

Heatshield B50-ST and B50-XT

Pre-Coated Mineral Fibre Batts

Product Description

Heatshield B50-ST and B50-XT are 50mm thick mineral fibre batts which are factory pre-coated with **Heatshield C100 coating** and offer a versatile solution to maintaining fire resistance in compartment walls (including gypsum drywalls) and floors where openings are formed to allow multiple complex service penetrations or where linear joints* (discontinuities) are located. In a fire situation, **Heatshield B50-ST and B50-XT Batts** provide an insulating and fire resistant barrier which prevents the passage of flames and hot gases through these openings and which restricts temperature rise on the non-fire side of the wall or floor. **B50-ST Batts** are independently tested and independently certified for use with a wide range of penetrating services. **B50-XT Batts** are available for 240 Mins linear gap and head of wall seals in concrete walls.

Both versions of **Heatshield B50 Batts** are supplied 1200mm x 550mm as standard, and are available either as single side coated or double side coated.

Intended Use

Heatshield B50-ST and B50-XT Batts are comprehensively tested and independently certified in a wide range of applications, from linear gap seals* in concrete walls and floors to service penetrations seals in concrete walls and floors and gypsum drywalls.

A. Penetration Seals - B50-ST Batts

120 Mins fire resistance (Insulation & Integrity) when used to seal a wide range of services penetrating concrete walls and floors and gypsum drywalls. Single electrical cables, cable bundles, insulated Steel, Copper and Cast Iron pipes, loaded cable trays.

B. Linear Gap Seals - B50-XT Batts

240 Mins up to 200mm wide head of wall seals and up to 100mm wide vertical joint seals in concrete walls. 120 Mins up to 200mm wide joints in concrete floors.

Application Instructions

Heatshield B50-ST and B50-XT are easily installed using readily available hand tools (handsaw, tape measure, 50mm paint brush, standard cartridge gun for sealant, knife, and spatula or flat tool for finishing).

1. Remove all loose debris, grease, oil and bituminous material from all contact surfaces of aperture or linear joint.
2. Accurately measure overall dimensions of aperture and cut the B50-ST Batt to ensure a very tight friction fit.
3. Accurately measure dimensions and positions of any penetrating services and mark on B50-ST Batt.
4. Cut out openings in Batt where previously marked for any penetrating services.
5. Coat all contact surfaces of substrate and all B50-ST Batt edges including holes cut for services with Heatshield C100 Coating
6. Press fit the B50-ST Batt into the aperture and around services ensuring that the coated surface finishes flush with surface of wall or floor.
7. Where 2 x Single Sided Batts are required, repeat steps above from other side of wall or floor.
8. Note: Use the minimum number of cuts / pieces of Batt to achieve a full, tight fitting seal.
9. Apply a bead of Heatshield S500 sealant around perimeter of seal and at all service / Batt interfaces


GREEN TECH[®]

Heatshield

Key Benefits

- Independently Tested & Certified
- International Approvals
- Solvent Free
- 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



ENCG R.40333

Certificate No:
UL-EU-01303-EN

Heatshield B50

Pre-Coated Mineral Fibre Batts



Physical Properties

Composition	50mm thick mineral fibre pre-coated on 1 or 2 sides
Colour	Grey or White
Batt Density	160 Kg / M ³
Dimensional Stability	≤ 1% at Specified Temperature, DS (70,-)
Thermal Conductivity	0.845 W/mk
Reaction to Fire	Euroclass, A1 EN1362:2012 + A1:2015(EN13501-1)
Combustibility	Non-combustible EN ISO 1182
Thermal Conductivity	0.039 W/mK
Thickness Tolerance T	T5
Coating Thickness	B50-ST = 700 microns B50-XT = 1600 microns
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
Shelf Life	N/A - Unlimited

Fire Performance - BS EN1366.3

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

Min 135mm thick flexible wall with Single Sided B50-ST Batts installed within the thickness of wall and coated surfaces flush with both sides of wall

