
3M Company
Design No. 3MU/AF 120-03
Applied Fire Proofing
Galvanized Steel Cable Tray
3M™ Interam™ ES-5A-12 Series Endothermic Mat – 3 Layers
ISO 22899-1
Temperature Rise 16°C – Time 15 minutes
Temperature Rise 71°C – Time 30 minutes
Temperature Rise 77°C – Time 45 minutes
Temperature Rise 117°C – Time 60 minutes
Temperature Rise 215°C – Time 90 minutes
Temperature Rise 328°C – Time 120 minutes

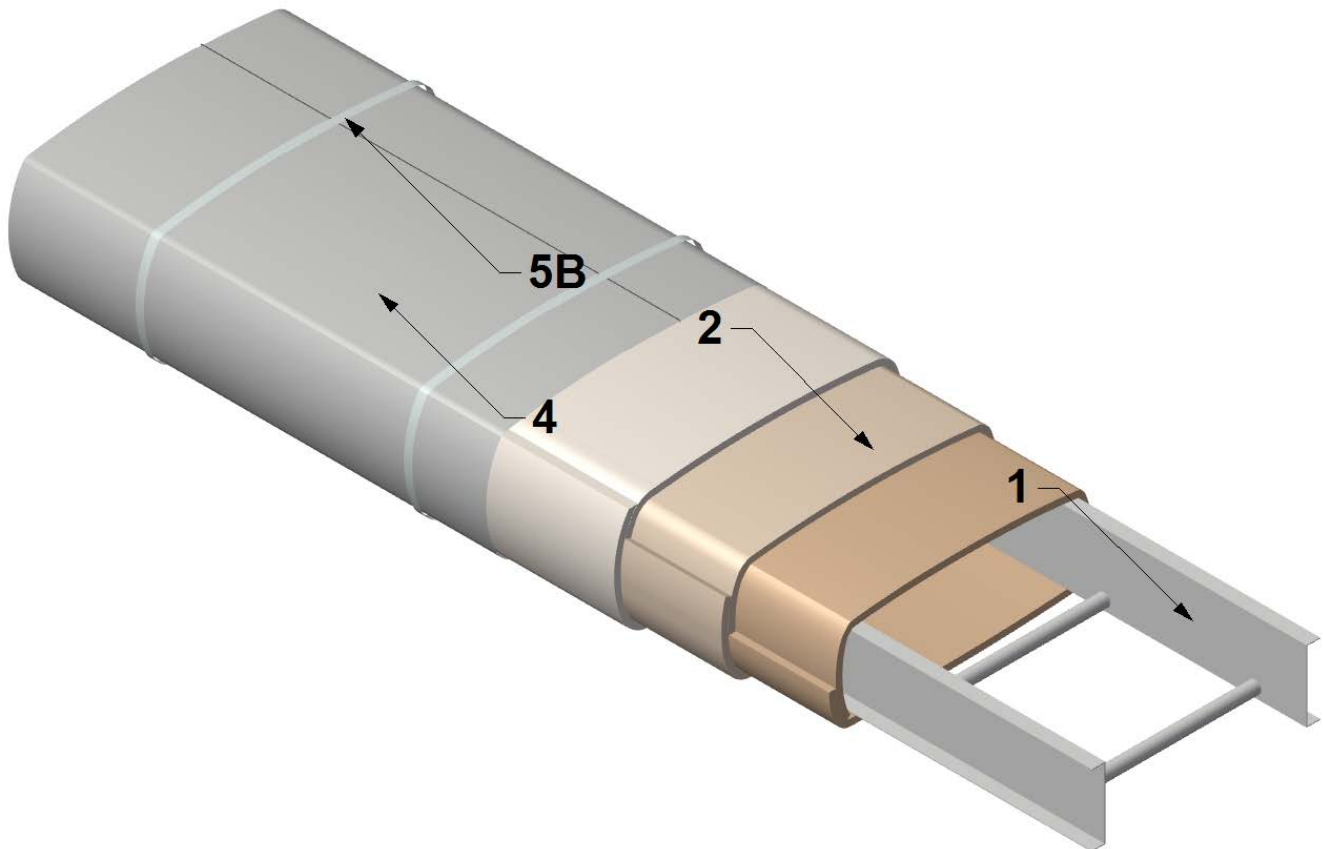


Figure 1 – Cable Tray Protection

1. CABLE TRAY: Use galvanized steel ladder-back cable tray with min. dimensions of 102mm (4 in.) high × 305mm wide (12 in.).

2. CERTIFIED MANUFACTURER: 3M Company

CERTIFIED PRODUCT: Applied Fireproofing

CERTIFIED MODEL: 3M™ Interam™ ES-5A-12 Series Endothermic Mat



ENDOTHERMIC MAT: Install three layers of foil-faced flexible Endothermic Mat, wrapped tightly around the cable tray (Item 1) with the foil facing away from the cable tray. Ensure a min. 50mm (2 in.) overlap onto itself at end of wrap. Temporarily affix sections of Endothermic Mat with filament tape if needed. Install each additional layer in the same manner, ensuring the seams between layers are offset a min. of 50mm (2 in.).

3. **ALUMINUM TAPE** (Not Shown): Apply 102mm (4 in.) wide pressure sensitive tape with aluminum foil-facing to all joints of each layer of the Endothermic Mat (Item 2).
4. **STEEL SHEATHING:** Install a one layer of min. 0.48mm (26 GA, 0.0156 in.) T-304 stainless

steel sheathing over the Endothermic Mat (Item 2) with min. 76mm (3 in.) overlap at joints to create a stepped surface installation.

5. **STEEL BANDING:** Apply 13mm (1/2 in.) wide by 0.5mm (0.02 in.) thick stainless steel banding as follows:
 - A. (Not Shown) Following the installation of the outer layer of the Endothermic Mat (item 2), install bands a max. of 400mm (16 in.), on center (oc) and 40mm (1-1/2 in.) from the ends of the Endothermic Mat.
 - B. Following the installation of the stainless steel sheathing (Item 4), install bands a max. of 400mm (16 in.) oc and 40mm (1-1/2 in.) from the ends of the sheathing.