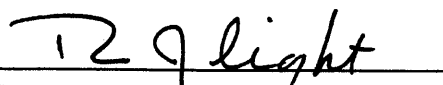


BC BUILDING CODE INTERPRETATION COMMITTEE
AIBC, APEGBC, BOABC, POABC

File No: 06-0008	INTERPRETATION	Page 1 of 1
Interpretation Date:	April 17, 2007	
Building Code Edition:	BC Building Code 2006	
Subject:	Companion Loads on roofs	
Keywords:	Companion Loads, roof live loads, load combinations, tributary area	
Building Code Reference(s):	4.1.3.2.(2), 4.1.5.5.(2), 4.1.5.9.(1)	
Question:	<ol style="list-style-type: none">1. Does the concept of Companion Loads described in Table 4.1.3.2. apply to the structural design of roof members?2. Can the roof loads be reduced for large tributary areas?	
Interpretation:	<p>1. Yes, for Wind Loads (W)</p> <p>Cases 2 and 3 of Table 4.1.3.2. require that Wind Load (W) be considered as a companion load for the design of roof members.</p> <p>No, for Snow (S) and Live (L) Loads</p> <p>Table 4.1.5.3. provides a "minimum" specified live load (L) for use and occupancy on roofs of 1 kPa to accommodate workers during construction and re-roofing, and to provide a level of resistance to accidental loads where snow loads are minimal (e.g. roofs that are sheltered from the snow).</p> <p>As stated in Sentence 4.1.5.5.(2), it is not necessary to apply the 1 kPa load from Table 4.1.5.3. for use and occupancy ("L" live load) simultaneously with the snow loads from Subsection 4.1.6. ("S" snow load).</p> <p>Sentence 4.1.5.5.(2) states that roof designs are based on either the 1 kPa load for use and occupancy, or the concentrated load per Table 4.1.5.10., or the snow loads per Subsection 4.1.6., whichever produces the most critical effects (i.e. Companion Loads using both "L" and "S" are not applicable to roof design).</p> <p>The intent is that the designer ignores those loads that are not the governing load. The Code specifically states that roofs need not be designed for both the snow load and minimum live load acting at the same time. The intent of the companion action formulation of loading is to reduce the effects of loads that are not likely to be fully present when the full effect of the principal load is present.</p> <p>2. No</p> <p>Neither the minimum live load of 1 kPa on roofs [see 4.1.5.9.(1)] nor the snow load [see 4.1.6.3.(1)] on the roof is reduced for larger tributary areas outlined in Article 4.1.5.9.</p> <div style="text-align: center;"> R. J. Light, Committee Chair</div>	

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.