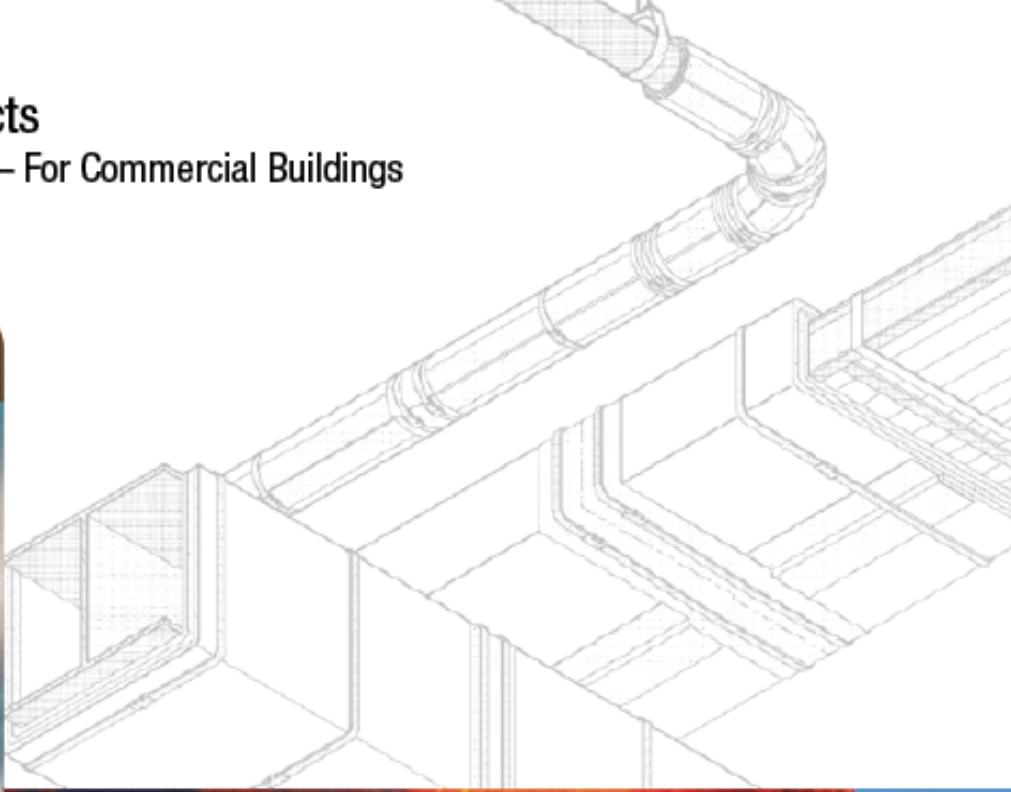


3M Fire Protection Products

3M™ Interam™ Endothermic Mat – For Commercial Buildings



Plan for the worst.
Protect with the best.



Get wrapped up in 3M™ Interam™ Endothermic Mat

3M™ Interam™ Endothermic Mat opens up new opportunities in building design, allowing architects to fulfill the UL mark of certification while enhancing design flexibility. Using advanced endothermic materials, 3M E-Mat helps prevent heat penetration via a chemical reaction, which absorbs heat energy. Its space-saving, conformable construction offers easy installation in a broad range of applications, providing flexible, full envelope protection in critical areas of all types.

Because of its flexibility, architects can use 3M E-Mat to meet fire protection requirements in nearly any area, helping to reduce the need to make revisions to existing plans. This represents a significant cost-saving and time-saving benefit for both builders and architects. With 3M E-Mat, architects can now provide guaranteed fire protection without being locked in to the design constraints of traditional fire-stopping methods.

3M is your fire protection industry leader. Trust our proven innovative technologies to help protect people and property for decades to come.



Tested & Trusted



Fire protection so flexible

you might get carried away.

3M™ Interam™ Endothermic Mat

protection so flexible that you could wrap nearly anything!



3M™ Interam™ Endothermic Mat E-5A-4 is flexible and easy to apply. The advanced endothermic materials contain chemically bound water that is released when exposed to high temperatures. This cools the surrounding materials to significantly retard heat transfer. With this advanced fire-stopping technology and the uniquely conformable construction of 3M™ Interam™ Endothermic Mat E-5A-4, builders can help protect and control virtually any area in commercial construction applications with unprecedented ease.



3M™ Interam™ Endothermic Mat

Flexible Fire Protection Solutions



MEMBRANE PENETRATIONS

Protecting some large membrane penetrations can be a challenge, with putty pads proving insufficient to cover larger areas. 3M E-Mat offers an excellent alternative, providing a fire-tested, code-approved method with the capacity to protect significant spaces containing electrical panels, elevator call boxes, safe deposit boxes and medical gas boxes.



