Code Compliance Research Report CCRR-0159

Subject to Renewal: 01/13/14
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Mitsubishi Plastics Composites America, Inc.
401 Volvo Parkway
Chesapeake, Virginia 23320
(757) 382-5768

www.alpolic-usa.com

1. Subject

ALPOLIC® ***fr/LT*** **Interior Composite Wall Panel**

2. Research Scope

2.1 Building Codes:

2006 International Building Code (IBC)

2009 International Building Code (IBC)

2.2 Use:

Interior Non-Structural Panels

2.3 Properties:

Physical Properties

Structural Performance

Surface Burning

3. Description

3.1 *General – ALPOLIC® fr/LT* Interior Composite Wall Panels are used as non-structural sheathing on the interior face of conventional framing.

3.2 *ALPOLIC® fr/LT* Interior Composite Wall Panels consist of a mineral filled polyethylene fire-resistive core with a nominal 0.25 mm (0.01 inch) aluminum skin bonded to each face. Panels are manufactured in 3mm (0.118 inch) thickness with maximum widths of 1.57 meter (62 inches) and maximum lengths of 6.7 meters (22 feet).

4. Performance

4.1 Maximum allowable transverse load in accordance with the requirements of IBC Section 1607.13 is 5 psf, when installed per the manufacturer's installation instructions.

4.2 *ALPOLIC® fr/LT* Interior Composite Wall Panels are a Class A finish established in accordance with ASTM E 84 as required by IBC Section 803.1 and may be used for interior wall surfaces where a Class A wall finish is required.

5. Installation

Installation shall be in accordance with the applicable code, manufacturer's installation instructions and this report. Where differences occur between this report and the manufacturer's installation instructions, this report shall govern.

5.1 *ALPOLIC® fr/LT* Interior Composite Wall Panels can be installed with the panel length oriented horizontally or vertically with continuous support provided throughout each long edge.

5.2 *ALPOLIC® fr/LT* Interior Composite Wall Panels are continuous edge attached to support framing with #10 x 3/4" long hex-head, self-tapping screws, 1 inch from each end and spaced 18 inches on center.

5.3 Aluminum I-Shaped panel stiffeners spaced 60.9 cm (24 inches) on center are adhered to the back face of the panel. Stiffener extrusions are attached at each end to support framing with (2) 1/4" x 1 inch long self-tapping, hex-head screws.

6. Supporting Evidence

6.1 Manufacturer's drawings and installation instructions.

6.2 Reports of testing and engineering analysis in accordance with the following codes and standards:

6.2.1 ICC-ES *Acceptance Criteria for Metal Composite Material* (AC25), effective November 1, 2010.

6.2.2 Transverse load tests in accordance with ASTM E 72-02, *Standard Test Method of Conducting Strength Tests of Panels for Building Construction.*

6.2.3 Fire testing in accordance with ASTM E 84, *Standard Test Method for Surface Burning Characteristics of Building Materials*.

6.2.4 Testing for stability of installed panels at temperatures of 200°F for a minimum duration of 30 minutes in accordance with Section 803.3 and Section 803.10 of the 2006 and 2009 IBC respectively.

6.3 Quality control manual in compliance with ICC-ES, *Acceptance Criteria for Quality Control System Documentation* (AC10) Approved July, 2011.

7. Conditions of Use

The *ALPOLIC® fr/LT* Interior Composite Wall Panels identified in this report are deemed to comply with the referenced building codes for the use indicated subject to the following conditions.

7.1 Structural performance of panels is not reliant on adhesion of factory installed panel stiffeners. Therefore, special inspection of adhesive application is not required.

7.2 The design of the MCM system framing members and connections must be submitted to and approved by the code official for each project.

7.3 Evaluation for the use of *ALPOLIC® fr/LT* Interior Composite Wall Panels as a component of a fire-resistive rated wall assembly is not within the scope of this report.

7.4 The *ALPOLIC® fr/LT* Interior Composite Wall Panels identified in this report are manufactured in Chesapeake, Virginia, USA or Ueda, Nagano Prefecture, Japan under an approved quality control system with inspections by Southwest Research Institute (IAS AA-665).

8. Identification

ALPOLIC® fr/LT Interior Composite Wall Panels produced in accordance with this report shall be identified with labeling that includes the following information:

8.1 The manufacturers name

8.2 The product name

8.3 The name or registered mark of the independent inspection agency, Southwest Research Institute (IAS AA-665).

8.4 The ATI-ES Code Compliance Research Report mark and number (CCRR-0159)

9. Code Compliance Research Report Use

9.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

9.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product or manufacturer by Architectural Testing.

