

February 7, 2012

AIBC Comments on City of Vancouver's Proposed Changes to the Vancouver Building By-law

Executive Summary

As always, the Architectural Institute of British Columbia appreciates the opportunity to review and comment upon proposed changes to the Vancouver Building By-law.

After review and discussion with members and associates, the institute supports in general the proposed amendments as their intents are to increase public safety, to either harmonize with or address deficiencies in the model National Building Code of Canada, to reduce the environmental impact of building, to provide greater ease of use or more options for designers, and to address operational or environmental conditions that are specific to the City of Vancouver.

In principal, the AIBC supports the introduction of "flex space", but hopes that more information will be forthcoming as the final by-law language was not provided - only charts of the proposed requirements. There is concern that the fire protection concepts behind these provisions have not been clearly stated. The case has not been made for the requirement for masonry or concrete vertical fire separations, when equivalent fire protection performance can be achieved with wall assemblies that are not masonry or concrete. The requirement for masonry or concrete vertical fire separations for flex space in existing non-combustible buildings will present considerable challenges for owners and designers, and may make the flex space option unworkable, when these are the types of buildings that could be benefiting most from the new provisions.

The AIBC supports the new requirements for the location of standpipe and sprinkler system fire department connections as they will contribute to occupant safety and FD efficiency. However, as these new requirements will place considerable restrictions on designers that may not be immediately obvious, and there is an element of subjectivity in determining what constitutes an "obstruction", it is strongly advised that the city provide designers with diagrams illustrating the requirements, either in the form of an appendix entry or a CBO bulletin.

Specific Comments

NBCC Model Codes

[NBC 2010 - Windows, Doors, Skylights and Sealants](#)

The AIBC supports the adoption of these NBCC 2010 revisions as they are necessary updates to current, North American standards and will result in better performance of the building envelope.

[NBC 2010 - Structural Loads](#)

The AIBC supports the adoption by of the NBCC 2010 revisions as necessary updates to reflect current research and data collection.

[NBC 2010 - Stairs, Ramps, Handrails and Guards](#)

The AIBC supports the adoption by of the NBCC 2010 revisions as they are improvements to the clarity and consistency of the requirements, and will provide the same level, or an increased level of safety.

[NBC 2010 - Spatial Separation](#)

The AIBC supports the adoption by of the NBCC 2010 revisions as they will provide an increased level of safety.

[NBC 2010 - Dangerous Goods/Flammable and Combustible Liquids/Hazardous Activities](#)

The AIBC supports the consolidation of NFCC/VFBL provisions into the NBCC/VBBL as it will make design and implementation of these requirements easier. The institute also supports the new provisions for storage and handling of dangerous goods, flammable and combustible liquids as they will provide important and necessary environmental safeguards. Additionally, the institute supports increased fire safety provisions adjacent to construction and demolition sites as necessary public safety initiatives.

[NBC 2010 - Residential Care](#)

The AIBC supports the implementation of the new B-3 category as it will allow owners/designers greater flexibility while still requiring (and benefiting from) professional design and review.

[NBC 2010 - Other Part 9 Changes](#)

The AIBC supports these miscellaneous Part 9 changes as they provide greater consistency, clarity and/or recognize contemporary building practices, or improve building safety or performance.

[NBC 2010 - Heating, Ventilation, and Air Conditioning](#)

The AIBC supports the HVAC amendments to the VBBL as they will result in reduction of the fire hazard from collective laundry venting, and reduce the health hazard of degraded indoor air quality the result of contaminated outside air or laundry exhaust being introduced into buildings.

[NBC 2010 - Secondary Suites](#)

The AIBC supports the City's decision to not include the NBCC secondary suite provisions as the current VBBL requirements are familiar to users and, with the mandatory sprinklering required in the City of Vancouver, may provide a higher level of safety than the NBCC.

[NBC 2010 - Fire alarms and Exit Signs](#)

The AIBC supports the proposed changes to the VBBL.

Environmental Protection

[Division B, Subsection 3.6.5. - Location of Gas Vents](#)

[Division B, Subsection 9.33.6. - Location of Gas Vents](#)

The AIBC supports the proposed change as it will result in limiting the impact of one building's systems on other properties, thereby improving the community through greater "neighbourliness".

[Division B, Article 7.2.2.6 - Low Consumption Water Closets](#)

The AIBC supports this provision as it will result in reducing water consumption, thereby contributing to better use of natural resources and less environmental impact from sanitary discharge.

[Division B, Sentence 9.25.1.1.\(3\) - Energy Efficiency for Part 9 Non-Residential Construction](#)

The AIBC supports this clarification.

