



## ADMINISTRATIVE REPORT

Report Date: June 10, 2016  
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Meeting Date: June 28, 2016

TO: Vancouver City Council  
FROM: Chief Building Official  
SUBJECT: Building By-law Housekeeping and Minor Energy Efficiency Amendments

### *RECOMMENDATION*

- A. THAT Council approve the adoption of Revisions 7 and 8 to the 2012 British Columbia Building Code, being Ministerial Orders M290 and M378 as attached in Appendices A and B, as amendments to the 2014 Building By-law, with the necessary modifications to incorporate the those revisions with the "Unique to Vancouver" provisions in the 2014 Building Bylaw.
- B. THAT Council approve the adoption of Housekeeping and Minor Energy Efficiency amendments to the 2014 Building By-law generally as set out in Appendix C.
- C. THAT Council instruct the Director of Legal Services to bring forward the necessary bylaw amendments for consideration by Council, generally in accordance with Recommendations A and B.

### *REPORT SUMMARY*

This report recommends the adoption of errata and revisions to the 2012 British Columbia Building Code, and general amendments to the 2014 Vancouver Building By-law. Specifically:

- Adoption of the December 2015 Revision of the British Columbia Building Code (revision 7 and 8);
- Housekeeping and administrative changes reflecting current policy;
- Clarifications and errata related to the intended method of application of existing provisions of the by-law;
- Minor amendments reflecting "Unique to Vancouver" provisions consistent with

- existing City policy and Council direction; and
- Minor Energy efficiency changes that build upon existing energy use provisions, and support the Council's Greenest City action plan.

The proposed amendment to the 2014 Building By-law will enable the City to continue to demonstrate building regulatory leadership while at the same time advance strategic City goals, such as: excellent and efficient public service; green buildings, affordability, livability, inclusivity, safety, and security.

### ***COUNCIL AUTHORITY/PREVIOUS DECISIONS***

In April 2014, Council enacted the 2014 Vancouver Building By-law (#10908) and repealed the 1999 Vancouver Building Bylaw (#9419) regulating the construction of buildings and related matters in the City of Vancouver.

This was enacted under the authority granted by section 306(a) of the Vancouver Charter, permitting Council to make By-laws to regulate the construction of buildings, and under section 306(w), by which Council may adopt by reference in whole or in part and with any change Council considers appropriate, any code relating to fire safety or energy conservation or affecting the construction, alteration, or demolition of buildings.

The current 2014 Building Bylaw includes significant green provisions addressing Council motions in March and September of 2007 directing staff to begin planning for significant, long-range GHG reductions with the eventual goal of becoming a carbon-neutral city; and secondly, responding to the 2011 Greenest City Action Plan including Goal 3 - Lead the World in Green Building Design and Construction. This goal included the targets: (1) Require all buildings constructed from 2020 onward to be carbon neutral in operations, and (2) Reduce energy use and GHG emissions in existing buildings by 20% over 2007 levels by 2020.

### ***CITY MANAGER'S/GENERAL MANAGER'S COMMENTS***

The City Manager and Acting General Manager of Planning and Development Services recommend approval of the foregoing.

### ***REPORT***

#### ***Background/Context***

Though the Vancouver Charter, Council has previously adopted the Vancouver Building By-law to regulate the construction requirements for buildings as well as the administrative provisions for permitting, inspection, and enforcement of these requirements.

The 2012 British Columbia Building Code (BCBC) is the base document used in the developing the City's 2014 Building By-law, which adopts the provisions of provincial code plus "Unique to Vancouver" provisions reflective of local concerns and objectives. This model of adoption and amendment is consistent with the model used by the province in developing the BCBC, which is in turn derived from the National

Building Code of Canada (NBCC) and the inclusion of specific provincial enactments to form the 2012 BCBC.

This mechanism allows Vancouver to respond to local concerns, and provide leadership in establishing construction policy related to changes in development objectives, and construction methods and technologies. Furthermore, in fulfilling Council's Greenest City Action Plan objectives, the 2014 Building By-Law now requires compliance with the ASHRAE 90.1 - 2010 energy efficiency standard.

It is intended that the proposed series of amendments support the Vancouver's leadership position in responding to industry need, managing risk, and establishing a solid framework of energy efficiency and compliance.

### ***Strategic Analysis***

The "Unique to Vancouver" (UTV) amendments that form the proposed 2016 amendment to the 2014 Building By-law are discussed below and may be broadly grouped as follows:

1. Adoption of new Provincial requirements with "Unique to Vancouver" amendments;
2. Housekeeping, Clarification, and Errata of existing requirements; and
3. Energy and Water Efficiency Requirements.

