

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

**File No: 06-0047-A**

**INTERPRETATION**

**Page 1 of 2**

Interpretation Date: April 21, 2009

Building Code Edition: BC Building Code 2006

Subject: Electrical wires or cables penetrating a fire separation

Keywords: Electrical wiring, service penetration, fire separation

Building Code Reference(s): 9.10.9.6.(4)

**Question:**

A non-combustible electrical service panel is installed in a vertical fire separation with a 1 hour fire-resistance rating. Electrical wires connected to the panel are penetrating an assembly with a fire-resistance rating. Each individual wire or group of wires is not more than 25 mm in diameter. The total aggregate dimension of all the electrical wires connected to the panel will be more than 25 mm. Does this arrangement comply with the Code?

**Interpretation:**

Yes.

The intent of Sentence 9.10.9.6.(4) is to allow electrical wires or cables, single or grouped, penetrating an assembly with a fire-resistance rating provided that the overall diameter of each penetration is not more than 25 mm and fire stopped to maintain the integrity of the fire separation. The Code is silent regarding how far apart each penetration should be, provided it maintains the integrity of the fire separation between each penetration.

It should be noted that the dimension of the electrical wires or group of wires include the combustible insulation or jackets.

(See diagram on next page)

  
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.

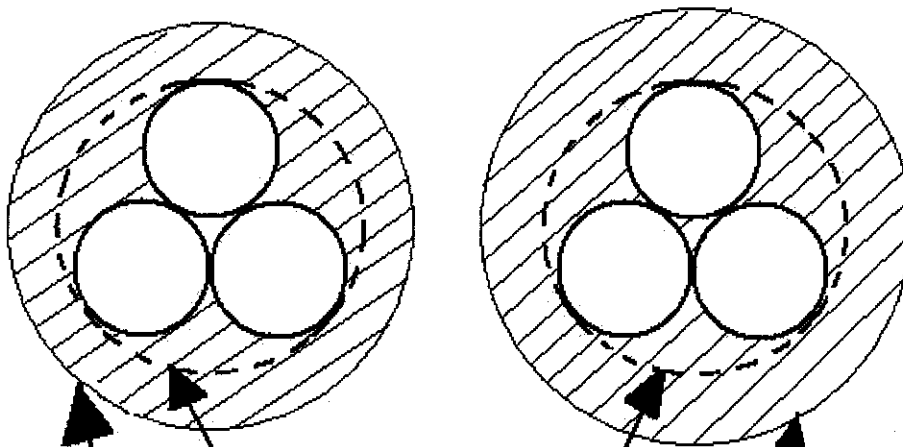
BC BUILDING CODE INTERPRETATION COMMITTEE  
AIBC, APEGBC, BOABC, POABC

File No: 06-0047-A

INTERPRETATION

Page 2 of 2

Spacing between penetrations  
is not regulated



Overall diameter of  
wires (single or  
grouped) is not more  
than 25 mm

Penetrations provided with fire stopped  
materials to maintain the integrity of the  
fire separation

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.