ELECTRICAL CIRCUIT PROTECTION

When a fire occurs, the electrical systems that control critical areas such as control rooms, ventilation, lighting, alarms and elevators must remain operational in a building. With 3M E-Mat, cable raceways, conduit, equipment shrouds and other electrical systems can be protected for up to three hours in intense heat.



STRUCTURAL STEEL PROTECTION

3M™ Interam™ Endothermic Mat E-5A-4 protects structural steel for up to 4 hours. The installation can be done in a wide range of temperature and humidity conditions using simple hand tools. Compare this to cementitious sprays which require complex pumps, a water supply, heated environments, careful surface preparation and masking of the surroundings.

FEATURES

- Heat absorbing
- Non-flame supporting
- Low smoke evolution
- Flexible
- Easily cut to size
- Provides uniform covering
- Easy-to-clean aluminum surface
- Easily installed, requires no surface preparation

APPLICATIONS

- Cable trays
- Fuel lines
- Structural steel
- Cable bundles
- Equipment shrouds
- Support members
- Electrical panels
- Medical gas boxes
- Elevator call boxes



Typical Building Applications

Using 3M™ Interam™ Endothermic Mat



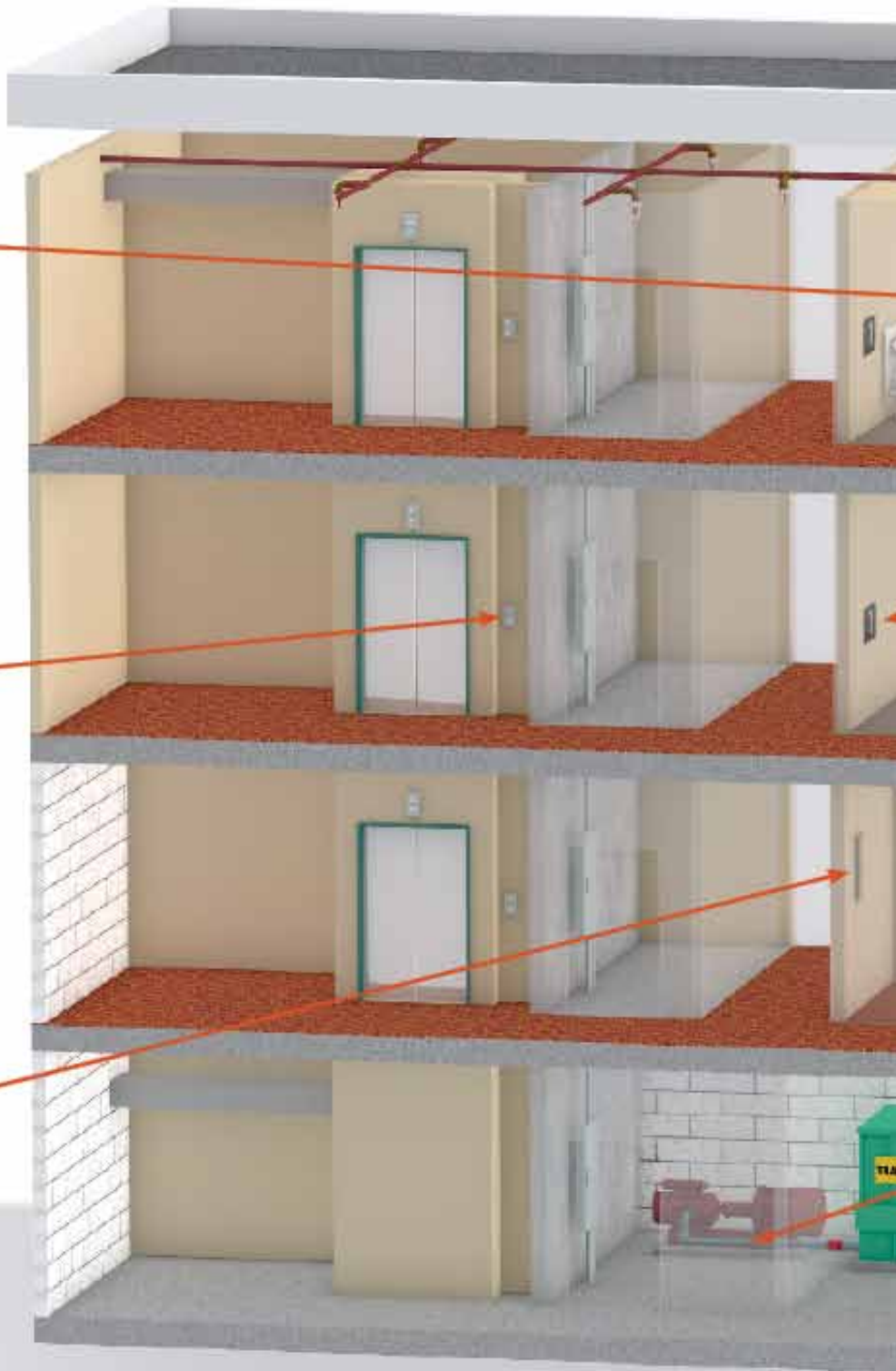
Safe Deposit Box W-L-7190
3M™ Interam™ Endothermic Mat
Product # E-5A-4

