



Center for the
Polyurethanes Industry

March 23, 2018

Federal Trade Commission
Attn: Hampton Newsome
600 Pennsylvania Ave. NW
Washington, DC 20580

Submitted electronically to: <https://ftcpublic.commentworks.com/ftc/R-value/>

Re: 16 CFR part 460 – R-value Rule Review, File No. R811001 (January 14, 2018)

Dear Mr. Newsome:

The Center for the Polyurethanes Industry¹ and Spray Foam Coalition² of the American Chemistry Council (ACC) appreciate the opportunity to provide comment on the Notice of Proposed Rulemaking (NPR) of the Federal Trade Commission's (FTC or Commission) *Trade Regulation Rule Concerning the Labeling and Advertising of Home Insulation (R-value Rule)*.

ACC has been a longtime proponent of the R-value Rule because it helps protect consumers from misleading advertising claims and promotes fair competition among manufacturers of residential insulation products. The FTC's systematic review of the rule presents an opportunity to strengthen the consumer protections offered under the current R-value Rule and to further fair competition.

Our comments focus on enhancements to the current R-value Rule that will clarify what R-value means in terms of overall insulation performance. When comparing insulation types it is imperative that consumers understand the importance of proper installation and minimizing air

¹ The Center for the Polyurethanes Industry (CPI) serves as the voice of the polyurethanes industry in North America, promoting its development and coordinating with polyurethane trade associations across the globe. The polyurethane industry supports research and initiatives that serve its communities and customers. The business of polyurethane is a \$26.5 billion enterprise and a key element of the U.S. economy. The industry operates in more than 1,000 locations in the U.S. and directly employs more than 46,500. A major job creator in the U.S., it's estimated that each job in the polyurethanes industry yields five more jobs indirectly for an approximate total of 235,000 jobs supported.

² The Spray Foam Coalition (SFC) champions the use of spray polyurethane foam in North America by promoting its energy efficiency, performance, economic benefits, and contributions to sustainability. The SFC provides a forum to conduct research, to advocate for science-based public policy, excellence in safety, stewardship, training, and to advance technical knowledge.



infiltration into a building. ACC offers additional changes to product labels and fact sheets that will highlight the importance of proper installation and air infiltration to consumers. We believe that presenting additional information can facilitate more informed purchasing decisions and, ultimately, further the intent of the R-value Rule.

Further, ACC supports FTC maintaining the ability for insulation manufacturers to cite R-value per inch, and supports FTC clarifying that all products making an R-value claim are subject to the R-value Rule. ACC also agrees with FTC that ASTM C1303 testing is not sufficiently vetted for use in the SPF industry. Finally, ACC requests that FTC provide additional guidance about making R-value claims at temperatures other than 75° F.

We appreciate the opportunity to provide comment and information as the FTC conducts its systematic review of the R-value Rule. We would be pleased to provide additional information and answer questions related to foam insulation, in particular SPF products. Please contact me at stephen_wieroniey@americanchemistry.com, (202) 249-6617, with questions or requests for additional information.

Respectfully submitted,


Stephen Wieroniey
Director

Comments

1. Additional Disclosures

a. Air Infiltration

Insulation products can provide thermal resistance by reducing both conductive and convective heat flows. Eliminating convective heat transfer (air flow) through walls and roof assemblies can provide significant energy savings. The U.S. Department of Energy estimates that up to 40% of a building's heating and cooling energy is lost due to air leaks,³ a major source of convective heat transfer in the building envelope. We support the proposed update to the fact sheet highlighting the need to limit air infiltration. This improvement will help drive consumer understanding of building envelope performance.

SPF insulation products have been recognized as air barriers when installed at typical thicknesses. Therefore, the use of spray foam insulation (and other air impermeable foam insulations) can lead to greater energy savings by eliminating air leakage in parts of the home where the insulation is installed.⁴ There are third-party consensus standards available to test materials for air permeability, including ASTM E2178 Standard Test Method for Air Permeance of Building Materials⁵ and ASTM E283 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Difference Across the Specimen.⁶ Consumers should be made aware of these benefits.

b. Proper Installation

The quality of installation techniques can also have a significant impact on the performance of insulation materials. Manufacturers of SPF insulation provide detailed installation instructions to help ensure that products perform as designed. Consumers should be aware of how poor installation can impact performance. For example, compression of fibrous insulation materials

³ https://www.energystar.gov/index.cfm?c=new_homes_features.hmf_reduced_air_infiltration.

⁴ Additional information on air barrier materials and testing requirements is available through the Air Barrier Association of America here: http://www.airbarrier.org/materials/index_e.php.

⁵ Information on ASTM E2178 is available at: <https://www.astm.org/Standards/E2178.htm>.

