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## **2018 Edition of the British Columbia Building Code**

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The Province has adopted the 2018 edition of the British Columbia Building Code (BC Building Code), which includes Book I (General) and Book II (Plumbing Systems). The 2018 BC Building Code is effective December 10, 2018 and applies to building permits applied for on or after that date. As with previous editions, buildings with permits in place under the 2012 BC Building Code will generally not be affected by the adoption of the new code.

### **How to Obtain a Copy of the 2018 BC Building Code**

BC Codes are available for purchase from the Queen’s Printer at [bccodes.ca](http://bccodes.ca), and will soon be available at all [BC Public Libraries](#).

### **New Requirements**

The BC Building Code is based substantially on the model National Codes which are developed by the National Research Council with involvement of provinces and territories. The National Codes are updated approximately every five years. B.C. adopts most of the national requirements into subsequent editions of the BC Building Code.

The most recent 2015 National Codes incorporated about 600 technical changes to enhance code language clarity, introduce new concepts, and expand existing requirements. Some of the new requirements in the National Codes include:

- Installation of leakage-rated door assemblies in some fire separations,
- Updates to airborne sound transmission provisions to address flanking sound transmission in addition to direct sound transmission,
- Changes to seismic design data and climatic data,
- Updates to stairs, ramps, handrails and guards, including an increase to the run dimensions for residential dwellings,
- Residential fire warning systems as a new acceptable solution,
- Additional materials and assemblies when using the component additive method in Appendix D of Division B,
- Maximum flow rates for supply fittings and shower heads.

For more information on the significant changes introduced in the 2015 National Building Code, please visit the National Research Council of Canada’s [website](#).

Changes specific to B.C. reflect the unique needs of B.C.’s geography, climate, and construction sector. The Building and Safety Standards Branch conducted a public review to seek feedback on the proposed code changes. Feedback was carefully considered and helped inform the 2018 BC Building Code.

This bulletin provides an overview of the following significant code changes, specific to B.C.:

- Accessibility
- Area Calculation of Exposing Building Face
- Asbestos
- Energy Efficiency Standards

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- Exit Signs
- Factory Constructed Buildings
- Fenestration
- Heritage Buildings
- Mid-Rise Combustible Construction
- Water Efficiency of Plumbing Fixtures
- Radon Data
- Stairs

### **Accessibility**

The 2018 BC Building Code combines the requirements of the 2015 National Building Code with BC's historical requirements to require a greater level of building accessibility. New requirements help improve accessibility in small retail shops, and common areas of condominium and apartment buildings, as well as permit greater flexibility in design choices. Please read Bulletin [B18-05](#) for more information on this update.

### **Area Calculation of Exposing Building Face**

The 2018 BC Building Code clarifies the requirements for fire protection between adjacent residential and small buildings in Part 9 and better aligns with the language and intent of Part 3. The change provides clarity for buildings divided into fire compartments that it is permitted, but not mandatory, to calculate the area of the exposing building face for each compartment, as an alternative option to taking the exposing building face as the exterior wall area facing in one direction on any side of the building.

### **Asbestos**

The 2018 BC Building Code removes all direct references that permitted asbestos-containing products. The Building Code does not ban asbestos-containing products, however asbestos-containing products are no longer listed among acceptable materials due to the potential risk to the health and safety of builders and building occupants.

### **Energy Efficiency Standards**

The 2018 Building Code references new editions of energy efficiency codes and standards. New buildings meeting ANSI/ASHRAE 90.1-2016, "Energy Standard for Buildings Except Low-Rise Residential Buildings" or the "National Energy Code for Buildings 2015" will improve their energy performance, and the new requirements contribute to the Province's goal of requiring net-zero energy ready buildings in the BC Building Code by 2032.

### **Exit Signs**

The National Building Code and BC Building Code reference two co-ordinated International Organization for Standardization (ISO) standards for the design of exit signs. The 2018 BC Building Code retains the versions referenced in the 2012 BC Building Code of these two standards, which are aligned with the references to the directional arrows in the 2015 National Building Code and the 2018 BC Building Code.

### **Factory Constructed Buildings**

The portion of the appendix related to CSA A277 "Procedure for Factory Certification of Buildings" was deleted when the previous exemption for these buildings was removed from the

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2012 BC Building Code. This appendix note has been re-inserted to clarify how conformance with the CSA A277 standard relates to the 2018 BC Building Code.

### **Fenestration**

Windows, doors, and skylights may conform to either the 2008 or 2011 version of “NAFS – North American Fenestration Standard/Specification for Windows, Doors, and Skylights” (NAFS), and to either the 2009 or 2017 the version of the “Canadian Supplement to NAFS – North American Fenestration Standard/Specification for Windows, Doors, and Skylights” (Canadian Supplement).

