

Building Code Terminology on Fire Resistant Construction

Technical Bulletin

The terms "Draftstopping", "Fireblocking", "Fire Safeing" and "Firestopping" are all used throughout the building construction and related industries. The purpose of this bulletin is to provide both definition and clarification of the terms, as well how they apply to various Owens Corning[™] insulation products.

Definitions

"Draftstopping" is defined in both the International Residential Code (IRC) and the International Building Code (IBC) as, "A material, device or construction installed to restrict the movement of air within open spaces of concealed areas of building components such as crawl spaces, floor-ceiling assemblies, roof-ceiling assemblies and attics".

"Fireblocking" is defined as "Building materials or materials approved for use as fireblocking, installed to resist the free passage of flame to other areas of the building through concealed spaces".

The term "Fire Safeing" is sometimes used in place of fireblocking or firestopping, though it is not defined by nor referenced in the current edition of the IRC or IBC.

"Firestopping" is not defined in either the IRC or IBC, but a "firestop system" is referenced in chapter 7, "Fire & Smoke Protection Features" of the IBC in conjunction with Through-Penetrations.

Clarification

The purpose of draftstopping is to prevent air from freely moving between areas of a building that have different uses and/or occupancies. Examples are living units of a multifamily building or floors and/or adjacent spaces in a commercial use building. The draftstopping keeps the air from moving from one space to the next through the attic, crawl space, or a framed floor assembly that serves both spaces. The reason is that the air could provide fuel to a fire in an adjacent space, or carry deadly gasses and other combustion by-products from the fire to adjacent spaces.

The purpose of fireblocking, as the name and definition imply, is to keep fire ("flames") from moving from one area of a building to an adjacent area via "concealed spaces" – the cavities of framed assemblies that extend between the spaces. Fireblocking primarily applies to flame passage

from floor-to-floor (wall cavities), but can also apply to horizontal passage of flame via floor cavities.

A fire stop system can be thought of as a subset of fireblocking. It is required specifically for penetrations of fire-rated assemblies - those walls or floors that are tested and carry an hourly rating for fire resistance. The key is that the fire stop system must be tested and approved for the same hourly rating as the assembly it is protecting.

Owens Corning[™] Qualifying **Products**

For fireblocking, both the IRC and IBC list "batts or blankets of mineral fiber/glass fiber" as approved fireblocking materials. Keep in mind this applies only to unfaced batts and blankets.

In addition, the codes include a provision for "other approved materials" as fireblocking. Owens Corning's™ EnergyComplete[™] Air Sealant has been tested and qualified as an alternative fireblocking material for use at joints and the annular space around any penetrations of the fireblocking. See the ICC Evaluation Services report ESR-3110 for confirmation.

Please contact 419-248-6557 for additional information. Email: gettech@owenscorning.com

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OWENS CORNING SCIENCE AND TECHNOLOGY, LLC ONE OWENS CORNING PARKWAY

TOLEDO, OHIO 43659

1-800-GET-PINK® www.owenscorning.com



