

FernoBoard®

Fire barrier system for 240 minutes fire resistance

TDS Fernoboard 2305EN

FernoBoard-1S and FernoBoard-2S are fire stop batts, consisting of a high density rockwool core, pre-coated on one or both sides with Fernoboard Coating fire resistant paint. FernoBoard fire stop batts make it easy to seal large openings that provide fire resistance and a smoke tight finish to adjacent areas. FernoBoard 1S and 2S are part of the Bloem Passive Fire Barrier System, that in combination with Fernocryl fire resistant acrylic sealant and Fernoboard Coating, offers fire resistance for penetrations up to 240 minutes.



Properties

- Fire resistance up to 240 minutes (El240)
- Classified for constructions with and without pipe penetrations
- Durable and long-lasting insulation solution
- Provides also very high sound insulation
- Flexible, so that small movements of the structure can be accommodated in the event of a fire
- Quick and easy to instal
- Can be installed in plaster walls with and without notch
- Suitable for many surfaces such as concrete, plaster, brick, masonry, steel, wood, plastic, etc.
- Supplied in thicknesses of 50 and 60 mm
- Can be painted over with most water based and solvent based paints
- Environmental and user friendly
- Halogen free and mold resistant
- Can be stored unlimited under the right conditions

Applications

- Flexible walls
- Rigid walls and floors
- To restore the fire resistance of wall and floor constructions of penetrations with single or multiple pipes, cables, cable trays, metal pipes, composite pipes and plastic pipes.
- Openings in walls: unlimited length x 1200 mm.
- Floor recesses: 2400 x 1200 mm

Testing and certificates

- Classified acc. EN1366-3 ETA 22/0711 and ETA 22/0715
- CE Certificate Nr. 2531-CPR-CXO10392
- Certification acc. EAD 350454-00-1104
- French VOC A+ Regulation, Leed EU v4.1, BREEAM Int.

Technical data

Product:	Coated high density stone wool	
Classification:	Up to E240, EI240*	
Application time:	+5°C tot +50°C	
Service temperature:	-20°C tot 1100°C	
Density:	150-170 kg/m³	
Thermal conduction:	0.82/0.88 W/mK @ 20mm. depth	
Sound isolation:	Rw 55dB	
Service life:	30 years	

^{*}For the fire resistance to be achieved per application, see (ETA 22/0710 & 22/0712)

Handling the product

FernoBoard fire stop batts can easily be sawn so that pieces can be fitted tightly into openings to be sealed. Within the FernoBoard system, FernoCryl fire-resistant acrylic sealant can be used for both gluing of the fitting pieces as for filling seams and cracks around openings. With FernoCoat, recesses can be neatly finished. For the intended fire resistance, please consult the relevant ETA.

Product	Article / EAN	Measurement	
Fernoboard-1S 50mm	BW08T50-1S	50x600x1200 mm	
Coated single side	8718444291237	30X000X1200 IIIIII	
Fernoboard-2S 50mm	BW08T50-2S	50x600x1200 mm	
Coated two sided	8718444291244	30X000X1200 IIIII	
Fernoboard-2S 60mm	BW08T60-2S	60x600x1200mm	
Coated two sided	8718444291282	000000000000000000000000000000000000000	

Delivery

FernoBoard is delivered wrapped in foil.

Thicknesses of 50 mm are 80 pieces per pallet.

Thicknesses of 60 mm are on pallets of 72 pieces.

Storage and shelf life

Under normal circumstances, FernoBoard fire stop batts can be stored unlimited.

Transportation classification

Not applicable, no special measures are required.







Processing instructions

- Substrates must be clean, free of dust, oil and grease.
- Loose parts must be removed beforehand.
- Seams and joints must be ≥ 10mm. to have width.
- Mineral wool (80kg/m³) can be used as backing material
- The required minimum depth according to the ETA must be completely backfilled to the surface.
- Fernocryl should not be applied if the ambient temperature is below +5°C or above 35°C.
- Temperatures outside this range can affect the curing of the sealant and reduce adhesion.

Supporting constructions

- Flexible walls must have a minimum thickness of 75 mm and comprise steel or timber studs* lined on both faces with minimum 1 layer of 12.5 mm thick boards. Apertures are not required to be lined.
- Rigid walls must have a minimum thickness of 75 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m3.
- Rigid floors must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m3.
- Timber walls must have a minimum thickness of 100 mm and comprise solid wood or cross-laminated timber.
- Timber floors must have a minimum thickness of 150 mm and comprise solid wood or cross-laminated timber.
- The service support must be classified in accordance with EN 13501-2 for the required fire resistance period.

*No part of the penetration seal may be closer than 100 mm to a stud, the cavity must be closed between the penetration seal and the stud, and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1 must be provided within the cavity between the penetration seal and the stud

Limitations

Bloem Sealants' Fernocryl should not be used in permanent damp areas

Pipe end configuration

Different intended uses of pipes can lead to the need for different requirements for the pipe end configuration within a test. During a fire the conditions of the pipe and sealing system which are exposed, depend on whether both or either ends of the pipe are sealed in practice. Within the EN 1366-3 Test standard can be chosen not to cover (or close) the pipe, or to cover the pipe in the furnace, or outside the furnace, or on one or both sides.

For instance, EI 60 U/C means the pipe was uncapped inside the furnace, and capped outside the furnace. The pipe end configuration / pipe system relations listed below may be used as a rule of thumb.

Intended use of pipe	Test Condition 4)	
Drainage or sewage pipe, plastic	ventilated drain	U/U¹)
	Unventilated drain	
	Drain w/water trap	
	Not at drainage	C/C ²⁾
Rainwater Pipe, Plastic	At drainage	U/U 1)
	Not at Drainage	C/C ²⁾
Pipe in closed circuit (water, gas, air, ele	C/C ^{2) 3)}	
Flue gas recovery system pipe, plastic	U/C 1)	
Pipe with open ends and ≥ 50cm length	U/U ²⁾	
Pipe supported by suspension system, metal	Fire rated support	C/U 1)
	Non-fire rated	U/C 1)
Waste disposal shaft pipe, metal		U/C 1)

- 1) Stated in NEN EN 1366-3.
- 2) Bloem Sealants's judgment based on tests.
- Metal pipes should have fire rated support.
 U/U classified fire seals cover C/U, U/C and C/C. C/U classified fire seals cover U/C and C/C. U/C classified fire seals cover C/C.