

BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, EGBC, BOABC

File No: 18-0121

INTERPRETATION

Page 1 of 2

Interpretation Date:	September 21, 2021
Building Code Edition:	BC Building Code 2018
Subject:	Wind Load for Part 9 Buildings
Keywords:	Wind load, Part 9
Building Code Reference(s):	1.1.3.1.(1) & (2), 9.4.1.1.(1) & (3), 9.4.2., 9.23.13., 9.23.14.11.

Question:

Subsection 9.4.2. does not identify wind loads as one of the required specified loads for Part 9 buildings.

Does the structural design for Part 9 buildings need to address wind loads for light-frame construction as described in Sentence 9.4.2.1.(1).

Interpretation:

Yes (with some exceptions)

Sentence 9.4.1.1.(1) provides 3 options for the design of structural members and their connections:

- a) Conform to requirements provided elsewhere in Part 9,
- b) Design to good engineering practice such as CWC 2014 "Engineering Guide to Wood Frame Construction", or
- c) Design to Part 4 using the loads, deflection and vibration limits specified in either Part 9, or Part 4

Sentence 9.4.1.1.(3) states that location specific information for structural design, including snow and wind loads and seismic response accelerations, shall be determined according to Subsection 1.1.3.

Sentence 1.1.3.1.(1) requires the use of climatic and seismic values established by the local AHJ, or in the absence of such data to use Sentence 1.1.3.1.(2) and Appendix C. This climatic data includes wind loads.

If structural members are designed to the prescriptive requirements of Part 9, they are deemed to meet the requirements for wind loads.



Patrick Shek, P.Eng., CP, FEC, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, EGBC and BOABC, which form the BC Building Code Interpretation Committee. The Building and Safety Standards Branch, Province of BC and the City of Vancouver participate in the committee's proceedings with respect to interpretations of the BC Building Code. The purpose of the committee is to encourage uniform province wide interpretation of the BC Building Code. These views should not be considered as the official interpretation of legislated requirements based on the BC Building Code, as final responsibility for an interpretation rests with the local *Authority Having Jurisdiction*. The views of the joint committee should not be construed as legal advice.

BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, EGBC, BOABC

File No: 18-0121

INTERPRETATION

Page 2 of 2

Subsection 9.4.2. for “Specified Loads” only applies to light-frame construction that meets the restrictions in Sentence 9.4.2.1.(1). Wind loads are not mentioned in Subsection 9.4.2., so light-frame construction that meets the restrictions in Sentence 9.4.2.1.(1) need not be designed for wind loads, except for “bracing” as required by Subsection 9.23.13. and “roof trusses” that are designed to Part 4.

Subsection 9.23.13. requires “bracing” in Part 9 buildings to be designed to resist both wind and seismic forces, so light-frame construction does require such bracing to be designed for wind loads.

Article 9.23.14.11. describes the prescriptive requirements for the design of roof trusses that are not designed to Part 4. If such trusses meet the requirements of 9.23.14.11. they are deemed to meet the requirements for wind load. If they do not meet the requirements of 9.23.14.11., they must be designed to Part 4 which includes wind load.

The Specified Loads in Subsection 9.4.2. do not apply to structural components that are not light-frame construction. This would imply that the design loads for such components are established by Subsection 1.1.3. which includes wind loads.

The Specified Loads in Subsection 9.4.2. do not apply to light-frame construction that exceed the scope of Sentence 9.4.2.1.(1). This would imply that the design loads for such components are established by Subsection 1.1.3. which includes wind loads must be designed to Part 4.

It should also be noted that Sub-clause 2.2.7.1.(1)(c)(i) of Division C requires Professional Design and Review of structural components that are not within the scope of Part 9. Structural engineers would design structural components for wind loading when they exceed the scope of Part 9.



Patrick Shek, P.Eng., CP, FEC, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, EGBC and BOABC, which form the BC Building Code Interpretation Committee. The Building and Safety Standards Branch, Province of BC and the City of Vancouver participate in the committee's proceedings with respect to interpretations of the BC Building Code. The purpose of the committee is to encourage uniform province wide interpretation of the BC Building Code. These views should not be considered as the official interpretation of legislated requirements based on the BC Building Code, as final responsibility for an interpretation rests with the local *Authority Having Jurisdiction*. The views of the joint committee should not be construed as legal advice.