#### 1. Adoption of New Provincial Requirements with "Unique to Vancouver" Amendments

The majority of UTV provisions are unaffected by the Provincial revisions as they are clarifications and updates to existing provisions. Those changes which have impacted UTV requirements have been either omitted or modified to retain the original intent of the UTV requirements.

Significant changes not falling within the above generalization are identified as follows:

<b>Subject</b>	<b>Proposed Amendment</b>
Daycares	Introduce additional options to address renovations in unsprinklered daycares and resolve inconsistencies with the Provincial Childcare licensing requirements.
Kitchen Ventilation	Introduce performance requirements as an alternative to specific technologies.
Residential Windows	Provide new wording consistent with the provincial requirements, but clearer in their application.

## 2. Housekeeping, Clarification and Errata of Existing Requirements

City staff have identified suitable clarification and errata amendments to the text of the 2014 VBBL included in Appendix C. These amendments are consistent with existing Council direction or are administrative in nature, and clarify the intended manner by which the existing by-law text should be interpreted.

Key proposed amendments to improve clarity include:

<b>Subject</b>	<b>Proposed Amendment</b>
Spatial Separation for Houses	Clarify that combustible construction is not permitted within 1.0 m of the property line.
Fire Protection - Sprinkler	Confirm the intent to permit sprinkler protection for exit exposure of low occupant load exits for Part 9 buildings as already permitted in Part 3 buildings.  Require sprinkler protection of decks for commercial and industrial occupancies in addition to residential.
Fire Separation of Secondary & Lock-off Suites	Clarify the intended requirement to provide a 45 min fire separation between the primary suite and the subsidiary suite.
Upgrades to Existing Buildings	Updates to the descriptions related to the categories of work.

## 3. Energy Efficiency Requirements

To support the City's goal of becoming the greenest city in the world by 2020 and demonstrate continued leadership in development, further amendments to Part 10 of the Vancouver Building By-law are proposed to further Council's green initiatives.

### A. Electrical Load Sharing for Electric Vehicles Charging Stations

Proposed revisions to the electrical vehicle charging requirements match with current administrative provisions and take advantage of new technologies that allow electrical load sharing. This allows designers to install smaller and less expensive equipment and wiring to service electric vehicles.

### B. Lighting Efficiency Changes

Proposed lighting changes will require building owner undertaking renovations to remove or replace a portion of existing inefficient lighting where noncompliant or in excess of the allotted lighting allowance in the project area. The installation of energy compliant lighting, and removal of inefficient or excess lighting, will result in long term savings for owner/operator which will offset the immediate cost of these changes may cause.

### Implementation of the Building By-law

The scope of the proposed updates are low impact, and are generally clarifications to existing policy or administrative in nature. It is further noted that these amendments align with the changes implemented within the BC Building Code and the Canadian Electrical Code, with which the industry is already familiar and will already have implemented in other Jurisdictions. In order to facilitate an orderly transition to the proposed changes, it is proposed that these changes be enacted in a staged manner, with the Housekeeping and Clarity amendments occurring as of August 1, 2016 and the remainder of the amendments occurring as of January 1, 2017.

The proposed By-law amendments have been developed in conjunction with affected groups – Sustainability, Vancouver Fire & Rescue Services, Building Inspections, and Planning and Development. The proposed changes have been forwarded for general comment to the Architectural Institute of BC, Association of Professional Engineers and Geoscientists of BC, and Urban Development Institute. Based on the feedback received, it is anticipated that the proposed changes would be well received by industry.

### *Implications/Related Issues/Risk (if applicable)*

#### *Financial*

There are no expected financial implications for the City.

Further, the scope of the proposed amendments is very small in the context of the overall construction budget of a building, and implementation of the changes are not expected to negatively affect the industry in a meaningful manner.

#### *Legal*

The City has the legal authority under Section 306(a) & 306(w) of the Vancouver charter to adopt the Canadian Electrical Code, in whole or in part or with such modification as may be provided in the by-law, and is subject to the Safety Standards Act and the regulations under that Act.

### **CONCLUSION**

Amendments are proposed to the 2014 Building By-law that will advance City goals of public safety and green buildings. The proposed amendments will adopt recent Provincial Building Code revision as amended to reflect the “Unique to Vancouver” provisions of the 2014 Building By-law as previously adopted by Council. In addition, the proposed amendments will include minor changes for housekeeping, clarification, and errata purposes, and extend existing energy efficiency requirements to maintain consistency with Council’s Greenest City Action Plan.

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