

BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, EGBC, BOABC

File No: 18-0115

INTERPRETATION

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Interpretation Date:	June 15, 2021
Building Code Edition:	BC Building Code 2018
Subject:	Sizing of Principal Mechanical Exhaust Fan for a Dwelling Unit
Keywords:	Ventilation, Exhaust, Heating Season
Building Code Reference(s):	9.32.2.1., 9.32.3

Question:

If an exhaust fan is sized based on non-heating-season ventilation, can the same sizing be used for heating-season ventilation?

Interpretation:

No.

Sentence 9.32.2.1.(1) requires natural or mechanical non-heating-season ventilation in rooms or spaces in dwelling units. Where mechanical ventilation is used, the system is required to supply or exhaust air at a minimum rate of half an air change per hour if the room or space is mechanically cooled, or one air change per hour if is not mechanically cooled.

Sentence 9.32.3.1.(1) requires heating-season mechanical ventilation in every dwelling unit that has electrical power. Sentence 9.32.3.3.(1) requires this system to include an exhaust fan that conforms with Article 9.32.3.5, which includes Table 9.32.3.5.

The heating system exhaust fan required by Article 9.32.3.5 is the principal exhaust fan in a dwelling unit, and it is required to run continuously. The required volume sizing for this fan is based on the area served and on the number of bedrooms. This is a different sizing method than the non-heating-season exhaust fan, which is sized based on air changes per hour. The fan size calculation must be done using both methods, and the larger calculated size will determine the required fan capacity.



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

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