

## Weighing the Merits of Spray Foam Insulation

A homeowner gets conflicting advice on how to insulate a 90-year-old Cape Cod home

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POSTED ON JAN 23 2012 BY **SCOTT GIBSON**

Scott Jacobs' 1,100-sq. ft. Cape is a perfect candidate for an energy upgrade. The 90-year-old house is gutted, and Jacobs wants to insulate it well even if his budget is not unlimited.

The house, located in Climate Zone 6, now has a 1/2-in. thick layer of rigid foam on the exterior walls. Jacobs' plan is to insulate the house from the inside with spray polyurethane foam.

"This is my problem," Jacobs writes in a [Q&A post](#) at GreenBuildingAdvisor. "Three companies have provided estimates now. Two say open-cell foam, 7 in. to 8 in., on the roof and 3.75 in. on the walls. One company just quoted 7 in. open-cell foam on the roof and 2 in. closed-cell foam on walls. Estimates vary between \$4,500 and \$5,500."

First, Jacobs wonders, how do the 2 in. of closed-cell foam compare with 3 3/4 in. of open-cell foam? And second, for someone with not much money to spend, would installing rigid foam insulation in the rafter bays himself be a reasonable option?

That's the topic for this month's Q&A Spotlight.

### Open-cell vs. closed-cell foam

Jean-Paul McGraw sums up some of the basic differences between these two types of insulation, including R-values and cost.

"The advantages of closed-cell foam compared to open-cell foam include its strength, higher R-value, and its greater resistance to the leakage of air or water vapor," McGraw writes.

"The disadvantage of the closed-cell foam is that it is denser, requires more material, and therefore, is more expensive. Even though it has a better R-value, typically the cost per R is still higher than open-cell foam. The choice of foam can also be based on the requirements for the other performance or application specific characteristics such as strength, vapor control, available space, etc."

Open-cell spray foam has an R-value of about 3.5 to 3.7 per inch and typically uses water as a blowing agent, while closed-cell foam has an R-value of about 6 per inch, he adds.

Costs, at least in McGraw's area, average about 80 cents a square foot for open-cell foam and about \$1.20 per square foot for closed-cell foam. With those R-values in mind, Jacobs will have trouble meeting energy code recommendations for his region if he goes with open-cell foam.

"A house in [Climate Zone] 6 requires R-49 insulation in the attic," Armando Cobo says. "If your intention is to have a conditioned attic, 7.5 in. [of open-cell] foam is R-28, then



### Mulling the benefits of foam

A homeowner has bids from several contractors for insulating his home with spray foam insulation, but conflicting advice has left him puzzled.

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..... you also need 3 in. minimum rigid insulation on top of the roof decking. If you want to install [closed-cell] foam, you would require 7.5 in., and it can only be installed in 2-in. applications.”

Cobo steers Jacobs toward a [chart](#) provided by [Demilec](#), an insulation manufacturer, with more details.

“The companies that are proposing 7 inches of open-cell spray foam for your roof are only offering R-26,” adds [GBA](#) senior editor Martin Holladay. “That isn’t much. In your climate zone, as Armando points out, you really want at least R-49. Don’t let a spray-foam contractor talk you into accepting insulation that is less than the minimum code requirements.”

### Energy codes aren’t everything

Energy codes may call for R-49 in the roof, but that doesn’t mean it’s absolutely necessary, some commenters argue.

Among them is A.J. Builder in upstate New York, who writes that “code R-values do not factor in how well spray foam works compared to fiberglass of the same R value. Most times spray foam is not installed to code R values and yet it performs much better than fiberglass.”

Others go even further. Meeting the R-49 requirements is a “waste of money,” Eric Price writes.

“Eric is right,” adds John Pfeiffer. “IMHO the law of diminishing returns really takes a bite out of using more than 2 to 3 in. of closed-cell (depending on your location, I’m in southern N.Y., zone 4a). Don’t trust the codes for telling you what is the most cost-effective way to insulate a house. They are written by people wearing suits and working in offices, not contractors.”