9.3 Reference to the Architectural Testing internet web site address at www.ati-es.com is recommended to ascertain the current version and status of this report.

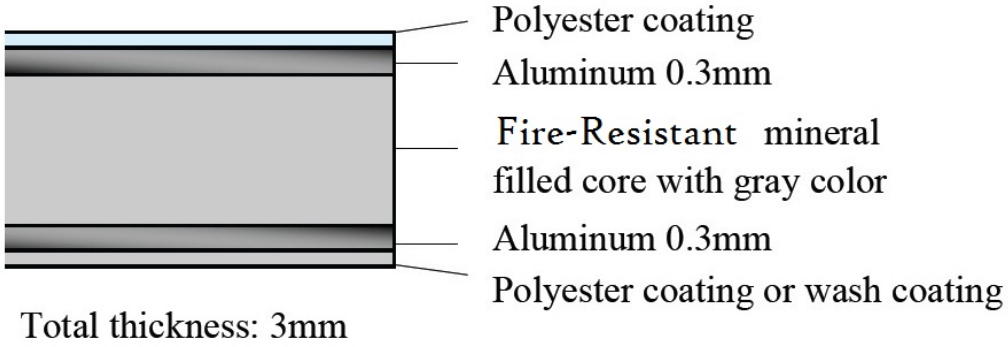

Figure 1 – Typ. Panel Composition
(3 mm panel shown)

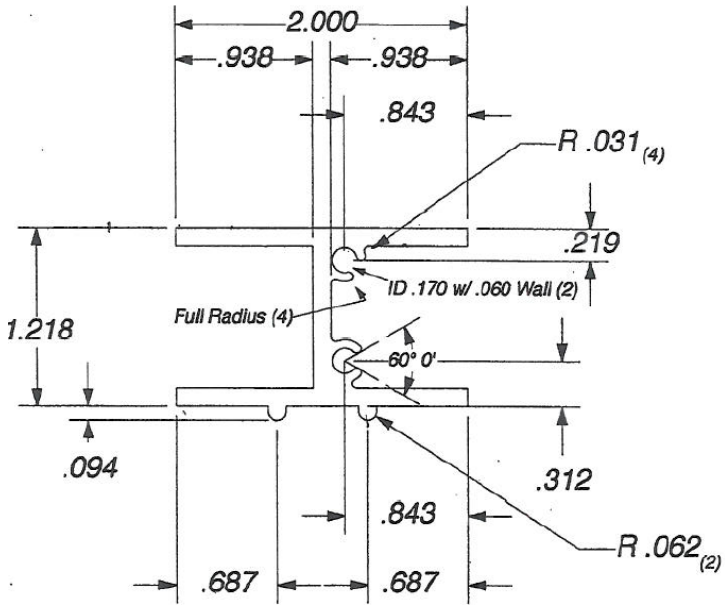

Figure 2 – Aluminum Stiffener

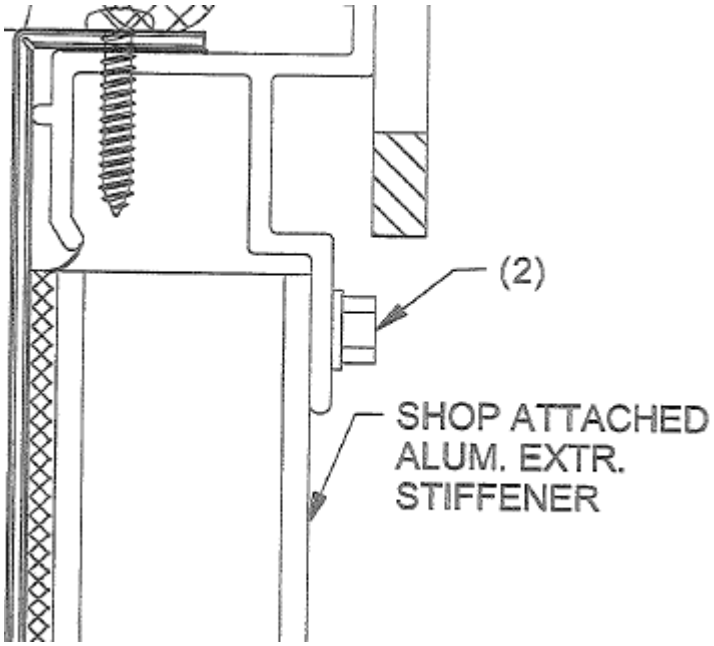

Figure 3 - Panel Connection at Support Rail