## **3M** Fire Protection Products

ENGINEERING JUDGMENT FOR: 01/05/15

Michael Palmacci

**General Insulation** 

378 Commercial Street

Malden, MA 02148

Fax: (781) 321-5350

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: 2 in.
Floor Assembly: Fluted Steel Deck/Concrete Floor	Wall Assembly: Gypsum Wallboard Assembly
Type of Movement: Dynamic	

**Special Conditions:** Field condition like UL System HW-D-0384 with deviation of max 8 in. joint between the wall and beam with spray applied fire resistive material (SFRM). Other side of wall runs perpendicular to flutes like HW-D-0111.

**Application Details:** To firestop this application, install in accordance with UL System HW-D-0384/HW-D-0111 with the following modifications/clarifications:

- Install a minimum 20 ga. steel cover plate to the bottom side of the beam to reduce the joint width to max 6 in. Steel cover plate to overlap onto beam a min. of 3 in. Cover plate to be mechanically fastened to beam using steel fasteners with minimum 75 lb pull out strength in. conjunction with 1-1/4 in. steel washers every 4 in. on center.
- 2. The movement capabilities for this application are reduced to +/- 13%.

## 3M Fire Barrier Material: FireDam Spray 200, FireDam 150+ Sealant

Based On: HW-D-0384, HW-D-0111

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).



## **3M Building and Commercial Services Division**