

Question: What's the deal with spray foam insulation?

DRAFTY OLD HOUSES ARE losing their charm, that is for certain. With continuous concerns for energy efficiency and making our older buildings as "tight" as possible, owners are exploring all their options. Enter the hot market for spray foam insulation. Spray foam has actually been around for quite some time. It's the kind in a can that we buy at our local hardware store to seal the gaps between window and door moldings, spaces between foundation materials, and the various other air leaks that building materials entering their one hundredth-plus year create. During the last decade or so, spray foam insulation has been widely introduced for its ability to cover much larger areas. So is it a good idea or not?

The kind in the can aside, let's look at the options for larger cavity insulation. The first distinction that needs to be made is the difference between open cell and closed cell foam. Open cell is just that: open membranes that will allow air passage, consequently moisture passage, through the material. Closed cell expands to purportedly create a completely closed compound, thus creating its own vapor barrier. Vapor barriers are always a good thing, provided

they are blocking moisture vapors from traveling into our buildings or onto wooden framing members.

Both systems are applied in similar fashions; pump kits combine two-part mixtures that, when heated to application temperatures, expand to completely fill the cavities they are sprayed into. Open cell's vulnerability to allow moisture vapors to travel through the insulation means they should only be applied in situations where moisture is of no concern (if you can find me an old house with no moisture concerns,

please let me know!). Both types of products do indeed *expand*, meaning they can push framings and stud walls out of alignment. They also make a big mess and time is of the essence during application. The very savvy do-it-yourselfer can certainly apply this material, but significance of temperature control for product flow and the concern for damaging framework may mean professional application is a better choice.

Regardless, the major concerns from a preservation, as well as a safety, standpoint are that areas should never be completely covered. Insulation should be applied between framing timbers, not covering them, so that wood can always

breathe. Also, no plumbing or electrical system components should be covered, thus impeding access and repairs in the future. Finally, this stuff pretty much glues itself in place, so if reversibility is important for future preservation or restoration, then this product is not appropriate.

Like many preservationists, I am still waiting for a verdict on this one. Reversibility is always a concern, not only to avoid covering important historic materials, but because the reality of older buildings involves repairs and upgrades, which requires access. I also believe newer products should be tested and proven before our fine old buildings are used as test subjects. Skepticism aside, closed cell spray foam insulation certainly has its application in less historically important areas, where there are no systems elements, and in other inconspicuous areas, such as basements, where other insulation options would be less effective. ■

Special thanks to my colleague Richard Eagan, Building Contractor & Project Manager, for his technical assistance with this column.

Noelle Lord operates Old House C.P.R., Inc. and shares her passion for helping owners of older buildings discover how to take good care of them through consulting, teaching and writing. She can be contacted by visiting www.oldhousecpr.com.


**STEWARDED YOUR
OLDER HOME**
BY NOELLE LORD



**Portland
1790's
Colonial**
*post & beam
addition, 5 fpl.,
barn, 1.75+ A*
\$499,000

Deb Blackburn · Mulkerin Associates · 207-772-2127

REPLICATION OF ARCHITECTURAL WOODWORK
CABINETS FOR HISTORIC HOMES
FURNITURE REPRODUCTIONS
ANTIQUE FURNITURE REPAIR



DAVID STENSTROM

60 WARREN AVE.
PORTLAND ME 04103
ph: 878-3747 cell: 749-9998
lastchance@maine.rr.com

**LAST CHANCE
WOODWORKING**



Painting
Weathervane Repair
Lightning Protection

Custom Millwork
Slate Repair
Historical Restoration

MMR PROFESSIONAL STEEPLJACKS

P.O. Box 185 • Boothbay, ME 04537
1-800-287-4026 • fax: 207-633-7078 • www.maine-steeplejacks.com

It's irreplaceable.

But what if you had to replace it?



Will your homeowners policy cover the true cost of fully restoring or replacing your home? Most don't.

That's why we offer specialized homeowners insurance, designed to protect distinctive, high-value and antique homes like yours. Call us to schedule a free, no-obligation review of your homeowners coverage, today.

Insurance offered through Turner Barker Insurance, a Gorham Savings Bank subsidiary.
Insurance products are not FDIC insured; not a deposit obligation of, nor guaranteed by the Bank.

Turner Barker
INSURANCE
A Gorham Savings Bank Company

turnerbarker.com • 773-8156