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To: Secretary, Federal Trade Commission

Subject: 16 CFR Part 460 – Labelling and Advertising of Home Insulation

Comments to Proposed Revisions:

II. Overview of the Rule

A: Products Covered

It is stated that the rule doesn't cover insulation for use in commercial and industrial buildings.

In the discussion it is argued that decisions in this field are made by professional architects and engineers and therefore the benefit of extending the rule to commercial and industrial buildings will be limited. This is correct, but doesn't cover all aspects. As specifications are not written in a uniform way R values are not directly comparable from one specification to another one, even professionals will have trouble assessing if the label R value is the production mean or something else. Extending the rule to these products will force the specification writers to give a uniform R value declaration. The additional compliance burden for the industry cannot be a real issue. No manufacturer can survive economically without a production control scheme; he will either give a false declaration or throw money away.

B: 1. Performance of Insulations in Actual Use

Many factors influence the performance in actual use, what this clause addresses is the reduction in R - value caused by air movements in porous insulation, also referred to as convection. Convection increases with permeability, temperature difference and insulation thickness. In cold climates this can be a substantial reduction of the R value. The discussion states conventional R value as a fair comparison of product R values. This is not quite correct, in cold climates and thick insulation, the very permeable insulation may lose half of its R value, while the less permeable is not affected. Also as stated in the discussion the physics behind convection can be presented as being very complex. On the other hand it can be simplified by setting a permeability limit on the safe side, by that it can be reduced to marking the product with a warning, "Do not use below x °F". This cut off temperature can be calculated by a simple equation or measured according to ASTM practise.

C: Disclosing R – Values That Account for Factors Affecting R value

1. Aging

The current Rule text requires R – value test to be performed on specimens that "fully reflects the effect of aging on the products R – value".

Nobody can disagree with this statement, but how to implement it is difficult, as the time to a stable R – value may vary from few years to many years.

To define the tests and procedures it is necessary to specify what is needed. Home insulation is normally installed in such a way that it cannot be replaced without major dismantling and this means that it has to function for the entire

life time of the building. Due to the shape of the R – value versus time curve the assessment of the R – value can be simplified to a safe value as the R – value at the mid life time of the product. This implies that we need to extrapolate to a value at about 20 years.

In this perspective conditioning for 180 days at near ambient or 90 days at 140 °F is hardly convincing as indicator for the 20 year value. ASTM C 1303 may not be perfect but certainly better than the other options, as C 1303 has the possibility to extrapolate to a 20 year value.

D: Other Testing Requirements

3. Tolerance

The proposed amendment to section 460.8 of the Rule to require that the mean R value of sampled specimens of a production lot meet or exceed the R – value shown in the label is certainly a step in the right direction.

The existing Rule is interpreted by manufacturers as allowing the production to be run with a mean R – value equal to labelled R – value. The result of this practise is that 50% of what is delivered to the market is equal or better than labelled, while the rest is below labelled R – value.

The proposed amendment will raise the fraction of what is at labelled R – value or better to approximately 75% of what is put on the market and approximately 25% will be below labelled R – value.

What fractile of products placed on the market fulfil labelled R – value is a political issue, in my opinion it would be reasonable to ask for at least 90% of the production is equal or better than labelled R - value.

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