

# BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing  
**AIBC, EGBC, BOABC**

**File No: 18-0191**

**INTERPRETATION**

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Interpretation Date:	July 19, 2022
Building Code Edition:	BC Building Code 2018
Subject:	Use of Mineral Wool in lieu of Fire blocking
Keywords:	Fire Blocking, Concealed Wall Space, Mineral Wool
Building Code Reference(s):	9.10.16.2.; 9.10.16.2.(2)(d)

## Question:

Is it acceptable to replace the required fire blocking between the vertical concealed space in the wall assembly and the horizontal concealed space in an adjacent dropped ceiling if both the wall and dropped ceiling are filled with insulation based on the provisions of Clause 9.10.16.2.(2)(d)?

## Interpretation:

No.

The extent of the application of Clause 9.10.16.2.(2)(d), is limited to fire blocking used between concealed wall spaces.

The requirements of Sentence 9.10.16.2.(1) establishes that the requirements of Article 9.10.16.2. are intended to address fire blocking in wall assemblies. The purpose of fire blocking is to impede the spread of fire within concealed spaces which may lead to harm to persons, or damage to the building, as generally established by the application statement:

*Intent 1: To limit the probability that concealed spaces within wall assemblies will not be separated at certain locations, which could lead to the spread of fire within these spaces, which could lead to harm to persons.*

The purpose of Clauses 9.10.16.2.(2)(a) to (d) are to exempt certain wall spaces from fire blocking, where measures described in Clauses (a) to (d) have been provided, on the basis that they provide "an equivalent level of protection and the risk of fire spreading from a concealed wall space to or through another concealed wall space is minimized."



Patrick Shek, P.Eng., CP, FEC, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, EGBC and BOABC, which form the BC Building Code Interpretation Committee. The Building and Safety Standards Branch, Province of BC and the City of Vancouver participate in the committee's proceedings with respect to interpretations of the BC Building Code. 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.

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However, the proposed use of mineral wool within a drop ceiling based on the mineral wool fill described in Clauses 9.10.16.2.(2)(d) in concealed spaces other than concealed wall spaces, lies outside the intended scope of the Article. As a consequence, it is unclear if the performance of such a measure will remain equivalent, since mineral wool used in a configuration other than within the prescribed wall assemblies, may not perform in the expected manner.

The general principle of Part 9 design assumes prescriptive compliance, based in part on the assumption of the conventional construction techniques described in this Part. When used outside the scope identified by Part 9, risks or consideration of the measures identified in 9.10.16.2.(2) may exist which have not been considered in the assumption of equivalence by Part 9 requirements. For example, mineral wool in non-vertical orientations may fall out or sag, allowing fire to propagate through the concealed space. Similarly, mineral wool in larger enclosures, may compress, or distort under their own weight due to a lack of the support assumed by conventional framed construction, allowing products of combustion to pass.

Note that the Part 3 requirements for firestopping in 3.1.11.1., which are based on a professional reliance model, includes the following additional intent statement: "To limit the probability that fire blocking material used to block and separate concealed spaces will not remain in place for a certain minimum time when subjected to fire conditions, which could lead to the spread of fire within these spaces", which could further inform of the extent of required performance.

A more rigorous evaluation of performance is therefore required for an authority having jurisdiction in order to accept the proposal. Subject to the requirements of an authority having jurisdiction, the use of mineral wool in lieu of fire blocking as an alternative solution or professional judgement may be an acceptable approach.



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