



CODE CHANGE BULLETIN – DECEMBER 19, 2014 REVISED

On December 19, 2014 a number of new BC Building Code requirements take effect. These include:

1. BCBC Revision 5 – Energy Efficiency: Housing & Small Buildings
2. BCBC Revision 7 – Ventilation, Radon, Daycares, NFPA, and editorial revisions

Any building permit application received after December 18, 2014 must comply with these new requirements.

1) Energy Efficiency: Housing & Small Buildings:

New energy efficiency requirements apply to all buildings that are required to contain *conditioned* space (i.e.: heating and/or air conditioning).

Part 9 buildings that exceed 300 m² and all Part 3 buildings, that contain *conditioned* space, must comply with the National Energy Code for Buildings (NECB). All other buildings that contain *conditioned* space, including all Part 9 buildings, that include any residential occupancy, must comply with the new Section 9.36 of the current BC Building Code. This new Section 9.36 and the corresponding Appendix for 9.36 are comprised of 103 pages and replace the previous Part 10 that was comprised of 5 pages. The previous Section 9.36 (Secondary Suites) will be renumbered to 9.37.

The major changes in 9.36 for simple Part 9 buildings in the Columbia Shuswap Regional District Area F Climate Zone (Zone 5) are:

- A) Code required minimum insulation values are now based on effective R value, not nominal R value. The effective R value is less than the nominal R value of the insulation in framed assemblies because of thermal bridging that occurs at the framing members. The minimum effective R values are: above grade walls: R17.5, below grade walls: R16.9, attics: R49.2 (or R39.5 if an HRV is installed). To achieve these effective R value minimums with traditional wood framing at 24" on centre, will require R22 batt insulation in above and below grade framed walls and R 50 insulation (or R40 if an HRV is installed) in attics.
- B) Insulation must be continuous. For example: items such as plumbing pipes, ducts or electrical panels in exterior walls must not reduce the insulation value below the code required minimum. Pipes and Ducts in unheated spaces must have the same R value of insulation as required for walls. Basement and Crawlspace walls must be fully insulated.
- C) Unheated slabs on grade above frost level require vertical R11 insulation down to the top of the footing, or 4 ft. horizontally. All heated slabs on grade require R13 insulation under the entire slab. A thermal break of at least R6 is required around the perimeter of all slabs above frost level.

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- D) Air barriers, must be continuous and have backing at all joints, all joints must have a minimum 2" overlap and be sealed using caulking or approval air seal tape. This means that, if interior poly is being used as the air barrier in wood frame walls, wood backing is required at ALL interior poly joints (this includes poly boot joints, joist ends, etc.). It may be advantageous to install a fully sealed exterior air seal membrane instead of interior poly, such as Tyvek, so that the exterior sheathing can act as the joint backing. If an exterior air seal is used, an additional inspection will be required, prior to the air seal membrane being covered with cladding, trim, soffits, etc.

- E) All wall, ceiling and floor assemblies between a dwelling unit and attached garage must meet the code requirements for exterior assemblies regardless of whether the garage is heated or not.

Please refer to the "illustrated Guide: Energy Efficiency Requirements for Houses in British Columbia" for more in depth information and typical construction details.

[Energy Efficiency Requirements Guides | Homeowner Protection Office](#)

2) Ventilation, Radon, Daycares, NFPA, and editorial revisions:

2(A) Ventilation:

New Ventilation requirements, for *dwelling units*, will be contained in Sections 9.32 and 9/36.3.9. Ventilation air must now be distributed to each bedroom and a common area on each floor. *Dwelling units* with ducted, forced air, heat and/or cooling systems will require some changes, such as an exhaust fan that runs continuously. *Dwelling units* without ducted heating or cooling systems will now require a ducted ventilation system such as an independently distributed Heat Recovery Ventilator (HRV) or a Central Recirculation Ventilator (CRV). Heated crawlspaces will now require ventilation.

Please refer to the "Building and Safety Standards Branch; Information Bulletin No. B14-05" for more in depth information and typical construction details. Note that passive ventilation options explain in bulletin B14-05 do not apply in Salmon Arm (Jan 2.5% design temp = -19°C).

http://www.housing.gov.bc.ca/building/B14-05_9%2032%20_Ventilation.pdf

2(B) Radon:

New requirements have been added to 9.13.4.3 that now require the rough in radon exhaust pipe to exhaust to outside air. Clearances are required from the radon exhaust to opening windows and air intakes equivalent to clearances from plumbing vents (min 11.5 ft. horizontal clearance or minimum 3 ft. vertical clearance above opening).

Please refer to the "Building and Safety Standards Branch: Information Bulletin No. B14-07" for more in depth information.

http://www.housing.gov.bc.ca/building/B14-07%20New_Radon_Rough-in_Requirements.pdf

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3) Building Permit Applications:

In order to ensure compliance with the new building code requirements, all building permit applications for conditioned Part 9 buildings, submitted after December 18, 2014, will require the following additional information:

- A) Provide a construction detail, drawn to scale, of each above grade exterior wall assembly, below grade exterior wall assembly, roof assembly and floor assembly. Indicate the effective R value of the assembly, the type and nominal R value of the insulation, the type and location of the air barrier and the type and location of the vapor barrier.
- B) Indicate whether or not a Heat Recovery Ventilator (HRV) is proposed to be installed.
- C) Show the type and location of mechanical ventilation systems on the submitted drawings.
- D) Show the location of the Radon Exhaust outlet pipes(s) on the submitted drawings.

DISCLAIMER: The summarized and condensed information contained in this bulletin and other referenced information has been provided for convenience only. Refer to the 2012 BC Building Code for complete information.