

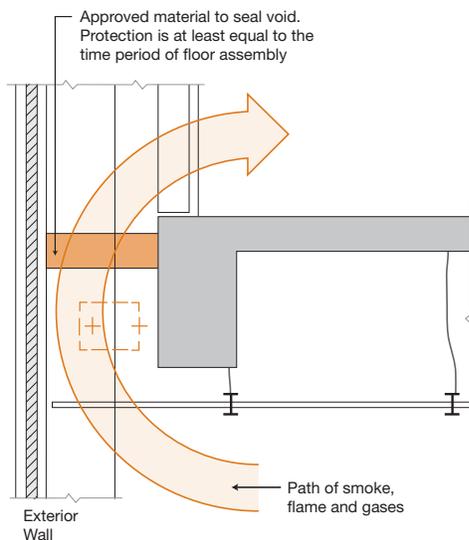


Fireblocking

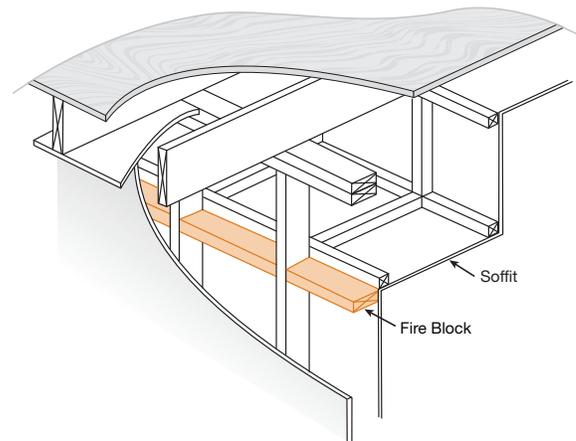
The International Building Code (IBC) and the California Building Code (CBC) cover the definitions and requirements for fireblocking in sections 717.1 and 717.2. The intent of fireblocking is to cut off concealed draft openings that spread fire. It is important to note that each section specifically states fireblocking is required for “combustible” construction. Experience has shown that the greatest damage occurs to conventional wood framed buildings during a fire when fire travels unimpeded through concealed draft openings. Fireblocking for cold formed steel framing is not specifically required unless called out for by the designer of record or the local building department.

The laboratory fire tests conducted on steel framed assemblies that are part of the Gypsum Association Fire Design Manual and as such part of the code, are typically tested without fireblocking. These full-scale fire tests are conducted in accordance with the requirements of ASTM (American Society of Testing Materials) E 119 and have all passed code review.

Rated Horizontal Assembly (Curtain Wall)



Fireblocking for Combustible Framing



CURTAIN WALLS:

The lack of a requirement for fireblocking would not apply to curtain wall construction where the wall extends out and runs past the concrete floor slab (see detail) serving as the rated horizontal fire assembly. Since the intent is to maintain the fire continuity of the rated horizontal assembly and prevent fire from what is known as “leap-frogging,” fireblocking would be required at these locations. The most common method of fireblocking for this area is to use a fire-safing material (mineral wool). Impaling clips are used to hold the fire-safing in place. Other materials and methods are acceptable if two conditions are met:

- The fire rating of the approved material meets or exceeds the rating of the horizontal assembly.
- It can be demonstrated to the building official the approved material will be held in place in the event of a fire.

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