

BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, APEGBC, BOABC, POABC

File No: 06-0110

INTERPRETATION

Page 1 of 2

Interpretation Date:	February 21, 2012
Building Code Edition:	BC Building Code 2006
Subject:	Deck drains and/or scuppers on roof decks
Keywords:	Deck drains, overflow drains, scuppers, roof decks
Building Code Reference(s):	9.4.2.3., 9.26.1.1.(2), 9.26.18.2., 7.4.10.4., 7.3.3.7., 4.1.6.4.(4)

Question:

A single family home has an open roof deck on the second storey with 200 mm high curbs on the 3 exterior sides and abuts the 2nd storey of the home on the 4th side. The door opening from the home to the roof deck has a door threshold that is lower than the perimeter curbs.

1. Can this roof deck be served by a single deck drain at the low point?
2. Can this roof deck be served by a single deck drain at the low point plus an overflow deck drain at a higher elevation?
3. Is it mandatory to have a scupper drain in addition to deck drains?
4. What is the appropriate structural design live load for such a deck?

Interpretation:

1. The number of deck drains is not regulated by the building code, although it is not good design practice to rely upon a single deck drain which is subject to plugging and could result in water infiltration into the home at the door threshold.
2. Yes, provided that the overflow deck drain is not connected directly to the storm sewer system (i.e. if the overflow deck drain is connected to the same leader that serves the low point deck drain, then they could both plug up simultaneously).
3. No, if both a deck drain and an independent overflow drain is provided as described in item 2 above. It should be noted that the use of scuppers is a good design practice to minimize the likelihood of water build up on the roof deck that could enter the home at the door threshold.
4. Article 9.4.2.3. requires that roof decks be designed for roof snow loads or 1.9 kPa, whichever is greater for a single dwelling unit, which represents a minimum water depth of 193 mm.



R. J. Light, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, APEGBC, BOABC, and POABC, which form the BC Building Code Interpretation Committee. 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, APEGBC, BOABC, POABC

File No: 06-0110

INTERPRETATION

Page 2 of 2

Sentence 9.26.1.1.(2) requires that platforms such as roof decks be designed as a roof as required by Sentence 9.26.1.1.(1).

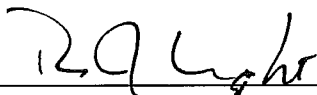
Sentence 9.26.18.2.(1) requires that roof drains be designed in accordance with Part 7.

Sentence 7.3.3.7.(1) requires that every *roof drain* be securely connected to a *leader*.

Sentence 7.4.10.4.(1) provides the hydraulic loads for the design of roof drains on roof decks, but does not mandate a minimum number of roof drains.

Sentence 7.4.10.4.(2) permits the use of *flow control roof drains*, with a requirement that the roof deck be provided with one or more scuppers which will limit the depth of water to 150 mm, but this only applies when using flow control roof drains.

It should be noted that for Part 3 buildings, Sentence 4.1.6.4.(4) requires that when scuppers are provided, the roof deck must be designed for a structural design load equal to the weight of water on the deck to a depth that is 30 mm above the level of the scuppers.



R. J. Light, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, APEGBC, BOABC, and POABC, which form the BC Building Code Interpretation Committee. 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.