Heatshield FS50 Wrapstrip

Flexible Intumescent Wrapstrip

GREEN TECH®

Heatshield

A Division of Triton Middle East LLC

Product Description

Heatshield FS50 Wrapstrip is a flexible and versatile intumescent strip. It contains a high expansion graphite which activates at elevated temperature making it suitable for maintaining fire resistance of compartment walls and floors where openings are formed to allow for service penetrations. In a fire situation, **Heatshield FS50 Wrapstrip** rapidly expands to fill voids and close off any openings providing a robust insulating char. This creates a resilient fire resistant barrier which prevents the passage of flames and hot gases and restricts the temperature rise on the non-fire side of the wall or floor. **Heatshield FS50 Wrapstrip** is comprehensively tested and independently certified for use with a wide range of penetrating services, and can easily be used in conjunction with other Greentech Heatshield products, such as M1150 Mortar, B50-ST Batts and S500 Intumescent Sealant.

Heatshield FS50 Wrapstrip is supplied in 2.2mtr rolls.

Intended Uses

Heatshield FS50 Wrapstrip is comprehensively tested and independently certified in a wide range of applications where electrical and mechanical services penetrate concrete walls and floors, and gypsum drywalls.

A. Concrete Floors

90 mins and 120 mins fire resistance (Insulation & Integrity) when used to seal a wide range of services penetrating concrete floors. Single electrical cables, PVC-U electrical conduits up to 32mm, ABS Pipes up to 32mm, PVC-U pipes up to 160mm.

B. Concrete Walls

120 mins fire resistance (Insulation & Integrity) when used to seal a range of PVC-U pipes up to 160mm, PVC-U electrical conduits up to 32mm, and ABS Pipes up to 36mm.

C. Gypsum Dry Walls

120 mins fire resistance (Insulation & Integrity) when used to seal PVC-U electrical conduits up to 32mm.

Application Instructions

Heatshield FS50 Wrapstrip is supplied in convenient sized rolls is easily installed using readily available hand tools (sharp craft knife, and tape measure).

A. Penetration Seals in Walls

1. Normally, the penetrating service requires Heatshield FS50 Wrapstrip to be installed on both sides of a wall (i.e. 2 seals), unless the fire risk side is designated as coming from 1 side only.
2 Ensure there is sufficient annular space around the service penetration to allow the correct number of layers of **Heatshield FS50 Wrapstrip** to be installed. Refer to fire performance tables for details.
3. Wrap the **Heatshield FS50 Wrapstrip** around the pipe or cable until the correct number of layers have been achieved. Cut the **FS50 Wrapstrip** accordingly and fasten using self adhesive tape.
4. Once fastened, slide the **Heatshield FS50 Wrapstrip** along the pipe or cable into the annular space in wall,ensuring that the exposed end of the FS50 is finished flush with face of wall.
5. When the FS50 is securely in position, fill any remaining annular space/ void with Heatshield M1150 Mortar.
6. Repeat on both sides of wall.

B. Penetration Seals in Floors

1. Seals in floors normally require FS50 Wrapstrip to be installed only one side and flush with soffit (underside).
2. Follow steps 2 to 5 in Section A above, ensuring that the exposed end of the FS50 Wrapstrip is flush with soffit / underside of floor slab.

Key Benefits

- Independently Tested & Certified
- International Approvals
- Non Hazardous
- Easy to Use
- Flexible & Durable
- Readily Available via Local Representatives
- Economic Solution
- 3rd Party Audited & Accredited
- ISO 9001 Quality Assured

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European Assessment Documents:
EAD350454-00-1104 - Sep 2017

UL EU

ENCG R.41917

Certificate No:
UL-EU-01306-EN

Heatshield FS50

Flexible Intumescent Wrapstrip

Physical Properties

Composition	Halogen Free reslient flexible roll with Graphite base
Colour	Black
Bulk Density	Typically 1291 Kg / M3 (+/-10%)
Activation Temperature	Approximately 180˚C
Average Relative Expansion Rate	Min 40 to 55 times (300˚C, 20min free expansion) Min 40 to 48 times (500˚C, 30min free expansion)
Expansion Pressure	Load test expansion with pressure min 1.2 to 2.2 N/mm^2
Combustibility	Non-combustible EN ISO 1182
Limitations	Do not use in conditions of continuous immersion, below ground or in areas of high mechanical abrasion.
Storage	Store in clean dry conditions off floor between 5˚C - 35˚C
Shelf Life	N/A - Unlimited

Fire Performance

Reaction to Fire	BS EN13501.1	Class E
Resistance to Fire	BS EN13501.2	

Min 135mm thick flexible or rigid wall with FS50 Wrapstrip wrapped around service and fitted into annular space between service and wall finishing flush with surface of wall

Penetration Specifications	No of Layer FS50	Apperture Size	Fire Performance Classification
PVC Conduit or Pipe Ø ≤ 32mm	1 x 2mm layer	Ø ≤ 44mm	EI 120 C/C EI 120 C/C

Min 125mm thick rigid wall with FS50 Wrapstrip wrapped around service and fitted into annular space between service and wall finishing flush with surface of wall

Penetration Specifications	No of Layer FS50	Apperture Size	Fire Performance Classification
PVC Pipe Ø ≤ 50mm	2 x 2mm layer	Ø ≤ 63mm	E 120 C/C EI 120 C/C
ABS Pipe Ø ≤ 36mm	2 x 2mm layer	Ø ≤ 50mm	E 120 C/C EI 120 C/C
PVC Pipe Ø ≤ 110mm	4 x 2mm layer	Ø ≤ 132mm	E 120 C/C EI 120 C/C
PVC Pipe Ø ≤ 160mm	4 x 2mm layer	Ø ≤ 180mm	E 120 C/C EI 120 C/C

Min 150mm thick rigid floor with FS50 Wrapstrip wrapped around service and fitted into annular space between service and floor finishing flush with surface of floor slab

Penetration Specifications	No of Layer FS50	Apperture Size	Fire Performance Classification
PVC Conduit or Pipe Ø ≤ 32mm	2 x 2mm layer	Ø ≤ 44mm	E 120 C/C EI 120 C/C
PVC Pipe Ø ≤ 50mm	2 x 2mm layer	Ø ≤ 63mm	E 120 C/C EI 120 C/C
PVC Pipe Ø ≤ 110mm	4 x 2mm layer	Ø ≤ 132mm	E 120 C/C EI 120 C/C
PVC Pipe Ø ≤ 160mm	5 x 2mm layer	Ø ≤ 202mm with mortar backfill	E 120 C/C EI 120 C/C

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EU

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Intertek

ISO 14001 + 45001

CERTIFIED ISO 9001

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