

Polyisocyanurate Insulation Manufacturers Association

**FEDERAL TRADE COMMISSION TRADE REGULATION RULE
LABELING AND ADVERTISING OF
HOME INSULATION: ADVANCE NOTICE
OF PROPOSED RULEMAKING:
16 CFR PART 460**



**COMMENTS OF POLYISOCYANURATE
INSULATION MANUFACTURERS ASSOCIATION**

I. Introduction

On September 1, 1999, the Federal Trade Commission (“the “Commission”) proposed commencing a rulemaking proceeding to amend its trade regulation rule concerning the labeling and advertising of home insulation (“R-Value Rule” or “Rule”). 64 FR 48024. The Commission solicited comments on the proposed amendments and additional issues. The Polyisocyanurate Insulation Manufacturers Association (“PIMA”) respectfully submits the following comments on the proposed amendments and on whether the Commission should propose additional amendments.

PIMA is a national trade organization whose primary purpose is to advance the use of polyisocyanurate insulation (“polyiso”) in the United States. Polyiso insulation is one of the nation’s most widely used, energy-efficient and cost-effective insulation products available. PIMA’s membership consists of manufacturers and suppliers of polyiso insulation which provide the predominant portion of polyiso to the U.S. commercial and residential construction markets. Polyiso products supplied by PIMA members are subject to the R-Value Rule.



II. PIMA's Comments on Specific Proposed Amendments to the Rule

(A) Part IV.A.: Disclosing Thermal Performance of Additional Products: Non-residential Insulations.

PIMA supports the Commission's position to not extend the Rule to cover sales of insulation products to the commercial or non-residential market. Since the Rule was promulgated there is no evidence that sellers of commercial insulations are engaged in unfair or deceptive practices to justify expanding the Rule. In addition the use of insulation products in commercial applications are specified by architects, engineers, specifiers, and others skilled in the trade.

PIMA does not take a position on extending the Rule to cover residential pipe and duct insulations.

(B) Part IV.C.1.: Aging: (a) Cellular Plastics Insulations.

ASTM Material Standards, developed through the consensus standards process with manufactures, users, and general interest groups participating, for each type and/or form of cellular plastic insulation contain the appropriate aging procedures. The aging procedures specified, including the length of conditioning time, have been adopted for inclusion in the ASTM Standards as, to date, they provide the best representation of the aging process for each individual material. The ASTM Standards do take into

consideration whether the cellular plastic insulation is unfaced or faced with a variety of facings, both permeable and non-permeable.

Products R-value or thermal resistance developed under the ASTM Standards are accepted in the technical community as referenced by the inclusion in the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE) Fundamentals Handbook. In addition, manufacturers of various cellular plastic insulation home insulations have Model Building Code evaluation reports establishing R-values for their products under code required Quality Assurance programs which use the ASTM Material and Test Standards.

PIMA agrees that the aging process for cellular plastic insulations is very complex and is affected by many variables. Some of these are: (1) The type of cellular plastic (polyiso, expanded polystyrene, extruded polystyrene); (2) The final form of the foam (spray, boardstock, bunstock); (3) The initial insulating power (R-value); (4) The density; (5) The size and orientation of the cellular structure; (6) The thickness of the cell walls; (7) The polymer composition; (8) The thickness of the cellular plastic; (9) The interface between the cellular plastic and any facing; (10) The manufacturing process; (11) The facing, and (12) The blowing agent and its retention in the cellular plastic. These variables and combinations of one or more of them affect the aging process of the different types and forms of cellular plastic insulation. The effect of these variables or factors on the various types and forms of cellular plastic insulations have been studied for many years back to and before the implementation of the Rule.

The conclusion drawn from this large volume of work is the aging process as addressed by the requirements in the ASTM Standard for each specific cellular plastic insulation.

PIMA submits that for products set forth in ASTM C 1289, Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board, the aging procedures described therein do accurately reflect long-term aging. The aging procedures - 90 days @140°F +/-2°F and 180 +/- 5 days @ 73°F +/- 4° F and 50 +/- 5% Relative Humidity (RH)- have been referenced in a variety of specifications, including both Federal and ASTM, for at least the past thirty years. The experience with the aging procedures over this time indicate both are appropriate for polyiso insulation products.

