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

INTERPRETATION		
Interpretation Date:	June 20, 2001	File No.:
Building Code Edition:	B.C. Building Code 1998	
Subject:	Moisture accumulation in wood floor assemblies	98 - 0026
Keywords:	Moisture, air leakage, water vapour permeance, rim-joist, wall sheathing	
Building Code Reference(s):	9.25.1.2., A-9.25.1.2. 9.25.4.2.(2), A-9.25.4.2.(2)	Page 1 of 1

## Question:

- 1. Is laminated veneer lumber (LVL) rim-joist at the exterior edge of floor assembly considered to be a "sheet or panel type material" and subject to the provisions of Article 9.25.1.2. as it relates to moisture accumulation?
- 2. In conventional wood framing, if low permeance plywood or OSB wall sheathing extends over top of the rim-joist, is such sheathing subject to the provisions of Article 9.25.1.2. as it relates to moisture accumulation?

## Interpretation:

No - A rim-joist is a structural member forming part of the floor assembly and comprises a
relatively small percentage of the overall wall area. It is therefore not subject to the
same rigorous requirements that apply to low vapour permeance sheathing as described
in Article 9.25.1.2.

Note that when low vapour permeance sheathing [less than 60 ng/(Pa•s•m²)] is used on the exterior (cold side) of the insulation, Sentence 9.25.4.2.(2) requires that the vapour permeance of the *vapour barrier* be significantly reduced to 15 ng/(Pa•s•m²). This design consideration is much more effective in controlling moisture accumulation than by drilling holes through the rim-joist or wall sheathing. Refer to A-9.25.4.2.(2) (p572).

Similarly, the vapour permeance of the exterior cladding should be significantly greater than the vapour permeance of the elements to the interior of the wall assembly in order to promote drying of the wall cavity elements.

2. No – for the same reasons as noted above.

R.J. Light,
Committee Chair