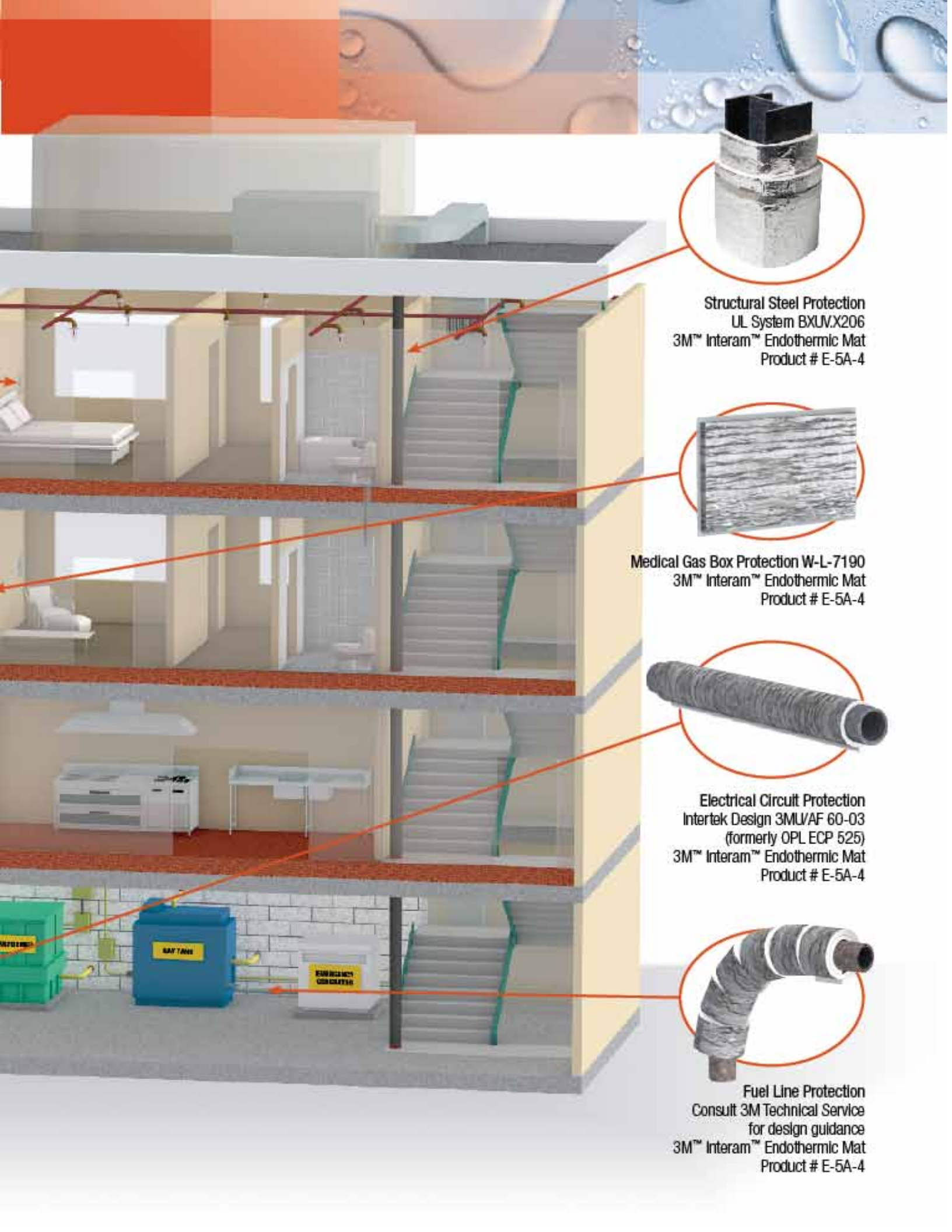


Elevator Call Box W-L-7190
3M™ Interam™ Endothermic Mat
Product # E-5A-4



Electrical Panel W-L-7190
3M™ Interam™ Endothermic Mat
Product # E-5A-4





Structural Steel Protection
UL System BXUVX206
3M™ Interam™ Endothermic Mat
Product # E-5A-4



