



# Interam™ E-5 Series Mats

## Endothermic Ceramic Fiber Blanket

3M Interam E-5 Series Mats are endothermic blankets designed to be wrapped around items requiring protection from fire exposure – electrical systems, shrouds for motor operated valves, structural steel. The flexible felt-like material is made up of a combination of ceramic fibers and an inorganic endothermic material.

The endothermic property of E-5 mats means that they block specified heat penetration by chemically absorbing heat energy. When exposed to high temperatures, Interam mats release chemically bound water to cool the outer surfaces of the wrap material and significantly retard heat transfer.

The total thickness or number of Interam mat layers used dictate the total amount of protection afforded. The two different mat thicknesses enable you to meet your fire protection requirements with the fewest number of layers.

Standard designs for 1, 2, and 3-hour structural steel fire protection and 30 minute, 1-hour, and 3-hour rated electrical system protection are available.



### Fire Protection Applications

- |                    |                     |
|--------------------|---------------------|
| • Structural Steel | • Cable Dropouts    |
| • Cable Trays      | • Equipment Shrouds |
| • Conduits         | • Supports          |

### E-5 Series Mat Features:

- Heat absorbing
- Non-flame supporting
- Low smoke evolution
- Flexible
- Easily cut to size (scissors, shears, razor blade)
- Provides uniform covering
- Thermally conductive as supplied
- Easily cleaned aluminum surface
- Easily installed – no surface preparation required

# Mat Descriptions

	E-5A-3 Mat	E-5A-3 Mat	E-5A-4 Mat
<b>Mat Laminations</b>	3 mil. aluminum/scrim	3 mil. aluminum/scrim	3 mil. aluminum/scrim
<b>Mat Thickness</b>	.0310in (7,87 mm)	.0310in (7,87 mm)	0.408in (10,3 mm)
<b>Roll Length</b>	16ft (4,87m)	25ft (7,62m)	20ft (6,09m)
<b>Roll Width</b>	49in (1,24m)	24.5in (622mm)	24.5in (622mm)
<b>Roll Weight</b>	91.4lbs (41,4kg)	71.4lbs (32,3kg)	74.6lbs (33,8kg)
<b>Weight/Unit Area</b>	1.40lbs/ft <sup>2</sup> (6,83kg/m <sup>2</sup> )	1.40lbs/ft <sup>2</sup> (6,83kg/m <sup>2</sup> )	1.83lbs/ft <sup>2</sup> (8,93kg/m <sup>2</sup> )
<b>Bulk Density</b>	54lbs/ft <sup>3</sup> (865kg/m <sup>3</sup> )	54lbs/ft <sup>3</sup> (865kg/m <sup>3</sup> )	54lbs/ft <sup>3</sup> (865kg/m <sup>3</sup> )
<b>Mat Area/Roll</b>	65.3ft <sup>2</sup> (6,06m <sup>2</sup> )	51.0ft <sup>2</sup> (4,73m <sup>2</sup> )	40.8ft <sup>2</sup> (3,79m <sup>2</sup> )
<b>Color</b>	green	green	blue

## Properties and Characteristics

### Surface Burning Characteristics

UL 723 (ASTM E-84)	
Flame spread .....	0.7
Fuel contribution.....	0
Smoke developed.....	0

### Thermal Conductivity

0.087 BTU/ft-hr. -- °F @ 200 F °	(0.151W/m --°C @ 93°C)
0.101 BTU/ft-hr. -- °F @ 350 F °	(0.175W/m --°C @ 177°C)
0.058 BTU/ft-hr. -- °F @ 600 F °	(0.100W/m --°C @ 316°C)
0.068 BTU/ft-hr. -- °F @ 750 F °	(0.118W/m --°C @ 399°C)
0.081 BTU/ft-hr. -- °F @ 900 F °	(0.140W/m --°C @ 482°C)

Underwriters Laboratory Inc.®  
Classified  
Mat Materials  
Fire Resistance Classifications  
Rapid Temperature Rise Fire Exposure  
Design No. XR201  
See UL Fire Resistance Directory  
18P6

### Mean specific heat

0.330 BTU/lb -- °F @ 75-400°F	(1385J/kg --°C @ 24-200°C)
0.276 BTU/lb -- °F @ 75-1650°F	(1155J/kg -- C@ 24-900°C)

Underwriters Laboratory Inc.®  
Classified  
Mat Materials  
Fire Resistance Classification  
Design No. X203  
See UL Fire Resistance Directory  
18P6

Loss on ignition 28%

Tensile strength.....110psi (758KPa)  
(with aluminum foil)

**Warranty and Limited Remedy.** This product will be free from defects in material and manufacture for a period of ninety (90) days from date of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. If this 3M product is proved to be defective within the warranty period stated above, your exclusive remedy and 3M's sole obligation shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product.

**Limitation of Liability.** Except where prohibited by law, 3M will not be liable for any loss or damages arising from the use of this 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



Specified Construction Products Department

3M Center, Building 225-4S-08  
St. Paul, MN 55144-1000  
800 328 1687



Recycled paper  
40% pre-consumer  
10% post-consumer

Litho in USA MCS 187585  
© 3M 1999 98-0400-0889-2