

FyreWrap® Lightweight A-Class Steel (A60) Marine Fire Divisions

Description

FyreWrap® Blanket from Unifrax is a totally inorganic, flexible and lightweight high temperature insulation blanket. It is specifically designed for maximum performance in passive fire protection applications and for use in FyreWrap Marine systems.

The FyreWrap blanket lightweight fire divisions have been tested to 2010 IMO FTP code and provide some of the lightest and thinnest A60 steel bulkhead and deck systems available today.

General Characteristics

FyreWrap Lightweight Marine Fire Divisions have the following outstanding characteristics:

- A60 fire rated steel divisions
- Tested in accordance with IMO MSC.307(88)
- International certification and approvals
- Non Combustible to IMO FTP Code Part 1
- Combined fire, thermal and acoustic insulation
- Flexible blanket, with a choice of protective surface coverings
- Easily wrapped to corrugated or stiffened plate profiles
- Minimal cutting required
- Reliable mechanical fixings, no adhesive required
- New wider pin spacings for more flexible installation
- Full technical support available
- Global manufacturing and availability



Typical Applications

Passive fire protection

Marine Applications

- Cruise liners
- Military/Naval vessels
- Luxury yachts
- Fast craft

Offshore Applications

- Oil platforms
- FPSO Units (Floating production storage & offloading)
- Accommodation modules

Advantages

- Significant weight reduction
- Thin systems add space for design
- Reduce fuel consumption
- Lower emissions
- Increase speed
- Improve vessel efficiency

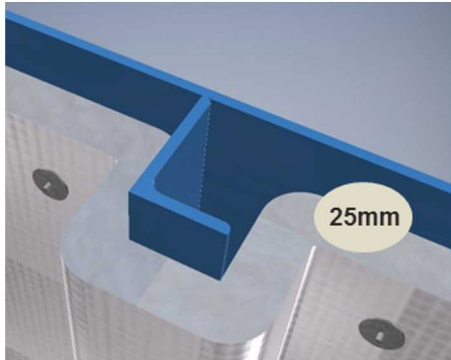
Typical Product Parameters

FyreWrap Blanket		
<i>Typical Chemical Analysis (wt. %)</i>		
SiO ₂	61.0 – 67.0	
CaO	27.0 – 33.0	
MgO	2.5 – 6.5	
Al ₂ O ₃	<1.0	
Fe ₂ O ₃	<0.6	
<i>Physical Properties</i>		
Colour	White	
Classification Temperature (C°)*	1200	
Melting Point (C°)	>1330	
Mean Fibre Diameter (microns)	4.0	
Density (kg/m³)	64	96
<i>Thermal Conductivity (W/mK) – ASTM C201</i>		
Mean Temp.		
200°C	0.08	0.07
400°C	0.12	0.11
600°C	0.18	0.17
800°C	0.27	0.26
1000°C	0.43	0.36
<i>Ambient Insulation Performance*</i>		
Blanket Thickness (mm)	R Value	U Value
25	0.78	1.28
38	1.19	0.84
45	1.41	0.71
50	1.59	0.63
55	1.72	0.58
63	1.96	0.51
<i>Acoustic Insulation Properties</i>		
Please refer to Marine & Offshore Fire Divisions Manual for Acoustic information		

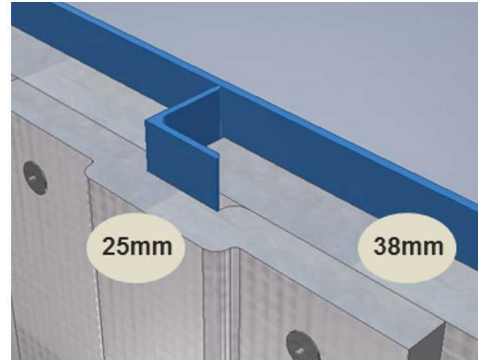
*Based on thermal conductivity of FyreWrap Blanket 64 kg/m³ density measured to BS EN 12667 at 10°C of 0.0319 W/mK. For blanket densities above 64kg/m³ the same values may be used.

System summary

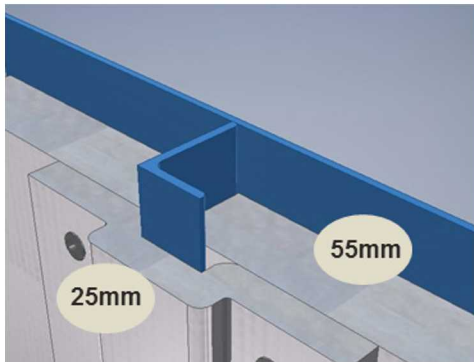
A60 Steel Deck	
Insulation thickness (mm)	25
Insulation Density (kg/m ³)	64
Weight (kg/m ²)	1.6
Insulation over stiffener (mm)	25
Insulation Profile Wrapped	



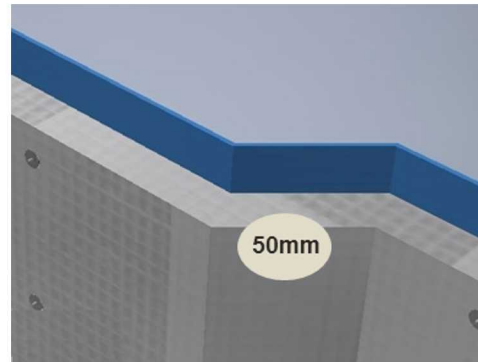
A60 Steel Bulkhead	
Insulation thickness (mm)	38
Insulation Density (kg/m ³)	96
Weight (kg/m ²)	3.64
Insulation over stiffener (mm)	25
Stiffener 300mm Strip Density (kg/m ³)	96



A60 Steel Bulkhead	
Insulation thickness (mm)	55
Insulation Density (kg/m ³)	64
Weight (kg/m ²)	3.52
Insulation over stiffener (mm)	25
Stiffener 265mm Strip Density (kg/m ³)	64



A60 Steel Bulkhead (Corrugated)	
Insulation thickness (mm)	50
Insulation Density (kg/m ³)	64
Weight (kg/m ²)	3.2
No stiffeners	
Insulation Profile Wrapped	



Features

- New wider pin spacings
- Quick and easy installation
- Lightweight
- Completely inorganic, with no resin binders, no potential for outgassing
- Superior vibration resistance compared to mineral or stone wool products that contain organic binders

Availability

Thickness (mm)	64	96	Roll Length (m)
25	✓	✓	7.32
38		✓	5.00
50	✓		3.66
55	✓		3.66

Standard roll width is 610mm. Other sizes may be available on request subject to minimum order requirements.

Handling Information

A Safety Data Sheet (SDS) 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 use.

Insulfrax fibre has a high solubility in simulated body fluids and hence carries no hazard classification, meeting stringent European regulatory requirements. Insulfrax fibres are exonerated from classification as hazardous (tested according to Note Q regulation (EC) No. 1272/2008).

For additional information about product performance or to identify the recommended product for your application, please email the Unifrax Application Engineering Group: applicationengineering@unifrax.com.

Or telephone: +44 (0)1744 887625.

FyreWrap®

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