

# How to Apply



# 3M™ Interam™ Endothermic Mat

Step-by-step instructions:



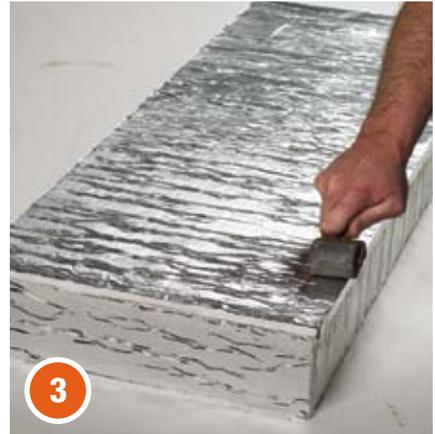
1

Cut the 3M™ Interam™ Endothermic Mat to fit the sides, top, bottom and back of the utility box. Apply 3M™ Super 77 Multipurpose Adhesive to the box surface and each piece of mat. Let the adhesive dry on the box and mat surface for approximately 1 minute. See UL System W-L-7168 for overlaps and complete system details.



2

Apply each piece of the mat to the box surfaces.



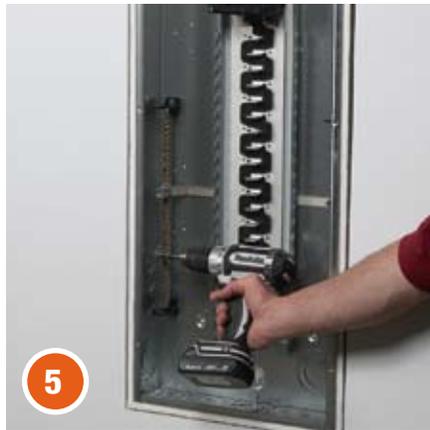
3

Use a roller to apply the mat to the box. This helps adhere the mat to the box surfaces.



4

All corners and butted seams in the mat are to be covered with minimum 2 mil aluminum foil tape.



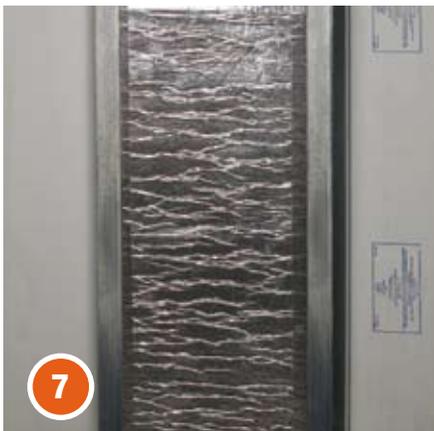
5

Insert the utility box into the opening so the box is flush with the surface of the wall. Secure the steel box to the steel studs per the utility box manufacturer's installation instructions.



6

The bottom or top of the steel box may be penetrated by up to two maximum 1 1/2" metallic pipes or tubes.



7

View of the protected box from the backside prior to installing the gypsum wallboard.



8

Apply a nominal 1/4" diameter bead of sealant at the mat and gypsum interface.



9

Apply the utility box cover with supplied screws. Completed system.



# UL Listed System

- 1 Wall Assembly** – The 1 or 2 hour fire rated framed gypsum board wall assembly shall be constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

  - A. **Studs** – Wall framing shall consist of steel channel studs. Steel studs to be min 3 5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC. An additional framing member shall be used to form a shelf within the wall cavity to support the steel box (Item 2) and mat fill material (Item 3). The framed opening is to be 1 in. (25 mm) wider than the width of the steel box.
  - B. **Gypsum Board\*** – The gypsum board type, thickness, number of layers and orientation shall be as specified in the individual Wall and Partition Design. Size of cutout made to accommodate steel box (Item 2) is to be 1 in. (25 mm) wider and 1 in. (25 mm) higher than the width and height of the steel box.