Multiple Service Penetrations

Penetration Specifications	Max opening size within HEATSHIELD B50-ST Batt	Insulation	B50 SYSTEM seal details	Classification
PVC conduit, Ø ≤ 32mm	Ø ≤ 32mm	N/A	Bead of 10mm x 10mm S500 around penetration	E 120-C/C EI 120-C/C
Insulated copper, steel or cast iron pipe, Ø ≤ 15mm	Ø ≤ 70mm	Min. 25mm thick aluminium foil faced stone wool insulation (CS, 50kg/m ³)		E 120-C/C EI 120-C/C
Single electrical cable of H07RN-F Ø ≤ 75mm	Ø ≤ 75mm	N/A		E 120 EI 60
Perforated cable tray (450 x 25 x 1.1mm) with cables and PVC conduits. See ETA & UL-EU Cert for details	460mm wide x 50mm high	Min. 40mm thick aluminium foil faced stone wool (50kg/m ³). Min 300mm long from both surfaces of wall wrapped around cable tray. Open ends of mineral wrap packed with loose mineral wool (50kg/m ³).	Bead of 10mm x 10mm S500 around penetrants and between cable tray and penetrants	E 120 EI 120
Electrical cable(s), single or bundle of up to 8 No. H07RN-F (5x1.5mm ²) with a maximum outer diameter of 14mm	Ø ≤ 65mm	N/A	10mm thickness of S500 around and between cables	E 120 EI 120

Single Cable Tray Penetration Seals with Cables, Data Cables & Conduits

Penetration Specifications	Max opening size	Insulation	B50 SYSTEM seal details	Classification
Perforated cable tray (450 x 25 x 1.1mm) with cables and PVC conduits. See ETA & UL-EU Cert for details	550mm wide x 200mm high	Min. 40mm thick aluminium foil faced stone wool (50kg/m ³). Min 300mm long from both surfaces of wall wrapped around cable tray. Open ends of mineral wrap packed with loose mineral wool (50kg/m ³).	Bead of 10mm x 10mm S500 around penetrants and between cable tray and penetrants	E 120 EI 120
Perforated cable tray (300 x 18 x 1.4mm) with cables and PVC conduits. See ETA & UL-EU Cert for details	400mm wide x 200mm high			E 120-C/C EI 120-C/C

Fire Performance

Min 125mm thick rigid wall with Single Sided B50-ST Batts installed within the thickness of wall and coated surfaces flush with both sides of wall

Multiple Service Penetrations

Penetration Specifications	Max opening size within HEATSHIELD B50-ST Batt	Insulation	B50 SYSTEM seal details	Classification
Insulated copper, steel or cast iron pipe, $\varnothing \leq 15\text{mm}$	$\varnothing \leq 65\text{mm}$	Min. 25mm thick aluminium foil faced stone wool insulation (CS, 50kg/m ³)	Bead of 10mm x 10mm S500 around penetrant	E 120-C/C EI 120-C/C
PVC Pipe / conduit $\varnothing \leq 50\text{mm}$	$\varnothing \leq 70\text{mm}$	N/A	PVC 120 Pipe Collar $\varnothing 55\text{mm}$. Mounting lugs are flush with surface of SS B50-ST Batts and a bead of S500 (10x10mm) applied around the surface of collar at the edge on both sides of the wall	E 120-C/C EI 120-C/C
Perforated cable tray (300 x 18 x 1.4mm) with cables and steel conduits. See ETA & UL-EU Cert for details	305mm wide x 50mm high	Min. 40mm thick aluminium foil faced stone wool (50kg/m ³). Min 300mm long from both surfaces of wall wrapped around cable tray. Open ends of mineral wrap packed with loose mineral wool (50kg/m ³).	Bead of 10mm x 10mm S500 around penetrants and between cable tray and penetrants	E 120 EI 120

Single Cable Tray Penetration Seals with Cables

Penetration Specifications	Max opening size	Insulation	B50 SYSTEM seal details	Classification
Perforated cable tray (450 x 25 x 1.1mm) with cables and PVC conduits. See ETA & UL-EU Cert for details	550mm wide x 250mm high	Min. 40mm thick aluminium foil faced stone wool (50kg/m ³). Min 300mm long from both surfaces of wall wrapped around cable tray. Open ends of mineral wrap packed with loose mineral wool (50kg/m ³).	Bead of 10mm x 10mm S500 around penetrants and between cable tray and penetrants	E 120-C/C EI 120-C/C
Perforated cable tray (300 x 18 x 1.4mm) with cables and PVC conduits. See ETA & UL-EU Cert for details	400mm wide x 250mm high			E 120 EI 120

Min 150mm thick rigid floor with Single Sided B50-ST Batts installed within the thickness of floor and coated surfaces flush with both sides of floor