[Division B, Article 12.2.2.1 - Energy Efficient Light Fixtures](#)

[Division B, Article 12.2.2.2 - Energy Usage Display Meter](#)

The AIBC supports these deletions.

[Division B, Sentence 12.2.2.5.\(1\) - Gas-Fuelled Fireplaces](#)

[Greenest City Action Plan - Gas-Fuelled Fireplaces](#)

The AIBC supports this provision as it will result in more efficient use of natural resources at little cost.

[Division B, Article 12.2.2.7 - Heat Recovery Ventilators](#)

The AIBC supports this requirement as it represents current "best practice".

[Greenest City Action Plan - Wood Burning Appliances](#)

In the interest of the common good of improved air quality, the AIBC supports the prohibition on wood burning appliances within the City of Vancouver.

Flex Space

In principal, the AIBC supports the introduction of "flex space". However, there is concern that the fire protection concepts behind these provisions have not been clearly stated. The case has not been made for the requirement for masonry or concrete vertical fire separations, when equivalent fire protection performance can be achieved with fire resistance rated wall assemblies that are not masonry or concrete. The requirement for masonry or concrete vertical fire separations for flex space in existing non-combustible buildings will present considerable challenges for owners and designers, and may make the flex space option unworkable when these are the types of buildings that could be benefiting most from the new provisions. The institute supported the flex space provisions being applicable to both new and existing buildings, whether they are of combustible or non-combustible construction. The AIBC seeks clarification on the fire protection concept proposed, a concrete "box" or a two-hour fire separation. As well, it is suggested that the issue of compatibility of uses (F occupancies versus C occupancies) in the flex space be explored, perhaps at an earlier stage in the city's building regulatory process than building permit.

General Amendments

Division A

[Division A, Sentence 1.1.1.1.\(6\) - Farm Buildings](#)

[Division A, Clause 1.3.3.6.\(2\)\(i\) - Sprinkler Exemption for Farm Buildings](#)

The AIBC supports this requirement, to keep farm buildings aligned with the mandatory sprinklering policy in place in Vancouver.

Division B

[Division B, Table 3.1.17.1 - Occupant Load for Exercise Rooms](#)

The AIBC supports the amendment. If space is designed more accurately for the intended use, it could provide a higher level of safety for occupants.

[Division B, Sentence 3.2.3.13.\(2\) - Protection of Exit Facilities - Exterior Egress Pathway](#)

The AIBC supports the amendment as it brings greater clarity to an existing requirement, and will assist users in implementing the provision into their designs.

[Division B, Subclause 3.2.5.13.\(3\)\(c\) - Automatic Sprinkler Systems for Laneway Houses](#)

The AIBC supports this provision as it allows laneway housing to be designed to the more appropriate standard.

[Division B, Sentence 3.2.5.13.\(9\) - Sprinkler Protection for Unenclosed Exterior Balconies of Residential Buildings](#)

The AIBC supports the proposed change as it will increase the level of safety for building occupants.

[Division B, Sentence 3.2.5.16 \(1\) - Fire Department Connection for Standpipe Systems](#)

[Division B, Sentence 3.2.5.16 \(2\) - Fire Department Connection for Sprinkler Systems](#)

The AIBC supports the proposed change as it will increase the level of safety for building occupants and will improve fire department efficiency. As it will put a new constraint on design, and the implications may not be immediately apparent to designers, it is recommended that the city provide example diagrams in the appendix, along with commentary on what will be considered obstruction to the egress path.

[Division B, Article 3.3.5.4. - Storage Garage Egress Ramps](#)

The AIBC supports the proposed change as it will increase the level of safety for building occupants.

[Division B, Sentence 9.7.1.5.\(2\) - Height of Window Sills above Floors or Ground](#)

The AIBC supports the amendment as it provides brings greater clarity to an existing requirement, one that is critical to the safety of children.

[Division B, Sentence 9.10.14.5.\(3\) - Spatial Separation for Storage Garage Serving Two Dwelling Units](#)

[Division B, Sentence 9.10.15.5.\(7\) - Construction of Exposing Building Face of Houses](#)

[Division B, Article 9.10.18.3 - Rooms and Spaces Requiring Heat Detectors or Smoke Detectors](#)

The AIBC supports these provisions.

Division C

[Division C, Sentence 1A.7.5.1.\(1\) - Chief Building Official May Extend Permit](#)

The AIBC supports the CBO having this slightly greater discretion in extending a permit before city council must become involved.

A handwritten signature in black ink that reads "Michael A. Ernest". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

Michael A. Ernest Architect MAIBC
Executive Director