



January 25, 2013



Construction Industry, Engineers, Designers, Contractors and Suppliers providing services throughout Yukon

RE: 2012 Revisions & Errata to the 2010 Edition of the National Construction Codes

Please be advised that on December 21, 2012 Revisions and Errata were made to the 2010 Edition of the National Construction Codes. These Revisions, which are already being administered as of January 1, 2013, will be fully implemented as of April 1, 2013. The 2012 Revisions incorporate energy efficiency requirements for housing and small buildings into Part 9 of the 2010 Edition National Building Code of Canada (NBC). Buildings containing non-residential occupancies whose combined total floor area exceeds 300 m² or medium-hazard industrial occupancies shall comply with the National Energy Code for Buildings (NECB). Buildings or portions of buildings that are not required to be conditioned spaces are exempted from the energy efficiency requirements.

The 2012 Revisions and Errata to the National Building Code of Canada 2010 (NBC), the National Fire Code of Canada 2010 (NFC) and the National Plumbing Code of Canada 2010 (NPC) can be downloaded at NRC website indicated below:

http://www.nationalcodes.nrc.gc.ca/eng/revisions_download.shtml

To order the 2010 National Model Construction Codes, please visit NRC's virtual store at:

http://www.nrc-cnrc.gc.ca/eng/virtual_store/index.html

A new addition to the NBC "Section 9.36 Energy Efficiency", has been incorporated into Part 9 of the NBC which is concerned with the energy used by buildings as a result of the design and construction of the building envelope, with continuous minimum effective thermal resistance values (RSI) and maximum overall thermal transmittance (U-value) of all windows and doors and the design, construction or specification of systems and equipment with minimum performance efficiency ratings for all heating, ventilating or air-conditioning and service water heaters.

Yukon has two climatic Zones; the first Zone includes the Whitehorse & Teslin areas, the second Zone covers all other areas in Yukon. Some examples of the continuous minimum effective thermal resistance (RSI) or (R) values of the building envelope are as follows:

- ceilings below attics an effective – R60,
- cathedral ceilings & flat roofs an effective – R31,
- walls above ground an effective – R22,
- walls below ground an effective – R20 first Zone and R22.5 second Zone,
- floors over unheated spaces an effective – R31,
- unheated floors below ground an effective – R12,
- heated floors below ground an effective – R16,
- all floors below ground on permafrost an effective – R26,
- monolithic slabs-on-grade an effective – R21 first Zone R26 second Zone

The maximum overall thermal transmittance (U-value) of all windows and doors is 1.4. This U-value is typically achieved using triple glazing with multiple low-e coatings. A ratio of the total vertical window & door area to gross wall area calculation is required to be submitted.

All heating, ventilating or air-conditioning and service water heaters are required to meet a minimum performance efficiency rating. Some examples of the minimum performance efficiency ratings are as follows:

- Gas/Propane Fired Boilers 83% efficiency rating,
- Gas/Propane Fired Duct Furnaces 81% efficiency rating,
- Gas/Propane Fired Warm-air Furnaces 78.5% efficiency rating,
- Gas/Propane Fired water heaters 80% efficiency rating,
- Gas/Propane Fired tankless water heaters 80% efficiency rating,
- Oil Fired Boilers 85% efficiency rating,
- Oil Fired Duct Furnaces 80% efficiency rating,
- Oil Fired Warm-air Furnaces 85% efficiency rating,
- Oil Fired Water heaters 78% efficiency rating,
- Oil Fired tankless water heaters 80% efficiency rating,

Solid-fuel-burning space-heating equipment are required to be EPA approved, HRV's are to have a sensible heat-recovery efficiency of at least 64% at an outside air temperature of -25°C, for those installed within the City of Whitehorse and a sensible heat-recovery efficiency of at least 55% if installed throughout all other parts of Yukon

A balanced ventilation system that either incorporates an HRV, (which is required in the City of Whitehorse) or without an HRV, (which requires that all the ventilation air be preheated to room temperature prior to being distributed into the building) is required to be designed for each building and prior to Occupancy, a balancing report is to be submitted.

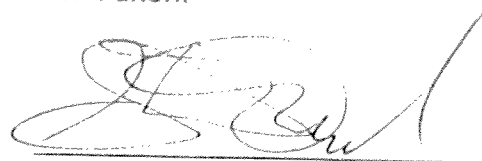
Please be advised that the City of Whitehorse Building & Plumbing Bylaw is available on their website at: <http://www.city.whitehorse.yk.ca/index.aspx?page=216>. Further, please be advised that for projects within the City of Whitehorse, the NBC minimum energy efficiency requirements apply unless the Building & Plumbing Bylaw requires higher energy efficiency requirements.

Although the Yukon Government has adopted the Codes, they are administered within Whitehorse, by Building Inspections, Development Services, City of Whitehorse, and in all other parts of Yukon, they are administered by the Building Safety Branch, Yukon Government.

Should you have any question please contact Doug Thorseth for projects within the City of Whitehorse or Stan Dueck for projects in all other parts of Yukon.



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