

BOCA Evaluation Services, Inc.

4051 West Flossmoor Road Country Club Hills, IL 60478-5795

Telephone: 708/799-2305 Facsimile: 708/799-0310 e-mail: boca@aecnet.com

September 17, 1996

Mr. D.L. Nickerson P.E. President, CBIS P.O. Box 1000 Freight House Road West Brookfield, MA 01585-1000

RE: Scrap Expanded Polystyrene Insulation

Dear Mr. Nickerson:

This letter is in response to your inquiry letter dated August 23, 1996 concerning the use of scrap loose fill foam plastic insulation. You had stated in your letter that scrap is being used to fill masonry units. You asked in your letter how this practice would be evaluated by BOCA.

Recycled foam plastic material can be used as an insulating material if the foam plastic material has been tested in accordance with ASTM E84 for flame spread and smoke developed rating, is separated from the interior with a thermal barrier, and is labeled by a third party agency. The flame spread and smoke developed rating shall be less than 75 and 450, respectively, as required by Section 2603.0. I have enclosed Sections 2603.2 and 2603.3 for your use. The foam plastic material shall be separated from the interior by a thermal barrier or a minimum of 1 inch masonry or concrete, as described in Section 2603.4 and 2603.4.1.3. Current formal interpretation 20/1319/82 also verifies this position by stating foam plastic insulation used with masonry cavity walls need to comply with the flame spread and smoke developed rating and also be labeled by a third party agency.

After reviewing your literature, I noted that your product includes a masonry unit lined with foam plastic material. We have evaluated a similar product through BOCA Evaluation Services, Inc. Research Report #89-67. This report evaluates a masonry unit as a modular formwork which is very similar to your own product. The foam plastic lining was evaluated as a foam plastic material in accordance with Section 2603.0 of the BOCA National Building Code. A similar evaluation of your product would also be done.

As far as recycled foam plastic materials, we have evaluated a recycled foam plastic board. Research Report #90-78 has evaluated a recycled foam plastic board (copy enclosed). Note that the evaluation is identical to the evaluation completed for virgin foam plastic boards. As long as the foam plastic complies with the code requirements, it may be approved by a code official in their evaluation. Scrap material taken from various sources does not go through the scrutiny of a third party agency quality control evaluation and there may be inconsistencies in the flame spread and smoke developed ratings of the material. However, if the scrap material was reprocessed, tested in accordance with ASTM E84 and the process monitored by a third party agency, then the material could be accepted as an equivalent to a virgin foam plastic board. Please note, the use of foam plastic scrap materials by themselves without the monitoring of a third party agency, labeling, testing in accordance with ASTM E84 would not provide enough information that may be used by the code official in their approval process and therefore, should not be approved.

A Participating Member in the National Evaluation Service

I hope this information is helpful, and the BOCA Evaluation Services, Inc. packet of information was also helpful. If you should have any questions please contact me at extension #319.

Sincerely,

Heidi H. Horn

Technical Staff

HHH/Ic Enclosure