

# BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing  
**AIBC, EGBC, BOABC**

**File No: 18-0062**

**INTERPRETATION**

**Page 1 of 1**

**Interpretation Date:** July 21, 2020

**Building Code Edition:** BC Building Code 2018

**Subject:** Design for Wind Uplift on Green Roofs

**Keywords:** Wind uplift, green roofs, roofing materials

**Building Code Reference(s):** 4.1.5.5.(1), A-4.1.5.5.(1)

**Question:**

Does the BCBC 2018 require that green roofs be designed to resist wind uplift?

**Interpretation:**

No

The structural design of green roofs to resist wind uplift is not addressed in the BCBC 2018.

Sentence 4.1.1.5.(1) states "Except as provided in Sentence (2), buildings **and their structural members** shall be designed in conformance with the procedures and practices provided in this Part".

Sentence 4.1.7.1.(1) states "The specified wind loads for a building **and its components** shall be determined using the Static, Dynamic or Wind Tunnel Procedure as stated in Sentences (2) to (5)".

Sentence 4.1.7.1.(5) states "For the design of cladding **and secondary structural members**, one of the following procedures shall be used to determine the specified wind loads."

Green roofs are not considered to be "**secondary structural members**" so the requirements of Subsection 4.1.7. for Wind Loads does not apply to green roofs.

It should be noted that research is underway at NRC's Dynamic Roofing Facility in Ottawa with respect to wind uplift on green roofs using the NRC wind test chamber. This research may result in some future changes to the National Building Code to address this issue.



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.