



Report from the Technical Research Committee (TRC)

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National Energy Code for Buildings (NECB)

CHBA continues to work on a number of requirements in the proposed NECB which adversely affect residential construction.

- **FDWR** - The priority issue is the formula for determining the fenestration and door to wall area ratio (FDWR). The FDWR controls the maximum energy target and indirectly the type of building that can use the prescriptive compliance path. Residential buildings typically have a relatively high FDWR so this ratio affects them more than other types of buildings. In cold areas, such as Alberta, the Code already calls for better windows and thicker insulation, so the requirement for smaller windows imposes an overly restrictive requirement for the prairies. CHBA requested CHBA-Alberta contact our provincial member of Provincial/Territorial Policy Advisory Committee on Codes (PTPACC) to encourage the member to raise a concern. CHBA-Alberta has done so, but PTPACC did not see sufficient reason for a review.

CHBA National is also hoping to address the following issues with NECB:

- Removing the requirement for HRVs in dwelling units with self-contained mechanical systems;
- Retaining a simple trade-off formula for envelope requirements;
- Providing separate requirements for fixed and operable windows;
- Adjusting the thermal requirements for above grade envelope elements in Zone 7A (Calgary and Edmonton).

This code applies to buildings over 600m² OR three stories and is scheduled for publication in the fall of 2011.

Energy Efficiency for Part 9

The Joint Task Group responsible for energy efficiency requirements in houses and small buildings met on February 17 and 18 and suggested the following changes:

- Choice of prescriptive or performance path;
- Requiring Energy Star criteria for windows in place of a fenestration to wall ratio for single family and multi-unit dwellings;
- Maximum U-values for windows, doors and skylights;
- Dwellings should achieve an EnerGuide rating of 80 ON AVERAGE;
- Walls values of minimum effective RSI value;
- There will be only one level of airtightness, 2.5 air changes/hr and it will not require blower door testing under the prescriptive path. Instead the use of an air barrier system listed under the new ULC standard would qualify the building to use lower insulation levels;

- Insulation values will be based on degree days for a particular region and will have different requirements when mechanical ventilation incorporates HRVs; HRVs to be optional;
- 92% efficient furnaces;
- Minimum water heater efficiency;
- Pipe, tank insulation;
- Installation of heat trap above the hot water tank.

National Building Code 2010 (NBC)

Overviews of the most significant technical changes in the 2010 NBC, NFC and NPC are being developed and will be made available as free on-line presentations on the national codes website (www.nationalcodes.ca) by early March 2011. Thirteen presentations will replace the cross country seminars traditionally offered during past model code launches.

Alberta plans to adopt the NBC sometime in late 2012 or 2013, with review and comment on Alberta specific changes only. Municipal Affairs is not planning to review changes done at the national level as part of the Alberta process.

Revision of EnerGuide

Work on the new EnerGuide Rating System is well underway with public review expected in April of 2011 and publication one year later. The new system will be moving to an energy consumption scale using GJ/year. A homeowner information sheet describing how energy is used and listing data that was collected to rate the house will be left in each house. Base ratings will be confirmed with a blower door test. This system is intended to serve as a backbone for home energy programming and policy development in Canada.

Radon

Health Canada released results in December from the first half of a radon survey of 18,000 houses across Canada conducted over 2 years. Areas in Alberta did show evidence of radon above the Health Canada limit. Health Canada is also preparing a remediation guide and maps showing radon concentrations. The mapping is due for completion in 2013.

CMHC is conducting research on a set of radon mitigation installations.

Accessibility/Visitability/Adaptability

CHBA is preparing a scoping report on visitability to document current and planned provincial initiatives in this area. The intent is to develop policy statements, a policy paper and an advisory document for builders. Currently the draft is being circulated for additional input.

Renovation Woes

Renovators in BC are struggling with WCB requirements for dealing with asbestos found in drywall joint compound and lead in paint products. Renovators are required to test for these substances prior to demolition and utilize an expensive removal and disposal process.