3M Fire Protection Products

ENGINEERING JUDGMENT FOR: 01/05/15

Michael Palmacci

General Insulation

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Project: Maine Med Bean 2	Contractor: Roland's Drywall
Fire Stopping Category: Joints / Head of Wall	Hourly Rating Requested/ Type: 1 and 2 Hour / F
Joint Type: Construction	Maximum Joint Width: 1 in. to Beam/2 in. to Deck
Floor Assembly: Fluted Steel Deck/Concrete Floor	Wall Assembly: Gypsum Wallboard Assembly
Type of Movement: Dynamic	

Special Conditions: Field condition where gypsum wall runs parallel to the flutes of a fluted deck that has an I-Beam with spray-applied fire-resistive material (SFRM). One side of wall terminates at the underside of the beam with SFRM. The other side of the wall terminates to underside of fluted deck.

Application Details: To Firestop this application, install in accordance with UL Systems HW-D-0465 and HW-D-0205 with the following modifications and clarifications:

- 1. Install a minimum 4 pcf mineral wool which has been compressed a min. 33% into the joint.
 - On the side of the assembly being firestopped per UL System HW-D-0465, mineral wool is to reside between top of gypsum and SFRM on underside of I-Beam.
 - On the side of the assembly being firestopped per UL System HW-D-0205, mineral wool is to reside between top of gypsum and underside of fluted deck.
 - Mineral wool to be installed full depth of the joint on both sides of the assembly.
- 2. Install a 1/8 wet thickness of FireDam Spray 200 over the mineral wool installed on both sides of the assembly.
 - FireDam Spray 200 to overlap minimum ½ in. onto all surrounding substrates; when SFRM is present, FireDam Spray 200 must overlap minimum 1 in. onto the SFRM.

Note: Movement capabilities in this scenario are reduced to 19% compression and extension per UL System HW-D-0205.

3M Fire Barrier Material: FireDam Spray 200

Based On: HW-D-0465 and HW-D-0205

This Engineering Judgment (EJ) is based upon the sole and exclusive use of 3M brand Fire Protection Products as described within. Modification of any of the parameters of this EJ, including, without limitation, the use of non-3M brand Fire Protection Products, shall render this EJ null and void. This fire-resistive joint design is expected to achieve the hourly rating indicated above. This engineering judgment is based on performance results obtained in testing with independent laboratories and / or internal 3M fire tests, which have been tested in accordance to ASTM E 1966 (UL 2079).

Engineering Judgment Prepared By:



Paul Fannin Technical Service Engineer Reviewed By:



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