



Department of Energy

Washington, DC 20585

December 20, 1999

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DEC 29 1999

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DEC 2 1999
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Mr. Kent C. Howerton
Office of the Secretary
Federal Trade Commission
600 Pennsylvania Ave. N.W., Room 159
Washington, DC 20580

Dear Mr. Howerton:

Thank you for the opportunity to comment on your Advance Notice of Proposed Rulemaking Concerning the Labeling and Advertising of Home Insulation ("R-value Rule"), 16 CFR Part 460. We are submitting the attached comments.

If you have further questions on the above comments, please contact either Mr. Stephen Turchen at (202) 586-6262 or Mr. Arun Vohra at (202) 586-2193.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan W. Reicher".

Dan W. Reicher
Assistant Secretary
Energy Efficiency and Renewable Energy

Attachment

Comments by the Department of Energy on the Federal Trade Commission
Advance Notice of Proposed Rulemaking
Concerning the Labeling and Advertising of Home Insulation (“R-value Rule”)
16 CFR Part 460

Overall, we believe the R-value rule provides important information to consumers on selecting insulation products, and adequate guidance to manufacturers on uniform methods for determining the R-values of these products. We believe that the rule can be improved by your consideration of and action on the following points:

- The R-value of insulation as described does not but should include the following effects:

1) The effect of moisture content on insulation thermal performance

Moisture can significantly degrade the R-value of thermal insulation. The moisture might be present in the material at the time of installation or it might become wet after installation, from occurrence such as rain seepage or infiltration of moist air into or out of the conditioned space.

- Do ASTM test procedures adequately specify moisture content appropriately, so that the measured R-value is representative of actual use?

- Under "Disclosures on Labels and Fact Sheets," one comment suggests adding language to the disclosure statement about "the potential for moisture permeation and accumulation and its deteriorating effects" on R-value. [Section IV.E.1.a, page 48040] The FTC response is to ask for such information which could be provided in a meaningful way that could be understood by the purchaser. More information on this subject can be found at the website of the Oak Ridge National Laboratory (ORNL) program: www.ornl.gov/roofs+walls.

2) The effect of aging on foam insulation

The blowing agents in plastic foam insulation products can outgas and the R-value can degrade with time. We recommend that FTC adopt the use of ASTM C1303, which describes the average service life R-value of insulations. This was also mentioned in the comments by Dr. Kenneth Wilkes of ORNL. [Section IV.C.1.a]

3) The wall system effects

Thermal bridging (particularly due to steel studs), other wall elements (windows, doors, corners), and other construction details all have major effects on actual thermal performance. It looks like the FTC rule applies only to the insulation material itself, not to how it works when installed. It seems like the best way to deal with this is additional disclosures. This point comes up also in comments from manufacturers of structural insulated panel [Section IV.B.2, page 48029], who say that FTC should consider systems rather than just insulation products. FTC responds by asking for advice on a "systems-type disclosure format." We recommend that FTC adopt the whole wall rating system developed by ORNL. See www.ornl.gov/roofs+walls.

- R-Value marking on duct insulation (Section IV.A.1, p. 48027)

The ANOPR states that duct wrap is the only type of duct insulation covered by the Rule because only duct wrap is used extensively in residential construction. Flexible duct, which includes an integral insulation jacket and does not require a separate duct wrap, has become much more common in residential applications since the Rule's inception. This type of duct is often marked with an "average R-value" rating. What is its basis? Is it accurate? The *CABO Model Energy Code* (MEC), as well as many unique State codes, require a specific R-value for duct insulation. This R-value is an important component of overall distribution system efficiency. While evidence may not exist to show that these R-values are being misrepresented, it is important for consumers (particularly new home buyers) and building inspectors that these R-values are stated in a uniform accurate manner. The FTC should also consider the issue of competitive advantage of installations using duct wrap (which must have an FTC R-value, at least for the bulk material) vs. flex duct (where the insulation is integral to the duct and does not fall under the FTC regulations). Additionally, it is unclear how, under the FTC rule, information on duct insulation R-value (duct wrap or flex duct) is actually to be reported to the consumer.

- Expanding Disclosure Statement "What You Should Know About R-Values" (Section IV.1.a., p. 48040-48041)

The suggestions proposed by CIMA & Corbond appear to highlight the perceived relative advantages of some particular insulation products. Some of the new items suggested (e.g., air permeability, convective losses under cold conditions) relate to getting accurate R-values and are covered in other aspects of the ANOPR. Relative advantages of insulation products should be advertised by the manufactures, not by the FTC.

We suggest adding to the current disclosure statement (Footnote 102): "To get the marked R-value, it is essential that this insulation be installed properly. Consult the insulation packaging or contact the manufacturer for instructions on proper

installation. Installation techniques can vary for different insulation products.”

- How to Verify R-Value Installed (Section IV. E.1.c., p. 48045)

The proposal by ICAA (Insulation Contractors Association of America) to provide an additional disclosure statement regarding verifying installed R-value for loose - fill insulation has merit and should be considered by the FTC.

There are serious concerns with loose - fill insulations as discussed throughout Section IV.E.1.C. of the ANOPR. Having guidance from a manufacturer or from an industry trade association (ICAA) on how to relate the R-value claimed to the observable installation would benefit consumers.

Provision of the CABO MEC cannot be relied upon to provide the assurance of correct R-value for loose-fill products. The MEC is not used nationwide (“33 states” per ANOPR). The strengthened provisions that relate to verification of R-value only appear in the 1995 and later MEC editions; many states use earlier MEC editions, e.g., 1992 & 1993. Even where adopted, enforcement of the MEC provisions can be irregular, non-uniform, or non-existent. Re-insulating an attic, for example, does not usually require a building permit and therefore no “third party” (building inspector) is available to enforce the MEC. Therefore, absent MEC enforcement, the FTC disclosure statement, as modified, provides a mechanism for the consumer to impose his own form of quality control on the loose-fill insulation job. ICAA should be commended and encouraged for its willingness to police its own members.