An R-40 roof may leak half the amount of heat as an R-20 roof, he says, but savings may amount to only pennies per square foot at the expense of adding twice the amount of insulation at double the cost.

“Also, consider what happens if your roof has a leak,” he adds. “Open-cell is a sponge and will need to be taken out and replaced; closed-cell won’t show the leak and will soak the plywood until something gives.”

### Our expert’s opinion

GBA technical director Peter Yost added this:

Scott, it sure sounds as though you would like to optimize energy performance, taking advantage of the framing cavities being open, and do it as economically as possible, including DIY. Given all that, here are my recommendations:

- Get a sense of where to spend your money – the best two ways to do this, in my opinion, are to get a whole-house performance assessment done by a [BPI-certified technician](#), and to use the [LBNL Home Energy Saver Pro Energy Assessment Tool](#). I have used this on more than one project, and using the detailed assessment path, I have come within \$100 of total household annual utility bills, and their recommendations are useful.
- Seriously consider the DIY rigid-foam approach to cavity fill. Yes, this is labor-intensive, but it is relatively easy to do, and you often can employ scraps of rigid foam or salvaged rigid foam insulation. The key is to not be too fussy about how your cuts fit, because you can’t cut it tight or well enough to be your [air barrier](#) anyway, so save the air sealing for later, when you spray foam all your joints and perimeters.
- Others have given solid guidance on choosing open-cell or closed-cell foam. On this, let me add that if you do choose a spray foam approach to cavity fill, be sure to use a [certified installer](#).
- Evaluate your investment options. [Martin](#) and [I](#) just both wrote useful blogs on the topic of payback analysis – give those a look.

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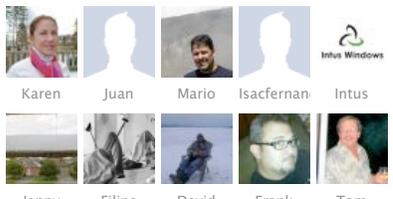
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## Spray Foam Problems by k s

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Lately there is a lot of speculation that spray foam insulation is not as inert as once thought and in fact, SPF may continue to off gas for many years. The EPA has also voiced their concern about the need for further research on the short and long term safety of SPF in residential use.

We are in contact with 30 other families in the USA and Canada who may be suffering from symptoms related to their SPF home (NOTE: schools and offices are using it too).

Some families have moved out of their homes. Other families have removed roof decks and/or walls of SPF in hopes of reducing the chemicals and symptoms experienced in the home. Some families have no choice other than to remain in their home and rely on mechanical ventilation/filtration to help ease the chemical burden and symptoms, but find little relief.

After nearly a year of research, ventilation, lots of lab testing (chamber and air samples), and expert opinions, our family has begun tedious process of removing our SPF (roof deck and wall cavities). The removal is being performed by a local remediation company (the company has removed SPF in homes prior because of mold and moisture issues).

A detailed protocol created by our Certified Industrial Hygienist (other credentials include CSE, CIEC, CEICC, CIAQP, CIAQC) whom has experience (20+ yrs.) with isocyanates (Side A of the two part foam) is being followed to ensure safe removal (dust created from breaking the foam is a respiratory and dermal hazard).

We are hopeful that removal of the SPF along with soda blasting will remove and neutralize the chemicals associated with the application of the SPF. We will do more testing after remediation is complete to ensure a safe environment prior to resuming to build

According to the EPA the SPF should be cured (inert) and safe for re-entry 23-72 hrs after install. According to SPF companies, there should be no odor or off gassing after it is cured.

Our home experienced something much different; a chemical smell has lingered and when we entered the home we experienced respiratory issues, headache, flu aches, muscle aches, throat, eye irritation and chest pain. On warm days, the smell and symptoms were more severe. Some visitors experienced the same symptoms while others do not. There is a varying degree of threshold levels, but almost everyone, after prolonged periods complain of eye, throat irritation.

