


BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, EGBC, BOABC

File No: 24-0043

INTERPRETATION

Page 1 of 2

Interpretation Date:	August 13, 2024
Building Code Edition:	BC Building Code 2024, Book II: Plumbing Systems (BCPC) and BC Building Code Book I: General
Subject:	Venting Requirements for Floor Drains NPS 3 and Larger
Keywords:	Floor Drain, Venting
Building Code Reference(s):	2.5.1.1.(3), Table 2.4.9.3. of the BCPC
Question:	Does the trap for a non-emergency floor drain, which is NPS 3 or larger, require a vent?
Interpretation:	<p>No.</p> <p>Sentence 2.5.1.1.(3) waives the requirement for a vent on a trap for a floor drain where;</p> <ul style="list-style-type: none">a) the nominal pipe size of the trap is not less than NPS 3,b) the length of the fixture drain is not less than 450 mm, andc) the fall of the fixture drain does not exceed its nominal pipe size. <p>Whether the floor drain is an emergency or non-emergency floor drain has no effect on whether the trap requires a vent or not, but rather, is based solely on the above criteria. If the floor drain is installed for a specific purpose, (i.e. non-emergency), then the hydraulic load from Table 2.4.9.3. would apply to the drainage system based on the trap size.</p> <p>Attached to this Interpretation is a comprehensive summary of drainage and venting requirements for floor drains taken from the 1992 BC Plumbing Code. Since the wording regarding floor drain requirements has not substantially changed since that time, it is reasonable to use the included methods for drainage and venting hydraulic load calculations and other considerations.</p> <p></p> <hr/> <p>Patrick Shek, P.Eng., CP, FEC, Committee Chair</p>
<p>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 <i>Authority Having Jurisdiction</i>. The views of the joint committee should not be construed as legal advice.</p>	

BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing
AIBC, EGBC, BOABC

File No: 24-0043

INTERPRETATION

Page 2 of 2

BRITISH COLUMBIA PLUMBING CODE

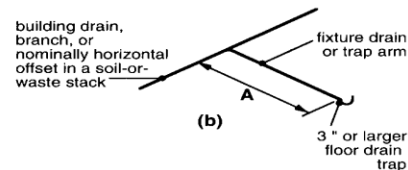
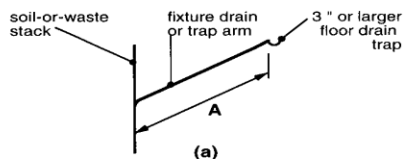
A-4.10.4.(1) Climate information on rainfall intensities for various cities can be found in Chapter 1 of the "Supplement to the NBC 1990".

When calculating the hydraulic load from a roof or paved surface, it should be noted that 1 mm depth of water on 1 m² of surface is equivalent to 1 L.

A-5.1 Emergency Floor Drains. There are two types of floor drains. One is an emergency floor drain installed to avoid flooding in a building from any pipe or fixture failure. The remainder are floor drains installed for a specific purpose to receive an equipment discharge and are defined as a fixture. Waste and vents for floor drains shall be required as follows:

1. Emergency Floor Drains (3" and over)
 - (a) The venting of these floor drains may be eliminated if they meet Clause 5.1.1.(2)(a)(b)(c).
 - (b) These drains are exempt from loading calculations for drainage system design.
 - (c) As these drains are exempt from venting, their loading does not apply to venting systems.
 - (d) Floor drains may connect to a soil or waste pipe that shall be vented elsewhere.
2. Emergency Floor Drains (2" size)
 - (a) These drains are exempt from loading calculations for drainage system sizing.
 - (b) These drains being less than 3" must be vented.
 - (c) As they must be vented, the loading of 2 fixture units must be included for all vent sizing, which includes wet or circuit venting.
3. Non-Emergency Floor Drains (3" and over)
 - (a) The venting of these floor drains may be eliminated if they meet Clause 5.1.1.(2)(a)(b)(c).
 - (b) These drains are subject to loading calculations for drainage system design.
 - (c) As these drains are exempt from venting, their loading does not apply to venting systems.
4. Non-Emergency (2")
 - (a) All floor drains in this category are subject to drainage and venting loads as any other fixture.

A-5.1.1.(2) Trapping of Floor Drains.



Length of 'A' must be at least 450 mm and its fall shall not exceed the size of the pipe.

See also explanation of Sentence 5.6.3.(1) for fall on fixture drain.

102

Pat Shek

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.