⁶ Information on ASTM E283 is available at: <https://www.astm.org/Standards/E283.htm>.

can reduce their effectiveness.^{7 8 9} Similarly, proper application techniques must be used when applying SPF insulation to ensure products are installed to specified depths necessary to achieve the desired R-value and in contact with the proper surfaces. Given the importance of proper installation, additional language should be included in section 406.12(c) of the R-value Rule to draw attention to this important factor, accordingly, we offer proposed language below.

c. Discussion of Additional Disclosures

As we stated in our comments on the advanced notice of proposed rulemaking (ANPR), the air sealing properties of an insulation material (and the assembly within which a product is installed) can dramatically impact energy savings. ACC supports FTC’s suggested changes to the fact sheet disclosures to address air infiltration. The proposed changes to section 460.13 are not a significant administrative burden and can easily be implemented. ACC estimates our members could implement the proposed changes to the fact sheets within 180 days. However, it is worth noting that old facts sheets have a tendency remain in commerce, even after the manufacturer provides updated fact sheets to the value chain. It will be important for the FTC to consider a reasonable approach to enforcement during the first year the amendments are effective.

ACC believes additional changes to the R-value Rule are necessary to adequately address air infiltration and proper installation. At a minimum, the fact sheets should refer consumers to a website to learn more information about the benefits of air sealing a home or building. Fact sheets already reference the manufacturer’s installation instructions but including a reference to a website on air infiltration in fact sheets will provide additional information to help consumers understand a building’s thermal performance. ACC finds that the information developed by the U.S. Department of Energy (DOE) provides a reasonable overview of the benefits of sealing a home, see: <https://www.energy.gov/energysaver/weatherize/air-sealing-your-home>. ACC understands the difficulty with ensuring that a website link is always updated and active, and encourages FTC to work with DOE to develop a similar website that would help ensure appropriate control of any website referenced by the R-value Rule.

By including reference to air infiltration and proper insulation in fact sheets, FTC demonstrates agreement that air infiltration and proper installation are major factors in a building’s thermal performance. FTC should ensure that consumers be made aware of the importance of limiting air infiltration and proper installation prior to purchasing a product. Therefore, ACC also suggests including statements on air infiltration and proper installation on product labels to expand public

⁷ As an example, see the product chart produced by Owens Corning regarding compressed R-values available at: <http://www2.owenscorning.com/literature/pdfs/10017857%20Building%20Insul%20Compressed%20R-Value%20Chart%20Tech%20Bulletin.pdf>.

⁸ http://aceee.org/files/proceedings/2008/data/papers/1_8.pdf

⁹ http://insulationinstitute.org/wp-content/uploads/2016/08/Compressed_R_values.pdf

awareness. From ACC’s perspective, the proposed changes to labels, outlined below, are not significant; would not burden manufacturers; and as suggested by the Commission, would not significantly increase costs of producing labels. ACC believes any changes to labels would require at least 18 months. Compliance with any changes to product labels should be based upon date of manufacture, and product manufactured prior to the compliance date should be allowed to remain in commerce until sold.

Finally, ACC suggests that installers inform their customers in writing that they have followed the manufacturer’s instructions to ensure a proper installation (as noted below).

Accordingly, ACC suggests:

Revise Section 406.12(c) as follows:

The following statement: “R means resistance to heat flow. The higher the R-value, the greater the insulating power. Other characteristics of insulation like air permeance, air sealing, and quality of installation will impact performance.”

Revise Section 406.13(d) as follows:

For air duct and fibrous insulation, the chart must be followed by this statement: “The R-value of this insulation varies depending on how much it is compressed during installation.”

Revise Section 406.13(e) as follows:

After the chart and any statement dealing with the specific type of insulation, ALL fact sheets must carry this statement, boxed, in 12-point type:

READ THIS BEFORE YOU BUY

WHAT YOU SHOULD KNOW ABOUT R-VALUES

THE CHART SHOWS THE R-VALUE OF THIS INSULATION. R MEANS RESISTANCE TO HEAT FLOW. THE HIGHER THE R-VALUE, THE GREATER THE INSULATING POWER. COMPARE INSULATION R-VALUES BEFORE YOU BUY.

THERE ARE OTHER FACTORS TO CONSIDER. THE AMOUNT OF INSULATION YOU NEED DEPENDS MAINLY ON THE CLIMATE YOU

LIVE IN. ALSO, YOUR FUEL SAVINGS FROM INSULATION WILL DEPEND UPON THE CLIMATE, THE TYPE AND SIZE OF YOUR HOUSE, THE AMOUNT OF INSULATION ALREADY IN YOUR HOUSE, YOUR FUEL USE PATTERNS AND FAMILY SIZE, PROPER INSTALLATION OF YOUR INSULATION, AND HOW TIGHTLY YOUR HOUSE IS SEALED AGAINST AIR LEAKS. IF YOU BUY TOO MUCH INSULATION, IT WILL COST YOU MORE THAN WHAT YOU'LL SAVE ON FUEL.

