



Improved Energy Efficiency and Insurance Industry Policy: Conflict or Common Ground?

October 26, 2010

Dear Code Official:

Is it possible that the insurance industry is opposed to the U.S. Department of Energy's (DOE) goal of improving the energy efficiency of all U.S. buildings? While the DOE works to improve our nation's energy codes and reduce our reliance on foreign energy sources, is the insurance industry setting policy to work against these goals? Shouldn't the insurance industry and the energy efficiency community be on the same side?

These questions and others have come up since the Institute for Business and Home Safety (IBHS), funded by the insurance industry, decided to oppose key energy efficiency code change improvements in the *International Energy Conservation Code (IECC)*. The IBHS has filed public comments specifically stating as much. In their comments, they disparage one of our most reliable and proven building products that helps deliver on these improved energy efficiency goals – foam sheathing.

Foam sheathing has been a mainstay in energy efficient construction since the first energy crisis in the early 1970s. These products are used across the country and around the world as a key contributor to improved building energy performance. A Fact Sheet about Foam Sheathing is on the back of this letter.

As you well know, the DOE has been working around the clock to help improve the 2012 *IECC*. It has proposed residential and commercial code changes designed to deliver a 30% improvement in minimum efficiency over the 2006 *IECC*. This is especially important since our buildings consume more than 40% of our nation's total energy use!

Key to the DOE proposals are small improvements to almost every aspect of building energy performance – better windows, air sealing, lighting and insulation. The DOE proposals don't require major changes in construction techniques. In fact, many of the proposals merely offer slight improvements to proven construction systems. Yes, we can still build with 2x4s! Exterior insulation, such as foam sheathing, is just one of the many proven options available to builders and designers seeking to meet these improved energy efficiency goals. Whether using the prescriptive compliance or the performance path, improved building envelopes are essential to meeting the federal government's goal that requires a 30% improvement in energy efficiency over the 2006 code.

Surely the insurance industry supports these same goals for our country. If not, the DOE, building officials and the foam plastics industry need to work together to find responsible pathways to meet these efficiency goals AND provide strong, safe homes and buildings. Unsubstantiated misinformation about one product works against both of these objectives.

Please vote to support:

- EC13 with no weakening Public Comments**
- EC 47**
- EC 50**
- EC157**
- EC158**

Please vote to oppose:

- EC140**
- EC 141**

Please ask the IBHS and the insurance industry to join our energy efficiency team in working toward our common goals. By truly working together using solid science-based performance, we can all make responsible and positive forward progress.

Sincerely,

Foam Sheathing Coalition



Fact Sheet about Foam Sheathing

1. Foam sheathing was introduced to the residential construction market in the early 1970s.
 - a) Use of foam sheathing has ranged from 10% to 17% of the wall sheathing market since 1994, when the National Association of Home Builders (NAHB) Research Center began reporting this material's use.
 - b) According to the NAHB Research Center,
Based on our 2009 Builder Practices Survey data (conducted in early 2010), 77% of wall sheathing for new homes is either plywood or OSB. These can be used exclusively or in combination with others (typically foam sheathing). Based on this same survey, we find that 73% of all new home walls are "fully sheathed with plywood or OSB." Note that 9% of homes have a second layer of foam sheathing in the same year.
 - c) This data indicates that almost 70 million square feet of foam sheathing was installed over wood sheathed walls in 2009. Similar numbers are projected for 2010, based on current builder practice.
2. Over the past 20 years, the use of foam sheathing has been a well-accepted practice as a cost effective solution for meeting current and proposed energy codes, while maintaining conventional 2x4 framing. This has been especially important in the face of increasing demand for greater wall and envelope energy efficiency.
 - a) The 2006 and 2009 *IECC* already contain R 13+5 (R-13 cavity insulation plus R-5 continuous insulation) as one of the prescriptive compliance options for wood-framed walls.
 - i) The 2009 *IECC* has been adopted in nearly 20 states. Most builders use foam sheathing installed over OSB or in combination with intermittent braced wall panels to meet the energy code, as indicated in the NAHB Research Center data.
 - b) The 2012 proposals extend continuous sheathing options to include R 20+5 values or R13+10 for wood-framed walls in climate zones 6, 7 and 8. Nothing presented by the IBHS – or any other opponent of energy efficiency – provides substantiating data that shows the use of foam sheathing in these zones constitutes some unknown hazard. Foam sheathing has been used successfully for more than 20 years in this configuration and these same climate zones, where it is advantageous for builders to improve wall envelope performance with exterior insulation.
3. With or without foam sheathing, buildings must meet the structural requirements of the *IRC* and the *IBC*.
 - a) The new energy proposals do not change or negate any of these structural requirements. Residential buildings must comply with Section 6 of the *IRC*, and multi-family and commercial buildings must comply with Chapter 16 of the *IBC*.
 - b) The Foam Sheathing Coalition (FSC) has published engineering solutions on the responsible use of foam sheathing, including a Testing & Engineering Report (TER) available at: www.foamsheathing.org.
 - i) For example, in high wind zones, foam sheathing may not be used under vinyl siding unless it is installed over OSB sheathing (ICC 600) or engineered by design professionals.
 - ii) In Chapter 7 of the *IRC*, foam sheathing is considered a cladding product and thus is not expected to resist lateral or gravity loads placed upon the structure by weather events.
4. The DOE has added new, more stringent compliance paths for wall assemblies. These proposals are based on the knowledge that building envelopes are the foundation of a package of changes required to achieve a targeted 30% improvement in the *IECC*. The DOE also acknowledges that it is more costly and more difficult to retrofit a building's envelope for efficiency improvements at a later time.