

## Fall 2017 Builders & Designers Forum

### *BC Energy Step Code*

#### **What is the Provincial BC Energy Step Code?**

The BC Energy Step Code is a provincial standard enacted in April 2017 that establishes progressive performance steps in energy efficiency for new buildings from the current BC Building Code level to net zero energy ready buildings by 2032. It was developed through wide-ranging stakeholder consensus over a two year period through a series of working groups and committees convened by the Building and Safety Standards Branch of the BC Provincial Government.

In addition to supporting long-term improvements in energy efficiency in the BC Building Code, the BC Energy Step Code will improve the consistency of building regulations in the Province. The Energy Step Code is a single provincial standard that replaces the patchwork of different green building standards that have been required or encouraged by local governments in the past. This will allow local governments to continue to play a leadership role in improving energy efficiency, while providing a single standard for industry and build capacity over time.

#### **Why is the City of North Vancouver Adopting the BC Energy Step Code?**

Amongst other requirements, the BC Building Act limits the ability of a local government to set building regulations. On December 15<sup>th</sup>, 2017, local bylaws requiring building regulations above the BC Building Code become non-enforceable. The City of North Vancouver is transitioning current bylaws to the Energy Step Code in order to maintain pre-existing building energy efficiency requirements.

#### **What does this change mean for Builders and Designers?**

For Building Permits applied for on or after December 15<sup>th</sup>, compliance with the BC Energy Step Code may be required (see following page). However, as the majority of projects have taken advantage of the City's Energy Efficient Buildings Initiative over the past six years, most builders/designers are already familiar with the performance-based design approach in the Step Code.

New in the Step Code is a maximum air-leakage rate for building envelope tightness. Failure to meet this air-tightness could lead to costly repairs and a delay in Occupancy. It is recommended that all projects undergo a pre-drywall air-tightness (blower door) test; your Energy Advisor will be able to assist with this.

The City's Energy Efficiency Design Documents have been updated to include the BC Energy Step Code. Please ensure your design team is using the most up-to-date forms. These forms are available online at: <http://www.cnv.org/property-and-development/building-and-development/plans-and-programs/energy-efficient-buildings-initiative/energy-efficient-bylaws-for-new-buildings/part-9-buildings-after-december-15-2017>

### Additional Resources and Training Opportunities:

1. Energy Step Code website: <http://energystepcode.ca/>. The following resources are available at the above address:
  - Energy Step Code Convenience Copy (downloadable Building Code reference material)
  - Energy Step Code Technical Training Series (four sessions – one hour each)
2. BC Housing Building Smart: <https://www.bchousing.org/research-centre/building-smart>
  - Energy Step Code In-Person and Online Sessions
  - Residential Design and Construction Guides
    - Illustrated Guide – Achieving Airtight Buildings
    - Illustrated Guide – R22+ Effective Walls in Residential Construction in BC
    - Heat Recovery Ventilation Guide for Houses
    - Pathways to High-Performance Housing in British Columbia
3. CHBA-BC: <http://chbabc.org/education/>
4. GVHBA: <https://gvhba.org/events/>
5. BCIT High Performance Building Lab: <https://commons.bcit.ca/energy/research/high-performance-building-lab/>
6. Professional Associations:
  - Architectural Institute of BC: <http://aibc.ca/>
  - Engineers & Geoscientists BC: <https://www.egbc.ca/>
  - ASTTBC – Building Designers: <https://buildingdesign.asttbc.org/>

### CNV Transition to Energy Step Code

	Current (Elective)	December 15, 2017	July 1, 2018
<b>Part 9 Small Residential (Less than 1200 sq.ft.)</b>	1% Bond + EnerGuide 80 = Density Bonus	BCBC	Step 1
<b>Part 9 Residential (Greater than 1200 sq.ft.)</b>	1% Bond + EnerGuide 80 = Density Bonus	Step 2	Step 3

### Estimated Cost Impact of Step Code Adoption in CNV

	December 15, 2017	July 1, 2018
<b>Part 9 Small Residential (Less than 1200 sq.ft.)</b>	0.0%	0.5%
<b>Part 9 Residential (Greater than 1200 sq.ft.)</b>	0.0%	0.0 - 1.1%
<b>Moodyville Neighbourhood</b>	0.0%	0.0%