A lot of lab work has been completed by a well known leader in product testing. Our chamber and air tests show a long list of chemicals that at even low levels, chronic exposure to most of the captured chemicals in our home will undoubtedly cause health issues after little or prolonged exposure. Frighteningly, our chemical profile from both the chamber and air testing mimics most of the other homes experiencing the same complaints with the SPF.

Is this all a coincidence that the same chemicals are found in homes with spray foam and the owners are experiencing the same symptoms?

Today we are much more sensitive to things that contain isocyanates and flame retardants. Renting a car, walking into REI, IKEA, and HomeDepot can cause eye irritation, burning throat and chest congestion. Even running on a refinished track or wearing a wetsuit can evoke our symptoms.

Other SPF homeowners have had severe reactions and illness thought to be associated with the chemicals from the SPF. Children of some of these SPF homes develop a chronic cough and asthma like breathing. Chronic low grade fever and autoimmune responses have also been observed. Muscle aches and mental confusion and chest pain are other symptoms and can be seen during exposure and/or develop after being in an SPF home for long periods.

Our SPF manufacturer/supplier is very aware of our complaints and concerns (and the complaints of the other homeowners), but the company continues

to deny any sort of problem with their product.

The contractor who installed the foam denies anything is wrong. Needless to say, like most of the other homeowners, we are left on our own to handle this because the science is not yet 'there'.

Do you have SPF insulation somewhere in your home (attic, wall cavities, crawl space)? Do you experience asthma like symptoms, chronic cough, headache, throat or eye irritation, nausea, skin rash, muscle aches, flu-ish, any new autoimmune issues since moving into or installing SPF? If so, do your symptoms decrease when away from the home OR during times of lower temperatures?

Another issue has been seen in older SPF in homes. Have you had SPF insulation for 1-8 years and recently notice a new chemical odor or the above symptoms? A family we know has removed SPF from their home after 6 yrs. because in June 2011 it started to smell and the family had to move out because of their related symptoms. Test results indicate the foam is decomposing and releasing the same chemicals that we have in our relatively newly sprayed home.

I hope our situation is a random, but if it is not and other homeowners with SPF are experiencing similar symptoms, it is important that information is being gathered and awareness is spread.

Please contact us at [foamproblem@gmail.com](mailto:foamproblem@gmail.com) for further info.

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2.  
TUE, 01/24/2012  
- 14:14

### **Save the foam budget for the exterior by Dana Dorsett**

Closed cell foam is great stuff, and putting at least some on the interior makes non-wicking foam the condensing surface rather than the wooden roof deck. But from a \$/R point of view the thermal bridging of the rafter element robs ccSPF blind on performance since the R/inch is so much lower than the foam. A more cost effective & higher performance approach is to go with rigid foam above the roof deck which will thermally break the rafters, and use a minimal amount of cc foam on the interior as interior vapor retarder/condensing surface, and fatten out the rest of the R with cheaper fiber (at least up to the rafter depths), and a class-III vapor retarder on the interior.

According to IRC 2009 you'd need R25 of rigid on the exterior, but with even an inch of ccSPF it would do just fine with less, especially if the exterior foam was semi-permeable (Type-I EPS, up to ~ R20 or so) and held down with furring onto which a nailer deck is applied, giving at least some drying capacity toward the exterior through the foam into the cavity.

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### **Spray Foam by Tom Gocz**

Spray foam is a special situation in that you have someone in your driveway, processing chemicals.

It seems entirely possible and likely that a poor spray foam installation can affect a home's occupants, especially those who are chemically sensitive.

Having had my hands on a number of disposable spray foam systems, I can say that the chemical mix is critical.

In the case of a commercial spray foam applicator, the attention to the system is, of course, critical.

Off-gassing can be very possible if the applicator does not do it right.

That being said, a good barrier between you and the foam is also important. Although it would normally be used as a fire barrier, it can also be a barrier against any off-gassing.

I am skeptical of open cell foam. Closed cell works so much better, eliminates (if done properly) infiltration and condensation issues and can be pretty structural.

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We live in a home that has R-65 in the walls and roof. It is a mix of sheet and spray foam.  
After doing a number of projects with disposable systems, the installation of spray foam by an experienced applicator was impressive.

