The Word: Fireblock

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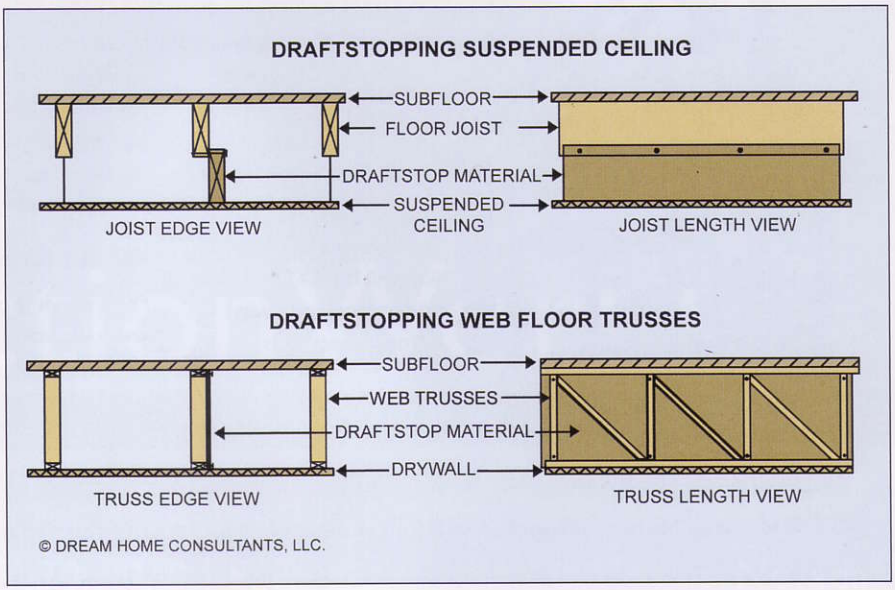
Once again, The Word invites you to travel into the dark realm of terms that are often misused or misunderstood in home inspection reports. The Word hopes you will find this trip informative and maybe a little entertaining.

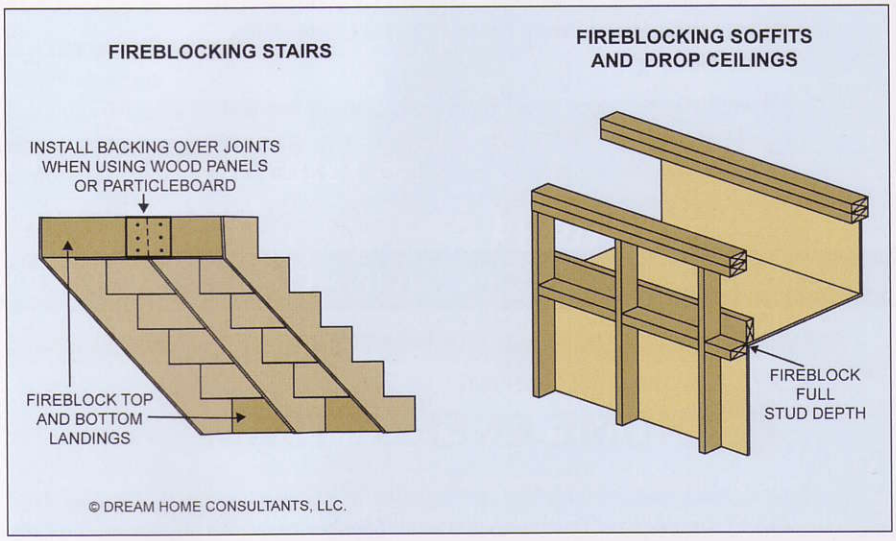
The Word's terms today are fireblock and its cousin, draftstop. The Word finds these terms interesting because some confusion about them occurred during discussions about the proposed pre-drywall inspection standards. The Word admits to misusing these terms in the days before taking up residence at the base of Mt. Olympus, thereby gaining a modicum of wisdom.

The easiest way to distinguish between fireblocks and draftstops is to remember that fireblocks occur in walls and draftstops occur in floor/ceiling assemblies. Fireblocks limit the spread of fire between stories and horizontally in wall assemblies such as soffits. Draftstops limit the spread of fire in open spaces between floors and ceilings that have useable space above and below. Common examples of areas requiring draftstops include floors supported by open web trusses and floors above suspended ceilings.

The International Residential Code 2009 (IRC), in Section R302.11, requires installing fireblocks:

1. in any concealed wall space if an opening exists that allows fire to spread from one story to another or from a lower story into the attic. Examples of such openings include: openings for plumbing pipes, openings for electrical wires and conduit, HVAC duct chases between stories, laundry chutes and openings at the tops of framed columns, niches and arches.





2. in concealed wall spaces at every ceiling and floor level.
3. where concealed vertical and horizontal wall spaces intersect. Examples of concealed horizontal spaces include soffits for kitchen cabinets and recessed vanity lights, and for drop ceilings.
4. between stair stringers at the top and bottom of each flight of stairs.
5. around chimneys and flues where they intersect framing at floor and ceiling levels.

6. in concealed wall spaces if the concealed space is open for more than (>) 10 feet horizontally. Examples of framing that could produce a concealed horizontal wall space include some methods of framing large arched openings between rooms, and walls built using two rows of staggered studs.

Common fireblock materials include 2-inch (nominal) thick lumber or two pieces of 1-inch thick lumber, 23/32-inch thick wood structural panels, ½-inch thick drywall, properly secured fiberglass insulation and approved fire-resistant caulk. Verify that visible joints between pieces of fireblocking material are staggered and that the material is secured in place so that it will not settle out of position over time. Damage to fireblocks and draftstops should be repaired and penetrations such as electrical cables and HVAC ducts should be sealed.

The IRC, in Section R302.12, requires installing draftstops when useable space exists both above and below the floor/ceiling assembly and when the open area within the concealed floor/ceiling assembly exceeds (>) 1,000 square feet. The draftstopped areas should be approximately equal in size. Common draftstop materials include ½-inch thick drywall and 3/8-inch thick wood structural panels.

The Word has seen these terms spelled as compound words (fireblock and draftstop) and as two words (fire block and draft stop). The Chicago Manual of Style states that the evolution of a new term goes from two words, to hyphenated words, to one word. The Word recommends using the compound word. The Word has seen the term firestop used as a synonym for fireblock, but The Word does not recommend firestop because it is too easily confused with draftstop. The IRC does not use the term firestop.

Firestops and draftstops are not visible during many home inspections. A good place to look for firestops is around chimneys and around HVAC duct chases. A good place to look for draftstops is above suspended ceilings.

Memo to the fire Gods and other authorities: The Word does not reside on Mt. Olympus and welcomes other viewpoints. Send your lightning bolts or e-mails to inspectorbruce@cox.net. ■

Attend Bruce Barker's presentation, "Not Your Daddy's Building Code," in the Specialty Track at InspectionWorld Las Vegas in January 2010.

Bruce Barker, Dream Home Consultants, Peoria, Ariz., has been building and inspecting homes since 1987. He is the author of "Everybody's Building Code" and currently serves as chair of the Standards Committee.