

## BC BUILDING CODE 2018

### USE OF COMBUSTIBLE FINISHES IN NONCOMBUSTIBLE BUILDINGS

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Where building area, height, and major occupancy require the use of noncombustible construction, the BC Building Code 2018 and the Vancouver Building Bylaw 2019 permit the use of a variety of combustible materials. This newsletter briefly highlights the key points when using wood as an interior finish at walls and ceilings, working within the limits in Article 3.1.5.12, "Combustible Interior Finishes" and Subsection 3.1.1.2, "Flame Spread Rating and Smoke Developed Classification".

**Interior Wall Finish:** Wood wall finish may be used where the thickness of the finish (including wood substrate) does not exceed 25mm and the flame spread rating throughout the finish does not exceed 150. Wood is generally accepted as having flame spread ratings of not more than 150.

**Interior Ceiling Finish:** Wood ceiling finish may be used where the thickness of the finish (including wood substrate) does not exceed 25mm and either the flame spread rating throughout the finish does not exceed 25 or the wood is FRT. An area equal to no more than 10% of the fire compartment ceiling area can have flame spread rating of up to 150.

**Testing:** Flame spread ratings must be achieved through testing to CAN/ULC-S102. FRT wood must meet the test criteria in Article 3.1.4.5 and provide flame spread rating of not more than 25.

**Note:** Fire retardant treated (FRT) wood is a combustible material.

**Exceptions:** See Subsection 3.1.12, "Flame Spread Rating and Smoke Developed Classification" for:

1. increased flame spread rating at small areas of walls where other requirements restrict the flame spread rating to less than 150.
2. additional restrictions in unsprinklered buildings.
3. additional restrictions in exit enclosures and exit lobbies, covered vehicular passageways, and vertical service spaces.
4. additional restrictions in high buildings which are unsprinklered or contain Group B major occupancies.

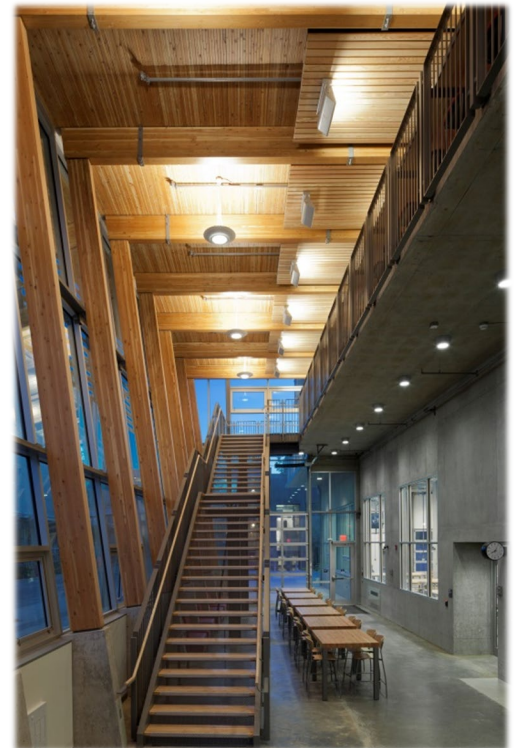


Photo courtesy of McFarland Marceau Architects Ltd

#### About the Author



**Wendy Morrison (PL Eng, BCQ)** is a Building Technologist with 18 years' experience at GHL, is registered with Engineers and Geoscientists BC as a Professional Licensee Engineering with the title PL Eng, and is a member of the Building Officials Association of BC (BOABC) and holds the title BCQ (Building Code Qualified); she is one of the first two BOABC members to achieve this designation while working in the private sector as a Code Consultant. Wendy has a multi-disciplinary background in administration, 10 years in the legal field, and has completed studies in Public Administration and Political Science.

*The information in this letter is for discussion purposes only. Refer to applicable Building Codes and Fire Codes for actual requirements. The designer should always check with the AHJ for local policies and interpretations regarding the foregoing.*

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