PIMA believes the use of ASTM C 1303, Standard Test Method for Estimating the Long-Term Change in the Thermal Resistance of Unfaced Rigid Closed Cell Plastic Foams by Slicing and Scaling Under Controlled Laboratory Conditions , is not appropriate for the faced polyiso products in ASTM C 1289. As stated in Section 1.2 of the Scope of C 1303, (Appendix A hereto), this method is limited to “unfaced, homogenous materials”, and “No procedures are detailed in this test method to address the effects of permeable or impermeable facings or skins, manufactured thickness, orientation, manufacturing process, density, quality, the influence of structures or containments, or the end-use environmental conditions on internal cell gas composition.” Additionally, the precision or validation of C 1303 has never been demonstrated clearly; the method and its application to cellular plastic insulation was developed on a very limited set of samples, using experimental products in some cases.

ASTM C 1303 is intended as a laboratory method and research tool to provide comparison data used in evaluating changes in chemical systems or formulations.

PIMA recommends that the Commission retain the aging procedures as now stated in the Rule and outlined in the appropriate ASTM Standard for a particular material. For polyiso products covered by ASTM C 1289, the aging procedures would be: 90 days @ 140° F +/- 2°F and 180 +/- 5 days @ 73° F ± 4° F and 50 +/- 5% Relative Humidity (RH). This would apply to all products, both permeable and non permeable faced. For extruded polystyrene products covered by ASTM C 578, the aging procedures set forth in this standard should apply. However, for expanded polystyrene products using pentane as a blowing agent, the Commission should consider requiring aging procedures as set forth in C 578 (See additional comments on pg. 11, *infra*). For other polyurethane or polyiso products, the aging procedures set forth in ASTM C 1029 and C 591 should apply for spray foam and bunstock respectively.

PIMA reminds the Commission that no undue burden would be placed on manufacturers if the specific aging procedures required would be those referenced in the appropriate material standards for cellular plastic insulations. A significant burden would be imposed on the cellular plastics industry if the use of ASTM C 1303 is required. Estimates of up to \$25,000-30,000 per product have been received which is a significant burden for a manufacturer producing a full range of products. The reason for the high estimate is the level of detail required in C 1303 to provide technical measurements of blowing agent diffusion coefficients and the damaged surface layer

caused by slicing. Additionally, the number of laboratories qualified to conduct ASTM C 1303 testing may be limited raising the cost even further.

PIMA maintains that the aging procedures now mandated by the rule are adequate for products “with relatively non-permeable facings” as demonstrated by the performance of this type product under the Rule as it is now enforced. PIMA believes the comment received from certain manufacturers that “consumers have been duped” are made, without technical merit, by competitors to polyiso insulation products. The performance of polyiso insulation is well documented in the literature and continues to provide products for home insulation the consumer can rely on for use in home construction.

PIMA believes all cellular plastic insulations coming under the definition of home insulation should be covered by the Rule. In general, all insulation materials will be documented by a specific ASTM Material Standard. A review of the available standards will identify additional cellular plastics or other types of insulation materials that may be subject to an aging process. As stated elsewhere in these comments PIMA believes expanded polystyrene - a material blown with pentane - should be required to provide R-values obtained after undergoing suitable aging procedures such as those contained in ASTM C 578.

(C) Part IV.D.3. Other Testing Requirements: Tolerance: To Clarify That The 10% Tolerance Limit Applies Solely To Claims Made By Manufacturers.

PIMA supports the Commission’s proposal to apply the 10% tolerance limit solely to claims made by home insulation manufacturers.

- (D) Part IV.D.5.a.i. Determining the Thermal Performance of Reflective Insulations: Traditional Reflective Insulations: Single Sheet Products.

PIMA recommends the use of ASTM E408, ASTM C835, and ASTM C1371 for the measurement of emissivity of single-sheet products.

- (E) Part IV.D.5.a.ii. Determining the Thermal Performance of Reflecting Insulations: Traditional Reflective Insulations: Multi-sheet Products.

PIMA supports the Commission's proposal. It enhances the uniformity of the Rule in its application to all insulation products.

- (F) Part IV.E.1.b. Other Disclosure Issues: Disclosures on Labels and Facts Sheets: Disclosures for Batt, Blanket, and Boardstock Insulations.