Medical Gas Box Protection W-L-7190
3M™ Interam™ Endothermic Mat
Product # E-5A-4



Electrical Circuit Protection
Intertek Design 3MU/AF 60-03
(formerly OPL ECP 525)
3M™ Interam™ Endothermic Mat
Product # E-5A-4



Fuel Line Protection
Consult 3M Technical Service
for design guidance
3M™ Interam™ Endothermic Mat
Product # E-5A-4

UL Approved System W-L-7190

- 1 Wall Assembly** – The 1 or 2 hr fire rated framed gypsum board wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 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 or wood studs. Steel studs to be min 6 in. (152 mm) wide and spaced max 24 in. (610 mm) OC. Wood studs to be nom 2 by 6 in. (51 by 152 mm) or larger and spaced max 16 in. (406 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, T, FT, FH and FTH Ratings are equal to the hourly rating of the wall assembly.

- 2 Steel Box** – Min 18 gauge, max 20 in. (508 mm) wide by max 48 in. (1.22 m) high by max 6 in. (152 mm) deep for steel stud walls. Min 18 gauge, max 12 in. (305 mm) wide by max 48 in. (1.22 m) high by max 5-1/2 in. (140 mm) deep for wood stud walls. Box to be recessed 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 one 2 in. (51 mm) diam steel EMT conduit and up to twelve 1 in. (25 mm) max diam installed from the top and one 1 in. (25 mm) and one 3/4 in. (19 mm) diam conduits installed from the bottom of the box. 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 lap over 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 in. to 1/2 in. (6 to 13 mm) larger than outside diam 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
3M FIRE PROTECTION PRODUCTS – Type E-54A or E-5A-4 Mat

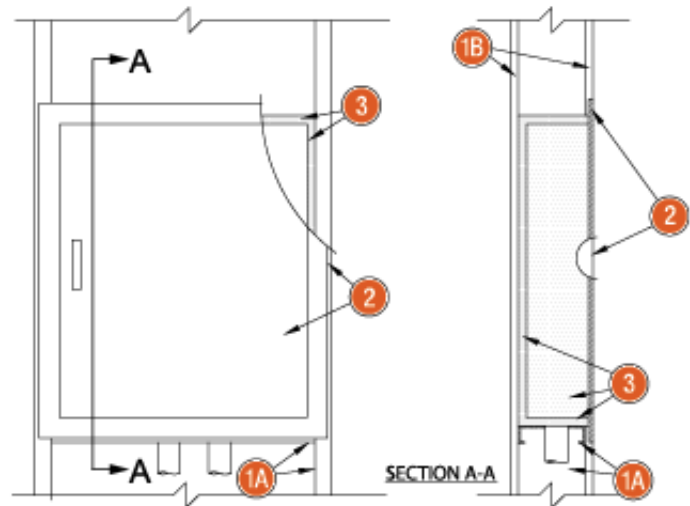
- 4 Fill, Void or Cavity Materials* – Caulk or Sealant – (Not Shown)** – Nom 1/4 in. (6 mm) diam bead of caulk applied to the edge of the mat material around the perimeter of the box mounting flange. Additional caulk fill material shall be used to completely fill each circular cutout made in the mat 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
3M FIRE PROTECTION PRODUCTS – 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
3M FIRE PROTECTION PRODUCTS – Type MP+ Moldable Putty

*Bearing the UL Classification Mark. Reprinted from the Online Certifications Directory with permission from UL © 2013 UL LLC



System No. W-L-7190,
 December 5, 2013

ANSI/UL1479 (ASTM E814)
 F Ratings – 1 and 2 Hr (See Item 1)
 T Ratings – 1 and 2 Hr (See Item 1)

CAN/ULC S115
 F Ratings – 1 and 2 Hr (See Item 1)
 FT Ratings – 1 and 2 Hr (See Item 1)
 FH Ratings – 1 and 2 Hr (See Item 1)
 FTH Ratings – 1 and 2 Hr (See Item 1)

Product Number	Description	Size	Unit	Case	UPC
E-5A-4	Endothermic Mat	24.5" x 20' x 0.4"	Roll	1 Roll/Case	0-51115-16571-4

Additional application materials

Product Number	Description	UPC
FB-3000WT	Water Tight Sealant	516594-3
CP-25WB+	Firestop Caulk	011638-9
MP+	Moldable Putty	516561-0

For CAD drawings and other UL System details, please see our website www.3M.com/firestop or call 1-800-328-1687.

Visit www.3M.com/firestop or call 1-800-328-1687
 for technical information, listed systems, training information and more.



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