### **Heritage Buildings**

The table of alternate compliance methods for heritage buildings is unique to B.C. and differs from the National Building Code. Editorial corrections and updates to include current references have been made to the table. The table has also been moved from the appendix into the body of the code (Division A) to clarify that its requirements are an enforceable part of the code.

### **Mid-Rise Combustible Construction**

Following consultations with industry stakeholders and based on extensive research and evaluation, the BC Building Code has adopted the 2015 National Building Code provisions for mid-rise combustible buildings with a variation specific to B.C. The variation will require 100 percent of the exterior cladding to have increased fire performance and 10 percent of the building’s perimeter to be located within 15 metres of a street or streets. More information on this update can be found in [Bulletin B18-06](#) on mid-rise combustible construction.

### **Water Efficiency of Plumbing Fixtures**

Plumbing fixture efficiency requirements have been relocated from the BC Building Code Book I (General) to Book II (Plumbing Systems). In addition, some new requirements have been adopted from the 2015 National Plumbing Code to help achieve consistent requirements across Canada. Changes to flow rates are reproduced in the following table, but do not apply to lavatories in health care facilities, emergency eye washes, or emergency showers. In addition to flow rates for public lavatories and showers, automatic shut off requirements are introduced.

<b>Fixture Flow Rates</b>	
<b>Fixture</b>	<b>Flow Rate measured in L/min</b>
Private lavatory supply	Reduced from 8.3 to 5.7
Public lavatory supply	Reduced from 8.3 to 1.9
Kitchen supply	Unchanged at 8.3
Shower head	Reduced from 9.5 to 7.6

There is no change to the flush cycle requirements for water closets, however the maximum water usage per flush cycle for non-residential urinals is reduced from 5.7 Lpf to 1.9 Lpf.

### **Radon Data**

Part 9 of the BC Building Code requires some buildings to have a radon rough-in for a subfloor depressurization system, in locations of the province where there is evidence of radon

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concentrations in buildings exceeding Health Canada guidelines. While the Building Code does include a list of areas where radon is known to be an issue, new data is continually being reported regarding radon concentrations in locations of the province that were previously not known to be an elevated radon risk. The authority having jurisdiction may have data established by bylaw or policy which determines if the radon rough-in provisions of the BC Building Code apply. In the absence of such data from the authority having jurisdiction, Table C-4 in Division B of the BC Building Code, which has been revised to reflect new evidence, can be used. Now, Table C-4 lists radon rough-ins as required in some locations that were previously not known to have an elevated risk of indoor radon concentrations exceeding Health Canada guidelines. New locations listed as “required” in Table C-4 are:

- Abbotsford
- Duncan
- Hope
- Lillooet
- Sechelt
- Whistler

More information on radon rough-in requirements can be found in [Bulletin B14-07](#).

### **Stairs**

Important changes have been made to stair requirements to improve safety and ease of use for all occupants. The 2018 BC Building Code does not include permissions adopted in the 2015 National Building Code for mixed flights and spiral stairs within a dwelling unit.

### **Education and Training**

The Building and Safety Standards Branch is working with partners to support code users in learning about the new code requirements. Additional information about education and training opportunities will be posted to [www.gov.bc.ca/buildingcodes](http://www.gov.bc.ca/buildingcodes).

### **Code Development**

Codes are constantly changing to reflect new technologies and practices. National model codes are developed by committee, and information on how to participate on a committee, or attend a committee meeting is available in the following links. To participate in the development of Codes, Code Change Requests can be sent to the National Research Council of Canada.

### **Links**

- Codes Canada: (volunteer & attend) [https://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes\\_centre\\_index.html](https://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes_centre_index.html)
- Ministry website: <https://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards>
- NRC Code Change Request: [https://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes\\_centre/code\\_change\\_request.html](https://www.nrc-cnrc.gc.ca/eng/solutions/advisory/codes_centre/code_change_request.html)

### **Contact the Building and Safety Standards Branch**

- **General** inquiries can be sent to [building.safety@gov.bc.ca](mailto:building.safety@gov.bc.ca)
- **Technical** Code inquiries can be sent to [codequestion@gov.bc.ca](mailto:codequestion@gov.bc.ca)

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## Information Bulletin

### Building and Safety Standards Branch

PO Box 9844 Stn Prov Govt

Victoria BC V8W 9T2

Email: [building.safety@gov.bc.ca](mailto:building.safety@gov.bc.ca)

Website: [www.gov.bc.ca/buildingcodes](http://www.gov.bc.ca/buildingcodes)

The Building and Safety Standards Branch does not enforce compliance with the BC Building Code. Local governments are authorized to enforce the BC Building Code through the Local Government Act and the Community Charter.

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