

FyreWrap® Cable Insulation

FyreWrap® Cable Insulation from Unifrax is a thin,flexible insulation wrap designed to provide a fire-protective encosure around cable trays & conduits. The FyreWrap system ensures electrical circuit integrity during exposure to an external hydrocarbon fire permitting continued operation or controlled shutdown of critical equipment during emergency conditions.

The system which is FM Global approved also complies with the API & ExxonMobil requirements on fireproofing for petroleum and petrochemical processing plants. Testing is to ASTM E-1725 "Fire Tests of Fire-Resistive Barrier Systems for Electrical System Components", requiring the highest level of performance for trays with zero to full cable loading and ASTM E-1529 circuit integrity ratings.



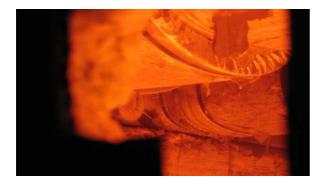
System Components

Insulating Core: FyreWrap Cable Insulation incorporates Insulfrax® S Blanket as its insulating core. This is a high temperature AES blanket with enhanced biosolubility which under the EU Directive 67/548/EEC carries no hazard classification and which is also fully non-combustible and generates no smoke or fuming.

Encapsulating Material: The insulating core is fully encapsulated by a 50µm aluminium foil reinforced with a bidirectional glass fibre mesh. This covering which has excellent tear resistance and which provides improved handling characteristics and most importantly imparts weather resistance to the system for outdoor installations.

Banding Straps: The insulating wrap is held in place with grade 302 (minimum) stainless steel bands, 13mm minimum width & 0.38mm minimum thickness.





Physical Properties

Thickness	50mm & 38mm		
Roll Size	5.0m x 610mm at 38mm 3.66 m x 610mm at 50mm		
Density	128kg/m³		
Standard Core	Insulfrax S Blanket		
Standard Encapsulation	50µm aluminium foil with mesh reinforcement		
Fire Resistance Rating	30, 45, 60 minutes		



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Technical Performance

Circuit Integrity - per ASTM E-1529

Temperature Integrity - per ASTM E-1725

Cable Loading - Empty to Fully Loaded Trays

ASTM E-84 Surface Burning Characteristics:

- unfaced core: Flame/Smoke Rating = zero - encapsulation: Flame/Smoke Rating = 5/10

Approvals/Compliance

FM Global Approved - Wrap for Grouped Electrical Cables

API 2218 "Fireproofing Practices in Petroleum and Petrochemical Processing Plants" - compliant

ExxonMobil GP14-03-01 "Fireproofing" Specification - compliant

ASTM E-1529 Circuit Integrity (Hydrocarbon Fire Curve, Loaded Trays)		As per FM Global Listing			
Tray	Cable Loading	Product Version	Blanket	No. of Layers	ASTM E-1529 Rating
305mm	39% actual fill, 100% visual fill	FyreWrap 1.5 Cable Insulation	38mm	One	30 min.
305mm	39% actual fill, 100% visual fill	FyreWrap 2.0 Cable Insulation	50mm	One	60 min.
914mm	39% actual fill, 100% visual fill	2.0 Cable Insulation	50mm	One	45 min.

Tray	Cable Loading	Product Version	Blanket	No. of Layers	ASTM E-1725 Rating
305mm	Empty	FyreWrap 1.5 Cable Insulation	38mm	Two	45min.
305mm	Empty	FyreWrap 2.0 Cable Insulation	50mm	One	30 min.
305mm	39% actual fill, 100% visual fill	FyreWrap 2.0 Cable Insulation	50mm	One	30 min.
914mm	Empty	FyreWrap 2.0 Cable Insulation	50mm	One	15 min
914mm	39% actual fill,100% visual fill	FyreWrap 2.0 Cable Insulation	50mm	One	15 min

^{*} Empty is worst case and qualifies cable loading range of 0% to 100%

Supplied by:

Handling Information

A Material Safety Datasheet has been issued describing the health, safety and environmental properties of this product, identifying the potential hazards and giving advice on handling precautions and emergency procedures. This must be consulted and fully understood before handling, storage or

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