4.  
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**KS**  
**by Frank Bovio**

I have read about this happening due to faulty installation. I do not know anything about your job, but if it was done in a cold climate and the substrate was cold, the chemical never fully cures, same goes for if the substrate had moisture on it when the foam was being installed. There are so many variables on how to go wrong on a spray foam job its scary.

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A lot of homeowners will choose the contractor offering the lowest price, and sometimes this is when the nightmares start! I do not know your details so I am only guessing as what could of happened. I do not know if it is permicible but I am curious to what brand of foam that was used in your home? I have read the same nightmares coming from other people on other pro forums (it always seems to be one brand).

I know with your situation it is hard for you to see, but not all spray foam is bad, and many more have it installed and forget they have it than folks with your problems. I am sorry you have had a bad experience.

5.  
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**Wet Crawl space insulation**  
**by Radu p**

Here's my situation: house in zone 5 near water (Atlantic Ocean) has a crawl that's always wet.

i need insulation on the bottom of my floor and I was proposed 2 solutions both with closed cell foam:

- A. sprayfoam 5' on the bottom of my floor in the crawl and mitigate the water in the basement or
- B. sprayfoam 5" on the bottom plus 2.5" on every square inch of exposed wood in the entire crawl and forget about the water because the crawl will be open to outdoors.

If I do A and I open the pandora box with a sump pump I may get the Ocean in my basement and I will pump forever. Also I have no idea of the implications and the costs.

If I do B I protect the house and I don't care about the moisture in the crawl anymore but there is more expensive.

What other solutions I may have?

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**Lower R values needed with expanding foam.**  
**by Ed Dunn**

I am glad to get some support from A.J. Builder on my contention that R value can be less when using expanding foam. Martin has disagreed with me on that one in the past, and I have to say that in my experience the tightness of the foam does make a difference. We can get away with using R38 in our area that calls for R50. The R50 figure came about, I assume, with testing and calculation R values needed in different climate zones using fiberglass and/or cellulose, not rigid foam. We have homes here that are using less than 1/2 chord of wood in a winter. One that uses propane, used less than 80g in a year. That included the hot water heater and cook stove.

For 20 years, I have designed over 45 passive solar homes. The first thing I specify is tightness. The next thing I specify is the insulation value. After that comes the orientation, mass, glass and ventilation. A tight house will decrease the amount of insulation needed. All I can say is it has worked well

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here in Flagstaff (ZOne 5b).

As to the comment by k s, we have not run into that here, yet. Would it have been easier to seal the living space from the foam with PVC paint on the drywall? I have understood that PVC paint over drywall seals air and water vapor. Why wouldn't it keep toxins out of the living space?

As to the disadvantages of closed cell foam, I was told by my installer that it is VERY rigid and the expansion/contraction of the studs would break the bond to the foam, eventually and we would have an air gap at all points where foam meets wood. Is that true?

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**Wet crawlspaces aren't diagnosable/fixable via bloggery  
by Dana Dorsett**

Mitigating all the bulk water issues is important no matter what and unless you are below the peak high tide mark you shouldn't fear pumping against the tide. Grading the exterior to slope away, installing gutters and directing downspouts well away from the foundation are just a start. Perimeter surface drains "French drains" on the exterior below the drip edge, directing water away may be necessary, as well as perimeter drains to a sump on the interior. But what you actually need isn't something you can figure out on a blog posting.

Without drying it out first you'd be well advised to stay away from spray foam, since it could even make things worse by not letting wood that is getting moisture via wicking through the foundation to dry quickly enough. If the bulk water issues can be dealt with, it takes less foam to spray & air seal the foundation, foundation sill & band joist than the subfloor above, and in combination with heavy vapor barrier on the floor, converting the crawl space into a "conditioned" crawlspace has both heating/cooling energy and moisture control benefits in southern New England climate, since the summertime dew points are high enough to make for a moldy crawlspace if vented to the outdoors.

