the City of Vancouver Electrical By-law. However, in order to maintain a minimum acceptable level of electrical and fire safety, the secondary suite would have to be provided with a minimum of two kitchen counter duplex receptacles supplied by two appliance circuits. These receptacles may be wired on a single circuit or a split circuit for both. A minimum of two duplex receptacles located on different walls would have to be also provided in each bedroom. In addition, a minimum of three duplex receptacles located on different walls would have to be provided in the living room area. This minimum number of receptacles in the living area may have to be increased as necessary, to preclude use of any extension cords instead of a permanent wiring.

Q. How expensive is such type of electrical work?

A. Installation of a typical kitchen counter receptacle is about \$80.00. A fridge circuit installation is also about \$80.00. Installation of a regular outlet is about \$50.00. With an hourly rate by an electrical contractor being within \$36.00 - \$40.00, a typical work to wire a kitchen would not exceed \$600.00, and wiring in a living room, two bedrooms, a bathroom and a hallway should not exceed \$900.00.

3. Hard-wired smoke alarms interconnected throughout and between the principle dwelling and the secondary suite.

Q. What does this requirement mean?

A. Vancouver Building By-law (Article 9.10.18.) provides specific requirements for installation of smoke alarms in dwelling units. These requirements include criteria for location of the smoke alarms, their permanent connection to a branch circuit supplying electrical receptacle and lighting. These requirements also mandate electrical interconnection of all smoke alarms in such a manner, that the activation of one alarm will cause all smoke alarms installed within the main dwelling and the secondary suite to sound. This latter condition is essential to alert the occupants of the entire building of a potential smoke and fire hazard.

Requirements for smoke alarms are applicable to a newly constructed dwelling with a secondary suite and for an existing building.

It is also intended by this requirement that in addition of being permanently connected to an electrical circuit, each smoke alarm installed in the principle dwelling and in the secondary suite will be provided with a back up battery and a manually operated device (a push-button) that will silence the signal emitted by the smoke alarm for a period of not more than 10 min, after which the smoke alarm will reset and again sound the alarm if the level of smoke is sufficient to re-actuate the smoke alarm.

Q. What is the cost of installation and interconnection of these smoke alarms?

A. A typical installation and interconnection of two smoke alarms is about \$150.00.

4. Q. Who is allowed to do the above electrical work?

A. All electrical work in a dwelling unit with a secondary suite (whether it is limited to the service panel board, or smoke alarms , or includes wiring to the electrical outlets) must be done only by a licensed electrical contractor under an electrical permit and such work is subject to inspection by the City Electrical Inspections Branch. This requirement is mandated by the BC Electrical Safety Act. This means that the owner would have to hire an electrical contractor to do all necessary electrical work.

5. Inspection

Q. Is an inspection by the City staff necessary?

A. All electrical work done by an electrical contractor to comply with applicable requirements is subject to inspection by the City Electrical Inspections Branch in accordance with the City Of Vancouver Electrical By-law. In addition, all newly constructed dwellings with secondary suites are subject to follow-up coordinated inspections after 12 months period. In the case of an existing building, in addition to the electrical work required to comply with applicable provisions of Table 4, each electrical contractor would have to conduct a safety inspection of the existing electrical installation in order to identify existing unsafe and hazardous conditions that might result in electrical shock or fire.

Q. How much might such a safety inspection cost?

A. This inspection is based on 2 hours of contractor's labour and with the hourly rate of \$40.00 it should be about \$80.00