

**3M**

Interam<sup>™</sup>

E-5A Series Mat Flexible Wrap for Industrial Fire Protection



# DON'T LEAVE ELECTRICAL AND CONTROL SYSTEMS VULNERABLE.

When a fire occurs, the electrical systems that control critical areas such as control rooms, ventilation, lighting, alarms and elevators must remain operational in order to facilitate a safe and orderly plant shutdown and evacuation. With 3M™ Interam™ Brand E-Mat (Endothermic Mat), cable raceways, conduit, equipment shrouds and other electrical control systems can be protected for up to three hours in intense heat.

3M™ Interam™ Brand E-Mat is significantly more flexible and conformable than traditional rigid panel systems. So it's easier to install on the complex shapes common in electrical systems. Installation is quick and clean, and can be accomplished by a trained crew.

Fire Resistance for Steel Cable Tray*		
.4" E-Mat Layers ASTM E-119 UL 263	Fire Rating ASTM E-1725 UL 1709 UL 263	Fire Rating ASTM E-1529 UL 1709
1		13 minutes
2	1+ hour	28 minutes
4		78 minutes
5	3+ hours	

\* Fire resistance for 4" x 12" (102mm x 35mm) Steel Cable Tray

Based on Omega Proj. 9006-98944

DNV Certificate No: HOU-96-007.

Based on UL File R10125-4, -5, Project 85NK23080

Contact your local 3M Sales Representative for additional information on other steel cable tray ratings.

Test reports available on request. Additional Testing Results

available include: Jet fire test (SINTEF),

Explosion, Acoustical.

Aluminum-faced 3M™ Interam™ Brand E-Mat Flexible Wrap is designed to provide electrical cable trays and conduits with full envelope protection against fire damage or entry of water during an accidental sprinkler discharge.



## IT'S LIKE WRAPPING CRITICAL AREAS IN A WET BLANKET.

During the first crucial minutes of a fire, it's imperative that critical equipment and controls remain protected and operational. That's why 3M™ Interam™ Brand E-Mat Flexible Wrap Systems are such a good choice.



*When exposed to high temperatures, 3M™ Interam™ Brand E-Mat Flexible Wrap releases chemically bound water, cooling the outer surface of the wrap materials and significantly retarding heat transfer.*

Unlike traditional fire proofing products, 3M™ Interam™ Brand E-Mat Flexible Endothermic Wrap offers more than thermal insulation. These advanced endothermic materials contain chemically bound water. In the event of fire, they help prevent heat penetration via a chemical reaction which absorbs heat energy. And because 3M™ Interam™ Brand E-Mat Flexible Wrap provides flexible, full envelope protection for electrical cabling, structural steel and pipelines, you can be assured of protection when and where it's needed most.

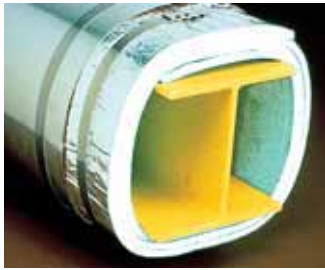


**THE SAFE, SIMPLE WAY TO PROTECT STRUCTURAL STEEL.**



Leaving structural steel exposed to fire can lead to irreparable damage of a facility's superstructure, thus compromising continuity of operations. 3M™ Interam™ Brand E-Mat Flexible Wrap provides an easy solution.

Traditionally, structural steel has been protected with messy, sprayed on materials or encased in concrete. 3M™ Interam™ Brand Endothermic System can reduce the amount of time to install structural steel fireproofing from 25-40 percent. It doesn't spall, crack or chip. It won't corrode steel or other metals. Whether used for retrofit or new construction, the system's flexibility allows it to be installed easily and maintained with virtually no disruption to surrounding areas.



*Multiple layers of 3M™ Interam™ E-Mat Flexible Wrap allow you to tailor the exact amount of fire protection you desire.*

		Fire Resistance for Structural Steel*			
.3" E-Mat Layer(s)	.4" E-Mat Layer(s)	ISO 834 (to 400°C)	Hydrocarbon Fire (to 400°C)	ASTM E-119 UL 263	ASTM E-1529 UL 1709
1		1 hour		1 hour	
2		1.5 hours	1 hour	2 hours	1.5 hours
3		2.5 hours	2 hours	3 hours	2.5 hours
	1		1 hour		1.5 hours
	2		1.5 hours		2 hours
	3		2 hours		2.5 hours
	4		3 hours		4 hours

\* Fire rating for W10 x 49 Column (254mm x 22kg)  
 Based on TCT 414187-751 & TCT 414186-331  
 Based on Omega Proj. 14540-98308 (PCI)  
 Contact your local 3M Sales Representative for additional information on other beam and column ratings.  
 Test reports available on request. Additional Testing Results available include: Jet Fire Test (SINTEF), Explosion, Acoustical.

