

November 26, 2018

Mr. Moffett Tharpe
Easi-Set Worldwide
5119 Catlett Road
P.O. Box 400
Midland, VA 22728

RE: Use of Grace Construction Products Monokote Z3306 Thermal Barrier Material at the Marriott Residence Inn, Providence, RI Project.
JENSEN HUGHES Project No. 1AJP00255.000

Dear Mr. Tharpe:

JENSEN HUGHES' August 17, 2018 engineering analysis letter provided the technical justification for the compliance of the SlenderWall Exterior Wall Cladding panel with NFPA 285 when the wall panel is finished with a single layer of 5/8-inch thick Type X gypsum wallboard on the interior face. In a number of locations on the project site, the SlenderWall panels are to be located adjacent to chevron framing and installed around an exterior column, as shown in Figure 1. In these locations, access is limited making it very difficult to install the interior gypsum wallboard. The project drawings depicted the application of a thermal barrier material over the CC SPF in lieu of the gypsum wallboard attached directly to the SlenderWall steel wall studs.

The JENSEN HUGHES engineering analysis letter clarified that the application of a 15-minute thermal barrier material over the Demilec spray polyurethane foam (SPF) would not maintain the compliance of the wall assembly with NFPA 285.

The project team has proposed applying the Grace Construction Products (GCP) Monokote Z3306 thermal barrier material at a minimum increased thickness of 1 1/8-inches in these limited access areas in lieu of the tested single layer of 5/8-inch thick gypsum wallboard.

JENSEN HUGHES has reviewed data sheets for the GCP Monokote Z3306 thermal barrier product. It is our engineering opinion that the application of minimum 1 1/8-inch thickness of the Monokote Z3306 thermal barrier material, applied per the manufacturer's installation instructions, over the Demilec SPF will provide equivalent protection as the single layer of gypsum wallboard applied over the foam in the tested and analyzed exterior wall panels.

A proprietary NFPA 285 test conducted by a rigid foam plastic insulation manufacturer and witnessed by JENSEN HUGHES personnel incorporated the Monokote Z3306 thermal barrier product applied over an SPF product sprayed into the test wall cavities. No interior gypsum wallboard was installed on the test assembly. The results of the testing indicated that the Monokote Z3306 material remained in-place protecting the SPF and the wall assembly met the conditions of acceptance of NFPA 285.

When the Monokote Z3306 thermal barrier material application interfaces with adjacent wall panels protected with the gypsum wallboard, the Monokote Z3306 must be sprayed such that is applied into any SPF/gypsum wallboard gaps a minimum of 2-inches and completely fill the gap. The intent of this application detail is to ensure no SPF will be or become exposed during a fire. Spraying the Monokote Z3306 into the air gap and under the GWB will ensure the continuous protection layer/thermal barrier is provided across the interior panel surface.

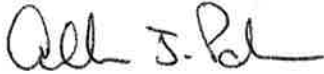
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We trust this engineering analysis letter will be acceptable to the Authority Having Jurisdiction (AHJ) for this project. Should you have any questions, please feel free to contact us at 401-736-8992.

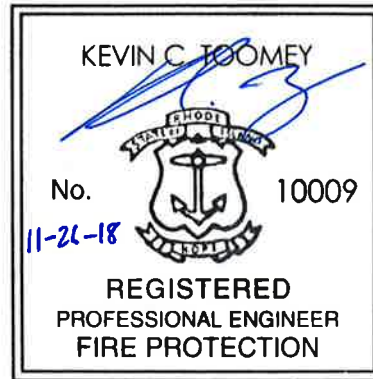
Prepared By:



Arthur J. Parker
Sr. Fire Protection Engineer



Kevin Toomey, P.E.
Director – Rhode Island



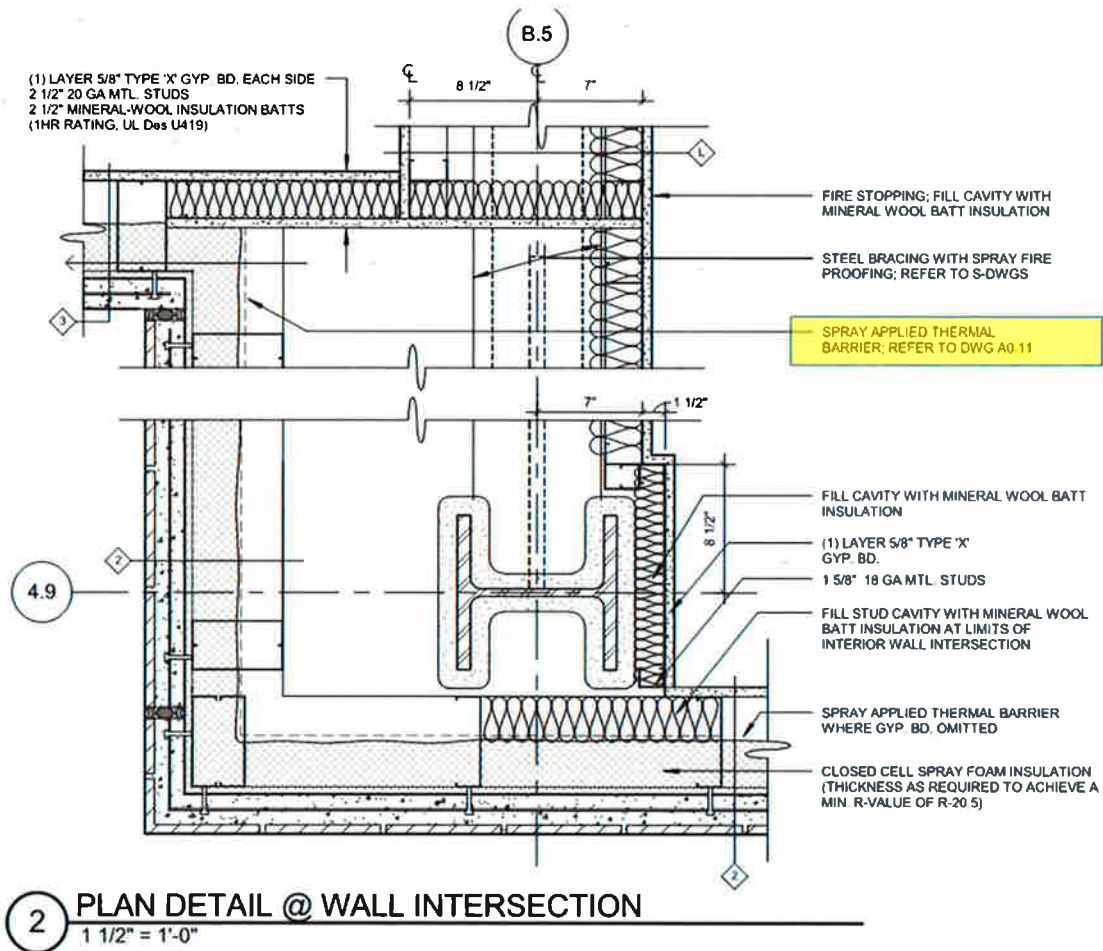


Figure 1. SlenderWall Exterior Wall Panel System installation at building corner with proposed thermal barrier material