PIMA supports the deletion of the phrase "mineral fiber" to ensure that all types of batt and blanket insulation are consistently covered by the Rule.

- (G) Part IV.E.1.d. Other Disclosure Issuers: Disclosures on Labels and Fact Sheets: Disclosures for Urea-based Foam Insulators.

PIMA supports the deletion of the reporting requirement for urea-formaldehyde foam insulation because the product is not available in the marketplace. However, the Commission should ensure that procedures are in place to reinstate this product category under the Rule should the product reappear.

(H) Part IV.E.3.a. Other Disclosure Issues: Disclosures by Installers or New Home Sellers. Fact Sheets.

See comments on page 15, *infra*. PIMA supports not requiring installers and sellers to provide manufacturers fact sheets.

(I) Part IV.E.4. Other Disclosure Issues: Disclosure By Retailers: To Excuse Retailers From Making Available To Consumers Manufacturers' Fact Sheets Under Certain Circumstances.

PIMA does not agree with the Commission on this issue and believes it is easier for retailers to supply fact sheets to consumers or at least have the fact sheets available at point of purchase for review by consumers. This is based on the statement in the ANPRM- that the retailer may not be required to supply the fact sheet “if all the required fact disclosures are made on the insulation package.” (emphasis added) 64 FR 48048. Under this proposed amendment, the retailer assumes the responsibility to determine which insulation products do not require a fact sheet. PIMA believes this will place an additional burden on the retailer which exceeds current requirements. For example, it is common practice for retailers to open bundles or packages of boardstock foam insulation and to display individual boards for sale. In this case, the packaging or label may be missing or damaged and the necessary consumer information may not be present. PIMA, therefore, supports retailers supplying fact sheets for all insulation products available at their location(s).

III. PIMA Comments on Whether the Commission Should Propose Additional Amendments.

The Commission has also requested comments on whether it should propose additional amendments in five major areas. PIMA submits the following comments on these areas.

- (1) Part IV.A. To cover additional products (i.e. residential pipe and duct insulation and insulation sold for use in commercial buildings).

See comments on page 2, above. PIMA does not support extension of the rule to insulation products sold for use in commercial buildings and takes no position on residential pipe and duct insulation.

- (2) Part IV.B.1 & 2. To require the disclosure of in-use performance values or the performance of building systems.

PIMA supports the Commission's position to not require disclosure regarding in-situ performance or multiple R-values for different uses. The information now supplied to customers provides the necessary input to allow consumers to make an informed choice based on comparative insulation product information without causing information overload. Test procedures are not developed at this time to allow measurement of R-values in actual in-situ applications. ASTM Standards C 236, C96, and C1363 (a new standard which combines 236 and 976) are laboratory methods which require steady-state conditions and are not applicable for in-situ measurements. Two additional ASTM Standards C 1041 and C 1046 are field applied methods used to measure heat flux on buildings but require complicated calculations to

determine R-value. Information developed from these methods is intended for use by those skilled in the industry.

PIMA also supports the Commission's position to not require the disclosure of insulation performance based on testing of home insulation products in different types of applications.

PIMA agrees with the Commission that a great deal of additional testing and research would be necessary to develop a system type disclosure format.

- (3) Part IV.C. To adopt additional test specimen requirements to account for various factors that affect R-value.

PIMA does not support additional test specimen requirements to account for various factors that affect R-value. The ASTM Material Standards in effect for each of the home insulation products provide guidance on aging and conditioning prior to testing for R-value. However, one standard, C 578, exempts products blown with air or pentane from conditioning and aging prior to testing. This exemption would allow expanded polystyrene products to be tested without aging and conditioning. PIMA recommends the Rule be modified to read:

Cellular plastics insulations utilizing blowing agents other than air should be subjected to aging and conditioning as specified in the appropriate ASTM Material Standard.

Accordingly, ASTM C 578 should be revised through the ASTM consensus process.

Since implementation of the Rule, consumers have become knowledgeable of the various types of home insulation products, the fact sheets provided by manufactures, are and capable of making informed decisions based on information now available. PIMA, therefore recommends not adopting additional test specimen preparation requirements.

(4) Part IV.D. To adopt additional or updated testing requirements.