It may still be necessary to run a dehumidifier in the crawlspace if there isn't sufficient sensible air conditioning load (as it true in my case) to dehumidify the house otherwise. Keeping the crawl at 60% relative humidity is enough to block rot & mold conditions on the joists & subfloor.

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8.  
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18:31

**Ed, "For 20 years, I have  
by aj builder, Upstate NY Zone 6a**

Ed, "For 20 years, I have designed over 45 passive solar homes. The first thing I specify is tightness. The next thing I specify is the insulation value. After that comes the orientation, mass, glass and ventilation. A tight house will decrease the amount of insulation needed."

Well said my friend. I am not against R-100 of cellulose on an attic floor because it is not hard to do and not that expensive. But, What Joe Lstiburek did wrapping his barn with thousands and thousands of dollars of foam... silly... R-value is R-value... but the proof is in what you and I have built... that does work well and you and I know that.

One leg in both camps but for now I am all for airtight is what makes sprayfoam hit the great numbers that it has hit for you and I.

Closed cell... open cell... Above someone stated they prefer closed. I have only used open cell water blown Icynene that so far has been applied with no problems. I am very happy with the crew, their choice of equipment and their choice of product and their choice of conditions to spray in. There are no problems with moisture or air quality or foam degrading or foam detaching (a few inches found out of thousands of feet of application.)

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9. **Bad spray jobs and chemical**

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**by aj builder, Upstate NY Zone 6a**

Bad spray jobs and chemical sensitivity.

One answer. Scary! I now have a company that has not let me down. But, if I did not have these guys, I would most likely never use spray-foam after spending time reading about the problems some have had.

That is most likely my thoughts on spray-foam for now and for the foreseeable future.

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**Price of spf  
by tom ruben**

Scott,

Please be specific. When you give \$1.20 per square foot for closed cell spray foam and \$.80 per square foot of open cell spray foam, what are you measuring for the square footage. Is it the floor, walls, roof . . .? Wouldn't it be more helpful to quote by cubic foot, so that different framing depths can be accounted for?

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11.  
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**recycling anyone?  
by Marc Bombois**

What I don't like about spray foam is it renders wood unrecyclable. It's not really a separable component of a building assembly and so it makes me wonder about whether or not it should be included in the pursuit of "green" building. In the future I see an awful mess when Scott's house is eventually torn down.

I think we all agree with the basic prescription for warm, easy to heat homes: tight as possible and great insulation. But let's include the criterion that all components of a building assembly be reusable. What do you folks think?

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12.  
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23:41

**Tom, 1" thick by 1'x1' = 1  
by aj builder, Upstate NY Zone 6a**

Tom, 1" thick by 1'x1' = 1 board foot which is how spray foam is quoted.

Say they measure your wall... 8' tall by say 10' long and they quote 4" thick.  $8 \times 10 \times 4 =$  the number of board feet (volume) to multiply times the price quoted earlier.

$= 320 \text{ board feet} \times 1.20 = \$384$  or  $\times .80 = \$256$

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13.  
THU, 01/26/2012  
- 08:48

**aj you are right...  
by Frank Bovio**

about board feet. The way you have it is for C.I., spraying the studs, and encapsulating. When doing walls with say sheetrock the formula changes a little bit. 16" O.C. = 1.25' wide x height of the wall. When doing larger walls, I divide that formula by the length of the wall. It takes out the studs. You do have to add a little more in for over spraying and waste, but if the guys like their Christmas bonus every year they will limit waste!!!

If a contractor quotes by the square make sure they are giving you board feet and square feet, the job will be very under priced!!

aj I am glad you have a good group of guys I only hope my contractors say the same about our company!!!

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14.  
THU, 01/26/2012  
- 09:42

### **Design makes a difference** by Ed Dunn

The design of a house makes a difference as to whether or not I use expanding foam or cellulose. In walls, I mostly use straw, but in the ceiling I use cellulose in trusses with an energy leg. It is the most cost effective way to insulate, and it works well when I use the recommended amount of insulation. I go with what the Oak Ridge National Labs and the Department of Energy say for our area, R50. I do not follow our local building code which adopted the Model Energy Code (R38). With this design parameter, I have homes that use 10% of average energy use for our area. Of course, they are all heated mostly by the sun.

