

# BC BUILDING CODE INTERPRETATION COMMITTEE

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

**File No: 18-0096**

**INTERPRETATION**

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Interpretation Date:	April 20, 2021
Building Code Edition:	BC Building Code 2018, Book II: Plumbing Systems (BCPC)
Subject:	Calculating the Hydraulic Load From Roofs with an Adjoining Vertical Surface
Keywords:	Roof, Hydraulic Load, Litres
Building Code Reference(s):	2.4.10.4.(1), Figure A-2.4.10.-B, Figure A-2.4.10.-C

## Question:

Where a project consists of multiple buildings located on a podium, when calculating the hydraulic load on the area drains located on the podium would one-half the area of the largest adjoining vertical surface need to be considered, i.e., the building's vertical walls?

## Interpretation:

No.

The situation described above can be quite common with multiple buildings located above a common parking structure. The need to include the hydraulic load from adjoining vertical surfaces could be onerous considering that these buildings could be high-rise structures of considerable height.

Figure A-2.4.10.-B illustrates how the hydraulic load for a storm drainage system is calculated when there are adjoining vertical surfaces on a roof which need to be considered. There may be situations which are very similar to Figure A-2.4.10.-B, such as where the podium slab is stepped, and these adjoining vertical surfaces should be accounted for when calculating the hydraulic load drained to the storm drainage system. However, it would be unreasonable to include adjoining vertical surfaces of a building given the irregular pattern of the building face.

When calculating the hydraulic load on the roof of a building one-half the area of the largest adjoining vertical surface would need to be added to the hydraulic load when sizing the roof drains draining to a leader (as shown in Figure A-2.4.10.-C).



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