

**BC BUILDING CODE INTERPRETATION COMMITTEE
AIBC, APEGBC, BOABC, POABC**

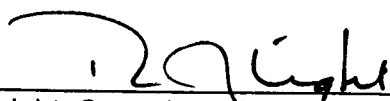
INTERPRETATION	
Interpretation Date:	June 20, 2001
Building Code Edition:	BC Building Code 1998
Subject:	Water storage reservoir tanks
Keywords:	Water storage, reservoir, storage tanks
Building Code Reference(s):	1.1.2.2.(1)(a), 1.1.3.2. (definition of <i>building</i>)
File No.: 98-0027	
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Question:

1. Is the design of a bolted steel water reservoir storage tank governed by the BC Building Code?
2. If so, what is an acceptable method for translating the Canadian seismic zone classification (Za, Zv, v) to those reflected in the American design standards for water storage tanks? (eg, AWWA D103-97)

Interpretation:

1. Yes, there is a BC Building Code Appeal Board decision # 1335 dated February 16, 1994 (copy attached) that has determined that water storage tanks fall within the general definition of "*buildings*" and are governed by the design requirements of the BC Building Code.
2. The structural design of water storage tanks must meet requirements of Part 4 of the BC Building Code and the appropriate referenced design standards. Unfortunately there are no reference design standards in Table 2.7.3.2. of the BC Building Code that adequately address the design of water storage tanks. Seismic forces resulting from dynamic movement of water within the storage tank is a very complex and specialized field. Although there is no direct correlation between the seismic load factors in the American and Canadian codes, an experienced structural engineer can derive a correlation by comparing the code commentaries of the various codes. It is left to the discretion of the experienced structural engineer to determine the most appropriate design method when applying the BC Building Code requirements to the design of the water storage tanks.



R.J. Light, Committee Chair

The views expressed are the consensus of the joint committee of 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; for that purpose, the inquirer should seek the opinion of a qualified lawyer.