

## **TECHNICAL MEMORANDUM**

January 2, 2014

## **RE:** Fire Rating Classification for Fire Rated core with custom HPL face

To meet ASTM E-84, BOCA, ICBO, SBBCI and NFPA requirements, Marlite Fire Rated HPL panels are comprised of Class A components, as requested by a specifier to meet, or exceed, restrictions where fire retardant surface materials are required.

Our panel system consists of the following series of three basic layers.

1 The Panel Face

See HPL Manufacturers Fire Rating documentation

2 <u>The Panel Substrate</u>

The substrate is an ASTM E-84 rated Class A wood fiber product (MDF) that measures between .220" and 1.250".

3 <u>The Panel Backer</u>

See item #3 on next page of this document

Strict interpretation of the ASTM E-84 fire rating applies only to the surface burning characteristics of the panel and not to those materials that make up the balance of the panel. Fire rated panels and trim are intended to provide a Class A fire rated application only and are not intended to be used to create fire rated demising wall construction. In any case, as there are often questions raised concerning the flame spread and categorizing of each individual layer of the system, I will address each layer in turn.

Item 1 - The Panel Face

Obtain fire rating documentation from the HPL manufacturer.

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Item 2 - The Panel Substrate

Marlite's Fire Rated Panel Systems, use an ASTM E-84, Class A rated wood fiber substrate (MDF) that carries a rating as follows;

Tested by Underwriters Laboratories, Inc.Flame spread20Smoke Developed175Tested by Omega Point Laboratories, Inc.Flame spread20Smoke Developed50

The ASTM E-84 fire rating for a Class A material requires a flame spread of between 0 and 25 along with a smoke development maximum of 450.

Item 3 - The Panel Backer

According to all current U.S. building fire rating codes the Class A fire rating is pertinent only to the surface burning characteristics of the applied materials, therefore the panel backer is not subject to scrutiny within a Class A applied material rating. That being said, the panel backer would still fall within the exemption outlined for finishes less than 1/28" (.0357") thickness that do not contribute to or pose an unusual additional hazard.

Sincerely,

Customer Service Dover, OH