



Department of Commerce

Safety & Buildings Division

201 West Washington Avenue

P.O. Box 2658

Madison, WI 53701-2658

Evaluation #

200306-I Revised
(Replaces 980008-I)

Wisconsin Building Products Evaluation

Material

Insulation Panels

Manufacturer

Energy Panel Structures, Inc.
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 liner panels where Type 5 construction is required.

The cited **IBC** requirements below are in accordance with of the current **Wisconsin Amended ICC 2000 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 2000 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** and **footnote e**.
- **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, 2008, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. 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: October 6, 2003

Approval Date: June 10, 2003 By: _____

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