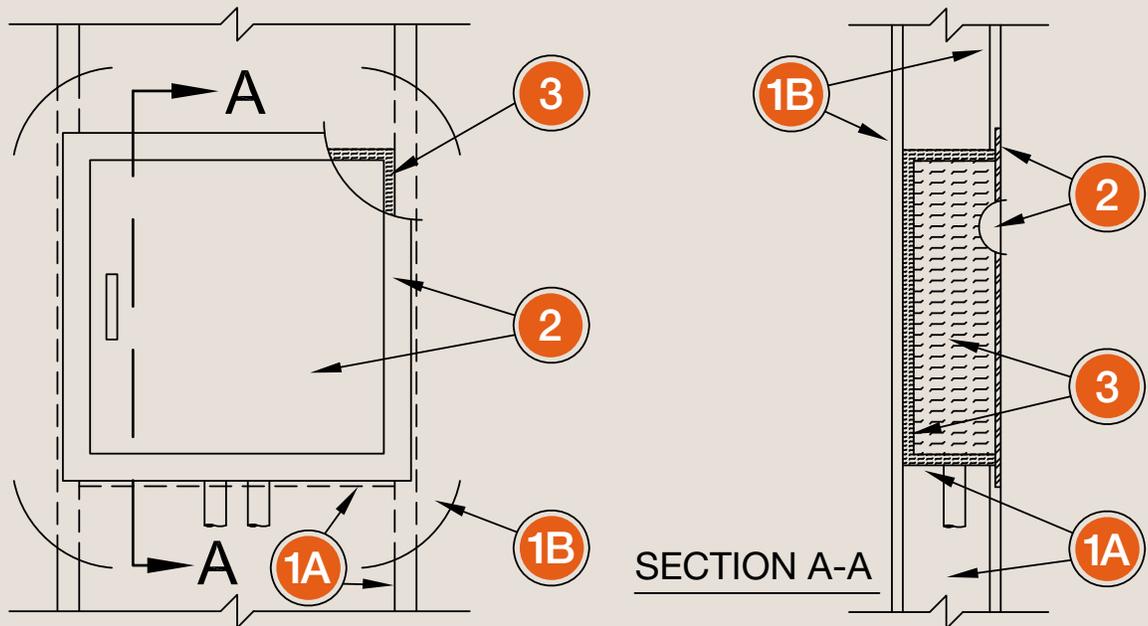
**The hourly F and T Ratings of the firestop system are equal to the hourly fire rating of the wall in which the firestop system is installed.**
- 2 Steel Box** – Max 19 in. (483 mm) wide by max 32 in. (813 mm) high by max 3 1/2 in. (89 mm) deep recessed steel utility box with hinged steel door and mounting flange. Steel box secured to steel studs with steel screws after application of mat material (Item 3) on exterior surfaces of steel box. Bottom and/or top of steel box may be penetrated by up to two max 1 1/2 in. (38 mm) diameter copper, steel or iron pipes or tubes. Open pipes or tubes which terminate within the box shall be sealed with caulk (Item 4) or plugged with a ball of putty (Item 5).
- 3 Fill, Void or Cavity Materials\* – Mat** – Nominal 0.4 in. (10 mm) thick aluminum foil faced endothermic mat supplied in 24 in. wide rolls. Individual pieces of mat cut to cover four sides and back of box and laminated to box with high-strength, fast, contact-type adhesive (foil face exposed). The mat sections on the top and bottom of the box shall be cut to overlap the mat sections on the sides of the box. The mat section on the back of the box shall be cut to overlap the edge of the mat sections on the top, bottom and vertical sides of box. Circular cutouts made in the mat to accommodate the pipes or tubes to be 1/4 to 1/2 in. (6 to 13 mm) larger than outside diameter of pipe or tube. All corners and butted seams in the mat are to be covered with min 2 mil aluminum foil tape.

**3M COMPANY** – Type E-54A or E-5A-4 Mat
- 4 Fill, Void or Cavity Materials\* – Caulk or Sealant** – (Not Shown) – Nom 1/4 in. (6 mm) diameter bead of caulk applied to the edge of the mat material around the perimeter of the box mounting flange. Additional caulk fill material shall be used to completely fill each circular cutout made in the mat material to accommodate a pipe or tube. The end of each open pipe or tube which terminates within the box shall be sealed with a min. 1/2 in. (13 mm) depth of caulk.

**3M COMPANY** – Type CP 25WB+ Caulk, FB-3000WT Sealant
- 5 Fill, Void or Cavity Materials\* – Putty** – (Not Shown) – As an alternate to the caulk (Item 4), the end of each open pipe or tube which terminates within the box may be sealed with a min 1/2 in. (13 mm) depth of putty fill material.

**3M COMPANY** – Type MP+ Moldable Putty

\*Bearing the UL Classification Mark.



System No.  
**W-L-7168**  
 March 15th, 2007  
 F Ratings - 1 and  
 2 Hr (see Item 1)  
 T Ratings - 1 and  
 2 Hr (see Item 1)



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For complete system details, refer to System W-L-7168  
 System details available at [www.3m.com/firestop](http://www.3m.com/firestop)

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