TO GET THE MARKED R-VALUE, IT IS ESSENTIAL THAT THIS INSULATION BE INSTALLED PROPERLY.

[TO LEARN MORE ABOUT AIR SEALING YOUR HOME VISIT: WWW.XXX.GOV](http://WWW.XXX.GOV)

Revise section 460.17 as follows:

If you are an installer, you must give your customers a contract or receipt for the insulation you install. The contract or receipt must include a statement that the insulation was installed according the manufacturers installation instructions. For all insulation except loose-fill and aluminum foil, the receipt must show the coverage area, thickness, and R-value of the insulation you installed. The receipt must be dated and signed by the installer. To figure out the R-value of the insulation, use the data that the manufacturer gives you. If you put insulation in more than one part of the house, put the data for each part on the receipt. You can do this on one receipt, as long as you do not add up the coverage areas or R-values for different parts of the house. Do not multiply the R-value for one inch by the number of inches you installed. For loose-fill, the receipt must show the coverage area, initial installed thickness, minimum settled thickness, R-value, and the number of bags used. For aluminum foil, the receipt must show the number and thickness of the air spaces, the direction of heat flow, and the R-value.

2. Reporting R-Value per Inch

ACC supports FTC maintaining the ability to cite R-value per inch, and supports retaining section 460.20 as written in the current version of the R-value rule. The R-value per inch of SPF does not decrease as additional insulation is applied, and therefore this section is of particular importance for SPF manufacturers. Further, because SPF is applied as a liquid and may be applied at varying thicknesses to achieve varying R-values, it is difficult to market a single R-value for a product. Requiring SPF manufacturers to cite an as applied R-value would require additional information such as cavity depth on the product's fact sheets, labels, and other

marketing materials introducing unnecessary confusion into the marketplace. Finally, not every application of SPF requires a completely full wall cavity to meet R-values required by the building code. ACC agrees with FTC that current language in section 460.20 is clear and concise.

3. Coverage

ACC supports the FTC’s proposed amendment to the R-value Rule confirming that all R-value claims made for any products marketed to reduce energy use by slowing heat flow in residential buildings must be substantiated by the testing set forth in the R-value Rule.

ACC suggests that FTC clarify that substantiation is also required for general residential energy savings claims that do not mention a specific R-value. ACC suggests referencing the FTC’s *Policy Statement Regarding Advertising Substantiation*¹⁰ in the preamble to the final amendments to the R-value Rule.

4. Reporting R-Value at Temperatures other than 75° F

SPF insulation often performs better at extreme temperatures. Notably, R-values measured at temperatures where thermal insulation properties are required, such as at 40° F, are often higher than when the R-value is measured at 75° F. The R-value Rule does not limit a manufacturer’s ability to make additional claims, provided the manufacturer has a reasonable basis and can substantiate the claim. ASTM C518¹¹ does not require testing at a specific temperature and some ASTM standards for foam plastics require R-value testing at temperatures other than 75° F, such as ASTM C1289.¹² Therefore, testing according to C518 *at any temperature* should be considered adequate substantiation by the FTC. ACC would like FTC to provide guidance on making R-value claims at temperatures other than 75° F. ACC would like FTC to consider:

- Could a manufacturer market an R-value at another temperature provided the statement is clearly qualified that the testing was conducted at another temperature?
- Would a statement such as “R-value at XX° F” or “thermal resistance at XX° F” on a product label be considered adequately substantiated and qualified and considered compliant with the FTC R-value Rule and section 5 of the FTC Act?

¹⁰ Appended to *Thompson Medical Co.*, 104 F.T.C. 648, 839 (1984), *aff’d*, 791 F.2d 189 (D.C. Cir. 1986), *cert. denied*, 479 U.S. 1086 (1987). See, <https://www.ftc.gov/public-statements/1983/03/ftc-policy-statement-regarding-advertising-substantiation>. (March 11, 1983)

¹¹ Information on ASTM C518 is available at: <https://www.astm.org/Standards/C518.htm>

¹² ASTM C1289 requires R-value testing at 40° F or 110° F. Information on ASTM C1289 is available at: <https://www.astm.org/Standards/C1289.htm>

5. Editorial Correction to NAIMA’s Representation

On page 20 of the proposed rule, FTC mentions that NAIMA represents “foam manufacturers.” Some members of the North American Insulation Manufacturers Association (NAIMA) manufacturer foam insulation, however, NAIMA only represents the interests of the fiberglass and mineral wool insulation industries.¹³ Any statements by NAIMA on foam insulation should be viewed as comments from the fiberglass and mineral wool industry, and not as a consensus position of the foam insulation industry.

¹³ NAIMA’s mission statement is available at: <https://insulationinstitute.org/about-naima/>.