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

INTERPRETATION		
Interpretation Date:	October 18, 2000	File No.:
Building Code Edition:	B.C. Building Code 1998	
Subject:	Tightly fitted fire stopping of service penetrations	98 - 0008
Keywords:	Fire stopping, tightly fitted, service penetrations	
Building Code Reference(s):	3.1.9.1.(1)(a)	Page 1 of 1

Question:

Is drywall taping and filling an acceptable method for fire stopping of service penetrations through gypsum board membranes forming part of an assembly required to have a *fire-resistance* rating or a *fire separation*?

Interpretation:

Yes, with conditions

Clause 3.1.9.1.(1)(a) permits "tightly fitted" fire stopping of service penetrations through membranes forming part of an assembly required to have a *fire-resistance rating* or a *fire separation*. However, "tightly fitted" is not defined. The Users Guide – NBC 1995 (Part 3) indicates that, "a pipe embedded in concrete or grouted into a concrete slab" are examples of "tightly fitted".

Drywall taping and filling is commonly used in the construction industry to fulfill this "tightly fitted" requirement when the service penetrations are through a gypsum board membrane. Such common practice is considered acceptable with the following provisions:

- The annular space around the service penetration does not exceed 6 mm,
- The holes for the service penetration through the gypsum board are neatly cut with a saw or a knife (i.e. no hammer holes),
- The drywall fill is inserted between the pipe and the drywall prior to taping,
- The taping and filling is tightly fitted around the service penetration,
- Service penetrations are perpendicular to the gypsum board membrane, and
- Workmanship on the quality of installation is of primary importance.

The preferred method for maintaining an adequate fire stop system is to utilize a system that has been tested in accordance with CAN4-S115-M as per Clause 3.1.9.1.(1)(b).

R.J. Light
Committee Chair