



## Part 9 Energy Efficiency and Ventilation Requirements

**No.: PERMITS-54**  
**Date: 2014-12-17**  
**Revised: 2015-06-16**

### Purpose:

To inform owners, designers and contractors of the implementation of the new energy efficiency and ventilation requirements in Part 9 of the 2012 BC Building Code (Code), effective December 19, 2014.

### Background:

As per Ministerial Orders M111 and M290 effective December 19, 2014, the 2012 BC Building Code will be amended to include new ventilation and energy efficiency requirements in Sections 9.32 and 9.36, respectively.

### Implementation:

All Building Permits under Part 9 of the Code submitted on or after December 19, 2014 must comply with the amended sections of the Code as applicable. Plans submitted must demonstrate how compliance is achieved.

To decrease time required to review the submission, please provide all calculations in metric.

Compliance to the new 9.32 ventilation requirements must be demonstrated by:

- Indicating how the building is to be ventilated, in compliance to 9.32.3.4, by using one of the following methods:
  1. 9.32.3.4.(2) – Supply with ducted forced air;
  2. 9.32.3.4.(3) – HRV with forced air heating;
  3. 9.32.3.4.(4) – Independently distributed HRV system;
  4. 9.32.3.4.(5) – Central recirculation ventilator; or
  5. 9.32.3.4.(6) – Passive supply
- Indicating the required supply and continuous exhaust ventilation rate for the building, based on Table 9.32.3.5; and
- Indicating the required exhaust for kitchens and bathrooms based on Table 9.32.3.6.

For more information on the new ventilation requirements of Section 9.32 please see the following link:

[www.housing.gov.bc.ca/building/B14-05\\_9%2032%20\\_Ventilation.pdf](http://www.housing.gov.bc.ca/building/B14-05_9%2032%20_Ventilation.pdf)

see over →

Compliance to the new 9.36 energy efficiency requirements must be demonstrated by complying with **ONE** of the following methods:

1. Part 9 Prescriptive (9.36.2 – 9.36.4):
  - Indicate the Code required insulation (RSI) values for all assemblies separating conditioned from unconditioned spaces (i.e. exterior wall, roof, slab, floors, skylight shafts);
  - Indicate the Code required thermal transmittance (U-value) for windows, doors and skylights;
  - Provide details and calculations for all assemblies justifying how the minimum effective RSI values are being met; and
  - If HVAC, service water equipment, ductwork or piping are installed in the exterior wall or outside the plane of insulation, details must be submitted demonstrating how they are to be insulated to the Code required values;
2. Part 9 Prescriptive and Trade-off (9.36.2.11):
  - Provide a table comparing the Code compliant reference design with the proposed trade-off option for above-ground opaque assemblies;
  - Provide a table comparing the Code compliant reference design with the proposed trade-off option for fenestration; and
  - If the trade-off involves windows, indicate the orientation of the windows.
3. Part 9 Performance method (9.36.5):
  - Provide an energy model summary that must be submitted to indicate the input and output values; and
  - The summary must be signed and sealed by a **Registered Professional**; or
4. NECB 2011:
  - For applications following the prescriptive/trade-off paths for NECB 2011, provide a summary comparing the Code required insulation/thermal transmittance values with the proposed assemblies for all building envelope components;
  - For applications following the performance/energy modelling path for NECB 2011, submit the energy model summary. The summary must indicate the input and output values; and
  - The above summaries must be signed and sealed by a **Registered Professional**.

For all above options, the drawings must clearly state which method of compliance is being used.

For more information on the new energy efficiency requirements of 9.36, please see the following link:

[www.housing.gov.bc.ca/building/green/energy/index.htm](http://www.housing.gov.bc.ca/building/green/energy/index.htm)

A package of sample drawings has been provided as a supplement to Permits-54 (Part 9 Energy Efficiency Requirements Drawings). The package is provided for information purposes to owners, designers, and contractors. It is intended to help demonstrate possible compliance options to Section 9.36 of the BC Building Code. The package can be found here:

[www.richmond.ca/plandev/building/building](http://www.richmond.ca/plandev/building/building)

Should you have any questions, comments or suggestions concerning this bulletin please contact either the Supervisor, Permits Section at 604-276-4278 or Supervisor, Building Inspections at 604-276-4354.