I only use expanding foam above when I have a story and a half design that limits the use of cellulose and being able to achieve that R50. These homes achieve the equivalent energy use of the truss roof designs. In a house that will be shaded, by our Ponderosa Pines or other structures, I would also consider the tightness of foam.

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- 09:44

### **Closed cell v open cell** by Ed Dunn

Can anyone give me an answer on the issue of closed cell foam breaking the bond with framing members as they shrink in the wall, therefore, eventually losing the tightness factor?

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16.  
THU, 01/26/2012  
- 09:50

### **Response to Ed Dunn** by Martin Holladay, GBA Advisor

If the closed-cell spray foam was properly mixed at the right ratio, and installed at the right temperature by a skilled operator, it will cling tenaciously and permanently to lumber, plywood, and OSB.

If shrinkage cracks develop, there was a problem with the installation, and the insulation contractor should be notified immediately of the problem.

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MON,  
01/30/2012 -  
08:02

### **spray foam pricing & details** by Steve Richards

To comment on a few points...

Open cell offers a substantially lower cost per R-value. It's a perfectly viable option to be considered above grade on most projects. A reputable contractor can advise customers on this.

While closed cell is often the best choice for projects, it often prices the job out of the spray foam option. We've achieved excellent blower door test results with all- open cell installations.

Open cell foams are vapor permeable and can absorb water, however, due to their nature, they dry out well and do not need to be removed.

Polyurethane foams improperly mixed can present off-gassing issues, but this is readily apparent at the time of installation. I work with the chemicals daily, and while there are those who like to look for problems relating to chemical sensitivity, the material is safe when properly installed. Nuisance odors can occur, and improperly mixed foam is bad, but there's plenty of overstated negative hype on the web. There are plenty of polyurethanes in every home, from upholstery cushions, to carpets, wood finishes, etc. A whole house approach to energy efficiency and ventilation is key.

As for R-values, the green building community can discuss this all they like, but those familiar with spray foam products will concur that the building code states R-values that are meant for fibrous products, which simply don't work as well under a range of conditions. I'd put R-30 spray foam against whatever amount of fibrous material can be installed in an attic, and see which prevails. Upon installing 5" of closed cell foam on the underside of a roof deck, diminishing returns enter into the equation, and at that point,

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exterior insulation needs to be considered, to minimize thermal bridging.....look at a spray foamed home under the right conditions and you can count the roof rafters from the street, looking at the condensation patterns. R-50 sounds nice, but in practice, besides ultra tight/passivehouse homes, this is simply not cost effective. Put even more simply, I own a spray foam rig, and I put 5" closed cell in my own attic.  
Steve Richards

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18.  
MON,  
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08:03

**Closed Cell Foam  
by S. P.**

Timely article. I am converting an unheated attic to living space and have been reading all I can find about closed cell vs. open cell for insulating the attic rafter bays. Had decided closed cell sounded better until a rep from one of the largest insulation companies in the Boston area came to give me an estimate last week. He said they no longer recommend closed cell for the under surface of a roof because they have had problems with the foam shrinking away from the rafters and subsequent heat leaks. I am wondering if it actually may be the rafters drying out and shrinking instead of the foam. Or it may be the slight expansion and contraction of wood between summer and winter, At any rate, the last thing I want is heat escaping or ice dams on the roof, so will probably go with open cell foam.

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19.  
MON,  
01/30/2012 -  
08:28

**open cell attics  
by Steve Richards**

I wanted to point out one further detail in regards to open cell in attic spaces. Due to the expansion of the foam and thicknesses required to achieve the desired R-value, open cell is often sprayed proud of the framing members, for instance, 8" foam on 2x6 rafters leaving 2.5" foam OVER the under surface of the rafters. This negates most issues of shrinkage, being that the foam is monolithic and encapsulates the underside of the framing. This also helps with thermal bridging. In response to the above post, SPF will sometimes shrink a bit upon installation if temperature isn't managed perfectly, but I find most cases are simply a case of the foam expanding and curling on itself, giving the appearance of gaps.  
The most important thing is....hire a reputable contractor.

