A joint committee with members representing AIBC, EGBC, BOABC

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Interpretation Date:	November 20, 2018					
Building Code Edition:	BC Building Code 2012					
Subject:	Continuity of fire separation at intersections between wood frame assemblies					
Keywords:	Fire separations, intersections, continuity					
Building Code Reference(s):	9.10.9.2.(3)., 9.10.16.3.(1), 3.1.8.3.(4)., 3.1.11.7., Appendix A-3.1.8.3.(4)., Appendix D-2.3.4., Appendix Table D-2.3.12., Interpretation 06-0014B item 2.					

#### Question:

- 1. Is 38 mm thick wood blocking suitable for maintaining the continuity of the fire separation at the intersection of wood frame assemblies where the 2 assemblies are constructed as fire separations with equal fire resistance ratings?
- 2. Is 38 mm thick wood blocking suitable for maintaining the continuity of the fire separation at the intersection between a fire rated wall assembly and a non-fire rated floor assembly?
- 3. Is 38 mm thick wood blocking suitable for maintaining the continuity of the fire separation at the intersection between a fire rated wall assembly and a non-fire rated wall assembly?

# Interpretation:

#### 1. Yes.

Sentences 9.10.9.2.(3). and 3.1.8.3.(4). require that continuity of the fire separation be maintained where it abuts another fire separation, a floor, a ceiling, a roof or an exterior wall assembly. These sentences reference Appendix A-3.1.8.3.(4) which requires filling all openings at the intersection of assemblies with material that will ensure the integrity of the fire separation at that location.

The Best Practice Guide on Fire Stops and Fire Blocks and their Impact on Sound Transmission (NRCC-49677) provides details of intersection of wood frame assemblies and indicates that wood fire blocking is suitable for maintaining the fire separation.

See Figures 13.D.1 and 13.E.1. from the NRCC-49677 on Page 2.

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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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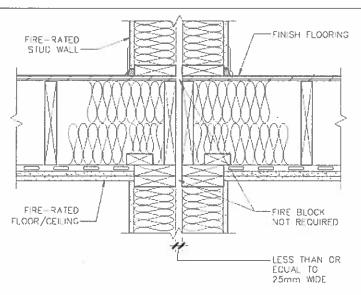


Figure 13.D.1 from the NRCC-49677

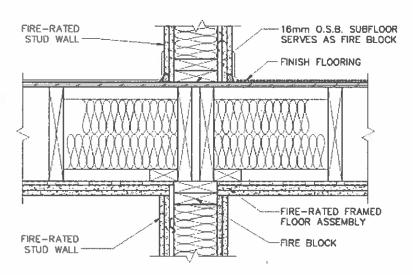


Figure 13.E.1 from the NRCC-49677

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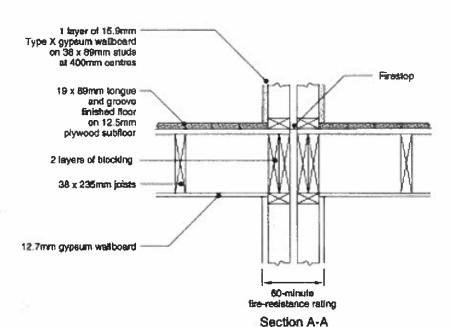
#### 2. Yes - provided enough blocking is installed

Where a fire rated wall intersects a non-fire rated floor assembly, the continuity of the wall fire separation can be maintained using multiple layers of wood blocking as shown in the Figure 5.18 below from the document "Fire Safety Design in Buildings" by the Canadian Wood Council.

Alternatively, a single layer of wood blocking in combination with drywall can also maintain the required continuity within the joist space as shown in Figure 13.D.3 from the NRCC-49677 on Page 4.

FIGURE 5.18

Continuity of fire separations



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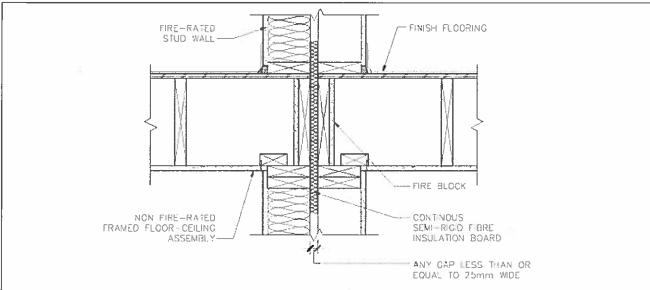
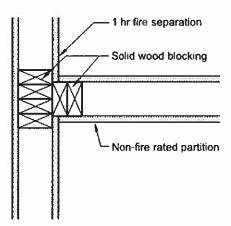


Figure 13.D.3 from the NRCC-49677

3. Yes - provided enough blocking is provided

Where a non-fire rated wall intersects a fire rated wall, the continuity of the wall fire separation can be maintained using multiple layers of wood blocking as shown in the diagram below.



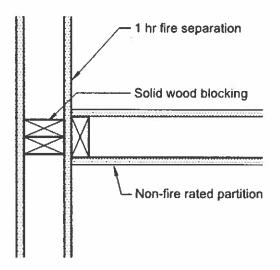
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Alternatively, the drywall membrane of the fire rated wall could be extended across the end of the non-fire rated wall to maintain the continuity of the fire separation as shown in the diagram below.



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