BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing AIBC, EGBC, BOABC

File No: 24-0070	INTERPRETATION	Page 1 of 1
Interpretation Date:	April 15, 2025	
Building Code Edition:	BC Building Code 2024	
Subject:	Protection of steel columns within a fire-rated wall	
Keywords:	Fire-resistance rating, steel column	
Building Code Reference(s):	Appendix D-2.6, Table D-2.6.1 F	

Question:

A loadbearing steel column is located within a wood or steel stud fire-rated wall with drywall on both sides of the studs.

Does this steel column require any additional fire protection if the fire-rated stud wall assembly has the same fire-resistance rating as required for the steel column?

Interpretation:

No, with conditions.

Fire protection of steel columns is described in Section D-2.6 of Appendix D.

This section assumes that the column is free standing with exposure to fire on 4 sides of the column.

If the steel column is embedded within a fire-rated stud wall, it would be exposed to a fire on only 2 sides of the column.

Table D-2.6.1.- F of Appendix D provides the minimum thickness of Type X gypsum board for various M/D ratios of the steel column.

Provided the thickness of Type X gypsum board on each side of the stud wall is equal to or greater than the thicknesses indicated in Table D-2.6.1.- F, the steel column would not require any additional fire protection.

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

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