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Secretary
Federal Trade Commission
600 Pennsylvania Ave., NW
Room H-159
Washington, DC 20580

August 25, 2003

Reference: Proposed Rule Language – 16CFR Part 460, Labeling and Advertising
of Home Insulation

Dear Commission,

This letter is in response to a published invitation to comment on new “Proposed Rule Language” for 16CFR Part 460. Responses to some of the questions the Commission has asked are presented below.

Questions:

(1) On the use of ASTM C 1303:

ASTM C 1303 should be used to determine the time-average thermal resistance of homogeneous, unfaced, rigid, closed-cell polyurethane, polyisocyanurate, and extruded polystyrene insulations, and any other plastic insulations that use a blowing agent other than air. The scientific basis for ASTM C 1303, which is a slicing and scaling technique, has been established for decades. The fact that it is a slicing and a scaling technique makes its use to determine long-term thermal resistance for products of different thicknesses from measurements of the apparent thermal conductivity of thin specimens appropriate. Such is the essence of the technique. In addition to requiring the use of ASTM C 1303 to determine the Long-Term Average R Value, the Commission should specify the period of time for which the number is to be reported. The time period, of course, should be the anticipated life of the structure containing the insulation. A life span of 40 years is suggested for the calculation of the Long Term Thermal Resistance (LTTR). The consumer purchases LTTR not initial values or R-values at age 180 days.

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The cost of C 1303 could be 10 to 15 times the cost of a single R-value measurement. This is because of specimen preparation and the fact that many R-value or apparent thermal conductivity measurements are required to evaluate the LTTR of a product. The evaluation, however, need only be done once for a specific product design. A product in this case means a specific polymer formulation, specific blowing agent, and specific processing conditions.

ASTM C 518 is not adequate for the determination of the long-term thermal resistance of extruded polystyrene thermal insulation. The aging time is not long enough for products of thicknesses greater than about one inch. C 518 lacks specific language that requires that the aged material be the same as the tested material.

ASTM C 1029 is not adequate for determining the long-term thermal resistance of spray-applied polyurethane thermal insulation. Like C 518, this standard lacks specific controls on aging and testing.

ASTM C 591 for unfaced polyisocyanurate thermal insulation is not adequate for the determination of the long-term thermal resistance of these products. This standard does require aging and testing of the same specimen, but the time period for aging is not sufficient.

ASTM C1289 is not adequate for determining the long-term thermal resistance of polyisocyanurate insulation with permeable facers. ASTM C1303 should be used for determining the long-term thermal resistance of polyisocyanurate insulation with permeable facers when it is approved for this type of insulation. Manufacturers using ASTM C1289 for insulations with gas impermeable facers must provide technical data verifying the long-term thermal performance.

Twenty years of very expensive government and industrial research have been done to provide a method for evaluation of long-term thermal performance of closed-cell polymeric insulations containing a blowing agent other than air. The consumer is entitled to the benefit of this research.

(2) On the use of ATM C 1149

The term "settled density" is inappropriate for "self-supported spray-applied cellulose insulation as defined by C 1149. C 1149 is appropriate for characterizing the thermal resistance of self-supported spray-applied cellulose insulation.

The Commission is strangely silent on the use of the ASTM consensus standard C 1497-01, "Standard Specification for Cellulose Fiber Stabilized Thermal Insulation". The Commission does acknowledge the existence of "stabilized cellulose", § 460.5 (a) (3).

The proposed wording should direct the use of ASTM C 1497 for the determination of the R-Value for stabilized cellulose insulation.

(3) Coverage Charts

The specification of a minimum number of R values that must be included in a coverage chart is appropriate. There should not be a limitation of the total number of R-values that are included on the coverage chart. This requirement has little or no financial impact on a manufacturer.

The requirement that manufacturers provide initial installed thickness in addition to the information already required is appropriate. The proposed language should be clear that the initial installed thickness does not change the requirement that the correct mass of insulation (minimum pounds per square foot) be installed to insure at least a minimum settled thickness.

The requirement that ASTM C 1374-97 be used to determine initial installed thickness is not appropriate. A result from C 1374 depends on machine settings for a specific product as noted in § 460.12 (b) (2). There is no assurance that results from C 1374 will be consistent with the existing procedure for determining the settled density and R-value of loose-fill cellulose insulation. The consumer will not be served by confusion that arises from having two **required** procedures for determining insulation thickness. The initial installed thickness is a recommendation to the installer by the manufacturer.

Manufacturers should be directed to provide initial installed recommendations that are consistent with results obtained for settled density. C 1374 is not a settled density test. The results from C 1374 provide a density that may or may not be consistent with the required settled density test in the case of loose-fill cellulose.

The use of C 1374 should not excuse the loose-fill mineral fiber industry from completing a long overdue method for determining the settled density of fiberglass and rock wool insulations. Responsible data have been published showing that settling occurs after installation for some insulation products.

The proposed language should require an insulation manufacturer to publish recommended initial installed thicknesses that are consistent with the settled density for the product.

The proposed requirement that manufacturers provide machine settings for each R value on a coverage chart imposes a severe financial burden on small manufacturers. Significant capital investment in installation equipment will be required. The cost of obtaining the data needed for the construction of a coverage chart could very well double. The cost of this requirement will be the same for small and large companies. The impact will be felt by the small companies.

Comment on § 460.5 (5) (b) Single Sheet Systems of Aluminum Foil

The requirement as proposed is overly restrictive since there are only four thicknesses in the ASHRAE Handbook of Fundamentals for each heat flow direction. These are air spaces widths of 0.5, 0.75, 1.5, and 3.5 inches. This denies the body of N.B.S. data used to obtain the four examples in the ASHRAE Handbook of Fundamentals and the footnotes to the data table which states that "interpolation and moderate extrapolation are permitted".

Suggestion:

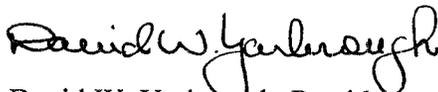
Add the following at the end of § 460.5 (5) (c)

Interpolation and moderate extrapolation is permitted for the cited conditions as indicated in the footnotes to the table.

We appreciate the opportunity to submit comments on this very important Rule.

Sincerely,


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David W. Yarbrough, President
R&D Services, Inc.