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20.  
MON,  
01/30/2012 -  
11:33

**Which foam to use  
by James Marot**

A concern which has arrived in the community I work is one of fire. In January of 2007 we had a house fire which started as a smolder and than found the fuel of the SPF in the wall cavity and raced through the home in those areas not covered by working smoke detectors - wall, ceiling and attic cavities. The family escaped the fire unharmed but only because of neighbor intervention. Because of this I have become an advocate for Low density foam. Low density foam, Icynene, is water base and though rates lower in "R" factor will not burn, becomes stable and inert after only a few hours from application, fills the cavity of most walls and ceilings completely and will dry when wetted. As research shows air infiltration is becoming the main issue in developing an energy efficient envelope. Either foam works well here, but with 1/2" of foam board on the exterior the lessor "R" value of the ICYNENE would mean nothing to loss of energy value and in my opinion create a better and safer interior environment for the occupants.

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21.  
MON,

**Why are we still using SPF?  
by bill bradbury**

01/30/2012 -  
12:30

I don't know about the rest of you, but to me green building is more than just energy efficiency. Why are we using products that are detrimental to ourselves and our planet? Roxul and cellulose are far better choices for most homes, but I do use foam on those rare occasions that SPF is the only choice.

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22.  
WED,  
02/01/2012 -  
18:06

### **Urethane** **by Roger Kjonaas**

I have used sprayed in place polyurethane in all but three homes I have built since 1981 and from about 1984 to 1996 I had my own equipment, so yes I am bias. I have also been hired to consult problems involving moisture problems created open cell spray insulation.

I agree with Bill that Roxul and cellulose are good insulations to consider and I would pick them in a heart beat over ICYNENE, but polyurethane is king.

As for toxicity, check out how it compares to #1 pine; normally by the time the fire reaches the foam, you would be dead from the smoke given off by your furniture and carpets.

I have urethane foam in my own home that was sprayed over twenty years ago and It looks the same as it did the day after I had it sprayed on the wall. As stated earlier, urethane faom that shrinks was sprayed in the wrong conditions, chemical temperature or ratio.

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23.  
THU, 02/02/2012  
- 23:00

### **Frank** **by k s**

EDITED THU,  
02/02/2012 -  
23:01.

Frank our home was 18-23 degrees during application, all windows closed and we are sure the substrate was far below 50 degrees. The product we used is the product that gets the most complaints here at GBA and other forums. The installer has his lawyer on us, with a lien on our home, wanting to be paid for the rest of his bill. Meanwhile his insurance says they will not cover anything and we just paid more than 60k to remove the SPF in hopes we can get a clean IAQ report. Why does this SPF company keep getting away with this? They are busy fighting many many familes, but all the while deny anything is wrong. I am sure application has almost everything to do with this. These stories and many other families are about to become very public. This is not about getting back at anyone, this is about creating awareness to a product that has turned lives upside down, yet t no one will take responsibility. Instead the homeowner is left with financial ruin and emotional dispair. Not to mention potential unknown health issues. All in the name of 'going green'. I'd love to see where green fits into the 600 large trash bags of removed SPF from my home sitting in a landfill for 1000 years. Stay tuned, it is hard for any company to deny something is wrong when a large number of people all have the same story to tell. Will keep you posted at [www.sprayfoamsucks.com](http://www.sprayfoamsucks.com) for details on upcoming events of spf. Ever wonder how many others are out there that have been paid some money to go away and not say anything about their foam? Think about it, if people go public about bad SPF in their home, their home is forever marked, say good bye to market value. So please consider the ones of us that are willing to be public are REALLY concerned and are trying to find what is wrong. We don't move out of our homes, throw everything away, live in campers or hotels because we want to. Some of us have new born babies and cannot go back to our home, even after Spf company has tried to remediate it. We are not making this stuff up. We just want some answers and our homes back.

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