# FLEXIBLE FIRE PROTECTION FOR PIPELINES.

When you've got a fire on your hands, the last thing you want to do is feed it fuel through a ruptured pipeline. A great way to help protect pipelines from ruptures caused by fire is to use 3M™ Interam™ Brand E-Mat Flexible Wrap.

3M™ Interam™ Brand E-Mat can be easily applied to insulated steam lines and pipelines containing combustible or dangerous liquids and gases. The flexible material provides an envelope of endothermic protection surrounding the entire length of pipe. 3M™ Interam™ Brand E-Mat Flexible Wrap can also be easily removed in order to inspect lines for corrosion.



*Flexible Wrap wraps easily around existing pipe insulation to give you a hydrocarbon fire rated system.*

<b>Tubular Structural Steel Fire Protected with 3M Interam Mat and Foamglass™ Fire Tested to ASTM E-1529 Hydrocarbon Exposure</b>					
<b>.4" E-Mat Layers</b>	<b>Foamglass thickness</b>	<b>Time in minutes</b>			
		<b>(to 200°C or 392°F)</b>	<b>(to 400°C or 752°F)</b>	<b>(to 500°C or 932°F)</b>	<b>(to 600°C or 1,112°F)</b>
1	38 mm	53	84	102	126
1	51 mm	62	95	114	137
2	51 mm	96	145	172	205

Tested in accordance with ASTM E-1529 (UL 1709)  
 For a typical 10" Dia. Pipe  
 Based on Omega Proj. no. 9006-99430  
 Additional Testing Results available include: Jet Fire Test (SINTEF), Explosion, Acoustical.  
 Foamglass is a registered trademark of Pittsburgh Corning.



In addition to 3M™ Interam™ Brand E-Mat Systems, there is a complete line of 3M Fire Protection Products to help prevent fire, smoke, toxic fumes and moisture from passing through penetrations in fire-rated walls and floors. For more information on these easy-to-use products, call your authorized 3M distributor, or contact 3M at 1-800-328-1687.



MAT MATERIALS  
FIRE RESISTANCE CLASSIFICATION  
RAPID TEMPERATURE RISE FIRE EXPOSURE  
DESIGN NOS. XR201  
SEE UL FIRE RESISTANCE DIRECTORY  
18P6



MAT MATERIALS  
FIRE RESISTANCE CLASSIFICATION  
DESIGN NOS. X203 AND X204  
SEE UL FIRE RESISTANCE DIRECTORY  
18P6



ELECTRICAL CIRCUIT PROTECTIVE MATERIALS  
FOR USE IN ELECTRICAL CIRCUIT PROTECTIVE SYSTEMS  
SYSTEM NO. 7, 8, AND 9  
SEE UL FIRE RESISTANCE DIRECTORY  
18P6



Listed  
Reference our Directory  
at [www.upl.com](http://www.upl.com)  
16049-1

3M Fire Protection Products are classified by Underwriters Laboratories, Inc. (UL 1479) and BCJ (Japan . Code Approved ICBO, BOCAI and SBCCI (N.E.R. 243). Tested Worldwide to ASTM E-814, ASTM E-119, ASTM E 1529, ASTM E 1725, NFPA, 101 Life Safety Code, AS 1530.4, BS 476, DIN 4102, ISO 834 and JISA 1304. 3M Fire Protection Products are asbestos free and contain no PCBs.

**For information, contact:**

Phone: U.S. 800-328-1687

Website: [www.3m.com/firestop](http://www.3m.com/firestop)

**Important Notice to Purchaser: LIMITATION OF REMEDIES AND LIABILITY:** If the 3M product is proved to be defective, THE EXCLUSIVE REMEDY, AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OR REPAIR OR REPLACE THE THE DEFECTIVE 3M PRODUCT. 3M SHALL NOT OTHERWISE BE LIABLE FOR LOSS OR DAMAGES, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, LOSS OR PROFITS, INVESTMENT, GOODWILL OR BUSINESS OPPORTUNITY), REGARDLESS OF THE LEGAL THEORY ASSERTED, INCLUDING NEGLIGENCE, CONTRACT, WARRANTY, OR STRICT LIABILITY.



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