PIMA agrees with the Commission to not require testing only by accredited laboratories such as those listed with the National Voluntary Laboratory Accreditation Program (NVLAP) since this would limit the number of qualified laboratories, placing an unnecessary burden on the industry. The Commission's own evaluation of the Rule conducted in 1995 found no problems with testing laboratories.

Additional record keeping is not required at this time as again, the Commission's own evaluation of the industry indicated no shortcomings. The ASTM Standards now used to test home insulation products provide sufficient guidance on the reporting requirements to satisfy the intent of the Rule.

PIMA recommends the Commission maintain the 75°F for all products covered by the Rule. ASTM Standard C 1058 provides guidance as do the appropriate ASTM Test Standards.

PIMA supports the establishment of a temperature differential of 50 F +/- 10° F for tests conducted at a mean temperature of 75° F for all products covered by the

Rule. ASTM Standard C 1058 provides guidance as do the appropriate ASTM Test Standards.

PIMA submits the tolerance limit and its application as now stated in the Rule is well understood by both the consumers and manufacturers. To change how the tolerance limit is applied may lead to confusion in the interpretation of the Rule. Also, the Fact Sheets required of manufacturers are designed to provide R-value information on each product, not on specific production lots. PIMA believes one area regarding sampling and the tolerance limit-sampling and testing of a particular production lot for compliance - should be accomplished by the procedures required by all ASTM Material Standards and its use specifies the necessary guidance to insure the number of samples and testing requirements provide an accurate description of the physical and thermal insulating properties of a particular material production lot.

PIMA believes the current sampling procedures used by the various manufacturers in the home insulation industry must meet the requirements for selection and frequency of testing. Manufacturers generally produce insulation products on a continuous basis and as such, have quality assurance procedures in-place to continually monitor production. The test specimens selected and tested under these programs are assuredly representative of ongoing production. The Commission's evaluation of the Rule in 1995 demonstrated this fact.

PIMA does not support the Commission proposing a specific retesting schedule. The manufacturers of home insulation products continuously test their products for R-

value, as this is the single most important property of an insulation. This continuous testing provides for current information on the insulation products and provides a history of performance. New products are thoroughly tested and evaluated and would not be introduced without confidence in the product, including meeting the requirements of the Rule.

- (5) Part IV.E: To revise the disclosure requirements for manufacturers' labels and fact sheets, advertisements and other promotional materials, and for professional installers, new home sellers, and retailers.

PIMA supports the current requirements for disclosures on labels and fact sheets “What You Should Know About R-values.” The R-value or thermal resistance is the most important measure of an insulation’s performance, as conveyed by the words, “The Higher the R-value, the Greater the Insulating Power”. When purchasing a home insulation product, the most important information required by the consumer is the R-value or the insulation efficiency. Other factors such as caulk, housewrap, vapor retarders, sheathing, venting, and many other factors are related to construction techniques providing quality home construction. The Rule provides the consumers with the knowledge of R-values of the various products they are considering and does not cloud the issue with a variety of other performance characteristics which, as stated, are good construction techniques. Energy codes do not favor specific insulation products but do require a product with a level of energy efficiency to meet the code.

PIMA supports the clarification of the Rule as it applies to boardstock insulation to refer to nominal thickness rather than just thickness. R-value and thickness are

directly related, therefore the manufacturer is required to deliver the proper thickness for the claimed R-value of the product.

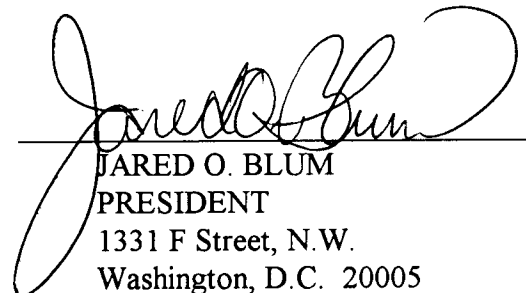
PIMA continues to support the sections of the Rule specifying disclosure requirements for advertisements and other promotional materials with the continued exemption for television advertising. Also, PIMA supports the decision of the Commission not to exempt radio advertisements.

PIMA has determined to support the Commission in its decision to not amend the Rule to require installers and home sellers to provide the manufacturers fact sheets after installation is complete and the home is finished. The Rule provides for sufficient disclosure requirements for installers and home sellers before the sale when consumer decision are made.

Respectfully submitted,

POLYISOCYANURATE INSULATION
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