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**Wisconsin**  
Department of Commerce

Evaluation #

New Product #20089020  
Replaces # 200820-I  
Previously Replaced 200306-I

Safety & Buildings Division  
201 West Washington Avenue  
P.O. Box 2658  
Madison, WI 53701-2658

## Wisconsin Building Products Evaluation

Material

Insulation Panels

Manufacturer

Energy Panel Structures  
PO Box 238  
Graettinger, Iowa 51342

### SCOPE OF EVALUATION

**GENERAL:** This report evaluates Energy Panel Structures, Inc., insulation panels for use where combustible construction is permitted, and as installed as a liner panel where Type 5 construction is required.

The **IBC** requirements below in accordance with the current **Wisconsin Amended ICC Code:**

- **Foam Plastic Core Material:** The Energy-Lok brand insulation panels and liners was evaluated under the foam plastic requirements in accordance with ss. **IBC 2603.1, 2603.2, 2603.3, 2603.4** and **2603.5.2**.
- **Wall and Ceiling Panel:** The Energy-Lok brand insulation panels and liners were evaluated as a insulated wall panel in accordance with ss. **IBC 2603.4.1.2, 2603.4.1.3, 2603.4.1.4,** and **2603.5**.

### DESCRIPTION AND USE

The following insulation panels are included under this approval:

1. **Liner Panels:** Consist of an interior face of 26 gauge galvanized steel, aluminum, or fiberglass reinforced plastic. Laminated with thermosetting adhesive to 5/8-inch thick Blandex wafer board or, 5/8-inch thick plywood (15-minute thermal barrier), laminated to the foam insulation (isocyanurate or polystyrene), with an exterior facing of 0.006-inch or thicker aluminum.
2. **Partition Panels:** Interior partitions having facing combinations of 26 gauge galvanized steel, aluminum, or fiberglass reinforced plastic, laminated to 5/8-inch Blandex or 5/8-inch plywood, with a core of foam insulation.
3. **Exterior Panels:** Interior facing to be the same as in item 1 with exterior facing of 26 gauge galvanized steel or 0.032-inch aluminum.
4. **Ceiling Panels:** To be the same as in item 2 when the building is not sprinklered. If the building is sprinklered, interior facing to be 26 gauge steel, aluminum, or fiberglass reinforced plastic, laminated to 5/8-inch Blandex or 5/8-inch plywood, laminated to foam insulation, and laminated to 0.032-inch aluminum or 26 gauge steel.

## TESTS AND RESULTS

An Underwriters Laboratories, Inc., test report of June 30, 1983, confirmed the 5/8-inch Blandex provides a 15-minute thermal barrier when tested in accord with ASTM E 119. Testing reported in the *Forest Products Journal* in July, 1982, showed no significant differences in the mean performance values for 5/8-inch plywood and the 1/2-inch gypsum wallboard that is recognized in s. **IBC 2603.4** as providing an adequate thermal barrier over foam plastic.

## LIMITATIONS OF APPROVAL

The **IBC** limitations below are in accordance with the current **Wisconsin Amended IBC 2006 Code**:

- **Combustible Construction:** The Energy-Lok brand exterior insulation panels are allowed for installation in accordance with s. **IBC 602.1** and **Table 602**.
- **Liner Panels:** The Energy-Lok brand insulation liner panels are allowed for installation in accordance with s. **IBC 2603.4.1.2, 2603.4.1.3, 2603.4.1.4** and **2603.5**.
- **Partition Panels:** The Energy-Lok brand insulation liner panels are allowed for installation in accordance with s. **IBC 602.4.6** and **Table 601**.
- **Exterior Walls:** The Energy-Lok brand exterior insulation panels are allowed for installation in accordance with s. **IBC 2603.4.1.2, 2603.4.1.3, 2603.4.1.4** and **2603.5**.

Insulation panels other than those listed above in the **DESCRIPTION AND USE** section **are not** included in this approval.

In all applications, all edges of Blandex or plywood must be backed with a 4-inch strip of 5/8-inch Blandex or 5/8-inch plywood so that direct flame impingement on foam plastic at edge joints will not occur.

**The type of core insulation must be specified on plans submitted to the department for approval.**

The structural performance and thermal transmission properties of the panels are outside the scope of this evaluation and are subject to specific evaluation and approval (submitted signed and sealed calculations), by the building plan reviewer.

This approval will be valid through December 31, 2013, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The product approval is applicable to projects approved under the current edition of the applicable codes. This approval may be void for project approvals made under future applicable editions. The Wisconsin Building Product Evaluation number must be provided when plans that include this product are submitted for review.

## DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Revision Date:

Approval Date: January 30, 2009 By: \_\_\_\_\_

Lee E. Finley, Jr.  
Product & Material Review  
Integrated Services Bureau