Multiple Service Penetrations

Penetration Specifications	Max opening size within HEATSHIELD B50-ST Batt	Insulation	B50 SYSTEM seal details	Classification
Perforated cable tray (450 x 25 x 1.1mm) with cables and steel conduits. See ETA & UL-EU Cert for details	450mm wide x 50mm high	Min. 40mm thick aluminium foil faced stone wool (50kg/m ³). Min 300mm long from top surface of floor only wrapped around cable tray. Open ends of mineral wrap packed with loose mineral wool (50kg/m ³).	Bead of 10mm x 10mm S500 around penetrants and between cable tray and penetrants	E 90 EI 90
Perforated cable tray (300 x 18 x 1.4mm) with cables and steel conduits. See ETA & UL-EU Cert for details	305mm wide x 50mm high			E 90 EI 90
Electrical cable(s), single or bundle of up to 5 No. NYY-J (5x1.5mm ²) $\varnothing \leq 14\text{mm}$	$\varnothing \leq 40\text{mm}$	N/A	10mm thickness of S500 around and between cables	E 90 EI 90
Insulated copper, steel or cast iron pipe, $\varnothing \leq 15\text{mm}$	$\varnothing \leq 70\text{mm}$	Min. 25mm thick aluminium foil faced stone wool insulation (CS, 50kg/m ³)	Bead of 10mm x 10mm S500 around penetrant	E 90-C/C EI 90-C/C
Insulated copper, steel or cast iron pipe, $\varnothing \leq 108\text{mm}$	$\varnothing \leq 160\text{mm}$			E 90-C/C EI 90-C/C
Single electrical cable of H07RN-F (4x185mm ²) $\varnothing \leq 60\text{mm}$	$\varnothing \leq 60\text{mm}$	N/A	10mm thickness of S500 around and between cables	E 90 EI 90

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MANUFACTURED IN U.A.E.

Fire Performance - BS EN1366.4

Linear Gap Seals

FIRES s.r.o. Classification Report Nos:

FIRES-CR-259-21-AUPE, FIRES-CR-188-22-AUPE, FIRES-CR-189-22-AUPE

Min 120mm thick rigid wall with B50-XT Coated Batts (vertical orientation)				
Product Type	Max Joint Width	Batt Configuration	Fire Resistance	Fire Performance Classification
B50-XT	100mm	1 x Double Sided	240 mins (E) 120 mins (E & I)	E 240-V-X-B-W100 EI 120-V-X-B-W100
B50-XT	100mm	2 x Double Sided	240 mins (E & I)	EI 240-V-X-B-W100

Min 120mm thick rigid wall with B50-XT or B50-ST Coated Batts (horizontal orientation)				
Product Type	Max Joint Width	Batt Configuration	Fire Resistance	Fire Performance Classification
B50-XT	50mm	2 x Single Sided	240 mins (E & I)	EI 240-T-X-B-W50*
B50-XT	200mm	2 x Single Sided	240 mins (E & I)	EI 240-T-X-B-W200*
B50-ST	100mm	1 x Double Sided	120 mins (E) 60 mins (E & I)	E 120-T-X-B-W0 to W100* EI 60-T-X-B-W0 to W100*
B50-ST	250mm	2 x Single Sided	120 mins (E & I)	EI 120-T-X-B-W0 to W250*

*Horizontally orientated linear joint seal in vertical wall, and horizontally in wall abutting a floor, ceiling or roof.

Min 150mm thick rigid floor with B50-XT or B50-ST Coated Batts				
Product Type	Max Joint Width	Batt Configuration	Fire Resistance	Fire Performance Classification
B50-XT	100mm	1 x Double Sided	120 mins (E & I)	EI 120-T-X-B-W0 to W100
B50-XT	200mm	2 x Single Sided	120 mins (E & I)	EI 120-T-X-B-W0 to W200
B50-ST	100mm	1 x Double Sided	120 mins (E & I)	EI 120-T-X-B-W0 to W100
B50-ST	200mm	2 x Single Sided	120 mins (E & I)	EI 120-T-X-B-W0 to W200

PLEASE CONSULT THE RELEVANT GREENTECH HEATSHIELD PRODUCT TECHNICAL DATA SHEETS FOR PERFORMANCE INFORMATION AND TYPICAL DETAIL DRAWINGS FOR INSTALLATION CONFIGURATIONS.

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