

EndoFlex Mat®

Flexible Endothermic Wrap for Fire Protection of Electrical Systems

Introduction

An electrical raceway fire barrier system (ERFBS) protects electrical components from the effects of fire. In doing so, it reduces the inflow of heat energy into the system and maintains the internal temperature below maximum limits. These limits will ensure that the cable systems remain functional during a fire, and allow operators to maintain control of these critical systems.



EndoFlex Mat works as a protective shield to absorb heat (endothermic) on electrical pathways and components such as: conduits, cable trays, junction boxes, cable dropouts or supports.

EndoFlex Mat has been designed and tested to provide 1, 2 or 3-hour protection for these electrical raceway systems. The number of EndoFlex Mat layers determines the level of protection.

Product Features

- Endothermic (heat absorbing)
- Highly flexible
- No special tools required
- Easily cut and handled
- Easy to maintain and clean
- Excellent resistance to weather elements
- Very low smoke spread
- Doesn't support flame spread

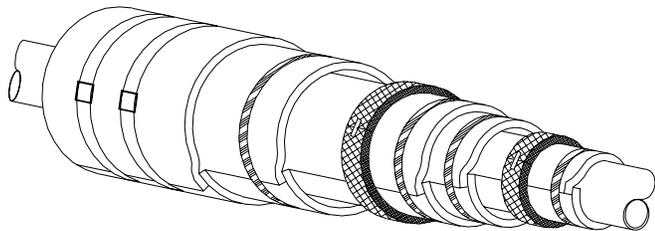
Fire Protection Applications

- Cable Trays
- Conduits
- Junction Boxes
- Cable Dropouts
- Cable Tray & Conduit Supports

Extensive Testing

- Tested to United States Nuclear Regulatory Commission (USNRC) standards with hose stream. This stringent standard translates into confidence for the user in our published hourly ratings.
- Most current and extensive testing of any product in its class reducing the need for engineering judgments.
- When engineering judgments are required, current data is the most up to date to extrapolate from, when compared to any other manufacturer.

Technical Specifications	
Mat Thickness	.40 in (9.8 mm)
Mat Laminate	3 mil aluminum foil
Roll Length	15 ft. (4.6 m)
Roll Width	24 in (61 cm)
Roll Weight	70.5 lbs (31.98 kg)
Weight/Unit	2.35lb/ft ² (11.51 kg/m ²)
Mat Area/Roll	30 ft ² (2.79m ²)
Loss on Ignition	30%
Thermal Conductivity	2.7 BTU/ft ² /hr @ 90°F
Flame Spread Index	5
Smoke Developed	10



Warranty and Limited Remedy

This product will be free from defects in material and manufacture for a period of 90 days from date of purchase. ETS Schaefer Corporation 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 ETS Schaefer product is fit for a particular purpose and suitable for user's method of application. If this ETS Schaefer product is proved to be defective within the warranty period stated above, your exclusive remedy and ETS Schaefer's sole obligation shall be, at ETS Schaefer's option, to repair or replace the ETS Schaefer product or refund the purchase price of the product.

Limitation of Liability

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

Made with pride in the USA 

Product Testing	
ASTM E-84-00a	Surface burning characteristics
ASTM C 518-98	Steady state heat flux and thermal transmission properties
ASTM E 1725-95	Fire resistive barrier systems for electrical system components
ASTM G-53	Simulated exposure of non-metallic materials to deterioration by sun and water
IEEE 848	Ampacity derating of 1" and 4" conduits and cable trays

Ampacity Derating		
Test System	Current (Amps)	Percent Derating
<i>4"x24" Cable Tray Baseline</i>	<i>30.24</i>	
1 hr	15.5	48.74
3 hr	14.61	51.69
<i>1" Conduit Baseline</i>	<i>33.72</i>	
1 hr	30.11	10.71
3 hr	28.65	15.04
<i>4" Conduit Baseline</i>	<i>28.59</i>	
1 hr	24.78	13.33
3 hr	23.27	18.61

CONTACT INFORMATION

ETS Schaefer Corporation
 8050 Highland Pointe Parkway
 Macedonia, Ohio 44056
 800.863.5400 / 330.468.6600
 Fax: 330.468.6610
 www.etssch

