

PROOFMATE FD-SK-SYSTEM

Properties:

PROOFMATE FD-SK-SYSTEM is an EPDM bonded membrane system together with a factory applied 1.0 mm thick hot melt layer.

It is composed by the following elements:

- *PROOFMATE FD-SK* tape (EPDM-strip with hot melting layer)
- *PROOFMATE SK* hot melt tape
- *PROOFMATE SK* hot melt wire
- *PROOFMATE F* (adhesive)

PROOFMATE FD-SK tape works as an adhesive and weldable connection between conventional TPO/TPE/FPO membranes sealing or dimpled sheets at corners, edges or intersections.

Technical data:

PROOFMATE FD-SK tape:

Substance data:

Material basis	EPDM, with weldable layer	
Total thickness	2.2 mm	
Thickness of weldable layer	1.0 mm	
Length	20 m	
Width	120, 180, 207 mm	
MFI-value of weldable layer	19 dg/min	ISO 1133, 2.16kg/190°C
Tensile strength		EN 12311-2B
longitudinal	8.7 N/mm ²	
lateral	8.6 N/mm ²	
Elongation at break		EN 12311-2B
longitudinal	530 %	
lateral	480 %	
Tear resistance		EN 12310-2
longitudinal	40 N	
lateral	62 N	
Dimensional stability		EN 1107-2
longitudinal	0.08 %	
lateral	0.05 %	
Joint peel strength	169 N/50 mm	EN 12316-2
Joint shear resistance	318 N/50 mm	EN 12317-2
External fire behaviour	NPD	EN 13501-5
Resistance to static load	25 kg	EN 12730
Resistance to impact	300 mm	EN 12691
Resistance to root penetration	resistant	EN 13948
Exposure to bitumen	passed	EN 1548
Foldability at low temperatures	≤ - 45°C	EN 495-5

PROOFMATE F:

Substance data:

Material basis	SMP	
Consistency	pasty	
Colour	black, grey	
Odour	hardly noticeable	
Spec. density (23°C)	approx. 1.5 g/cm ³	DIN EN ISO 2811-1
Dyn. viscosity (23°C)	approx. 2000 Pas	DIN EN 2555

Reaction data (23°C):

Processing temperature	5 - 40°C	substrate temperature
Tack-free time *	approx. 15 min	ASTM C679
Setting process *	approx. 3 mm/24 h	

Properties of cured adhesive:

Tensile strength	approx. 1.3 N/mm ²	DIN EN ISO 527
Elongation at break	approx. 350 %	DIN EN ISO 527
Shore A hardness	approx. 40	DIN ISO 7619-1
Temperature resistance	-30 to +80°C	

Bond strength at concrete		DIN EN 1542
dry	approx. 1.65 N/mm ²	
slightly moist	approx. 1.65 N/mm ²	

(* measured at 23°C / 50 % rel. humidity)

Processing:

Substrate preparation:

The substrate to be sealed must be stable and free of grease and dust. It must not rub off or sand. All cement skins, projecting sharp edges, soiling and old coatings must be removed. The substrate can be prepared with a high-pressure water jet. If formwork oil cannot be completely removed, the substrate must be prepared with *FIX-O-FLEX HAFTGRUND*.

If the *PROOFMATE FD-SK-SYSTEM* is going to be used for sealing of expansion joints or on surfaces where negative water pressure can be expected the surface has to be primed in advance with *HYDROPOX EPG*. This primer seals the pores and can be applied even on humid surfaces (see Technical Data Sheet *HYDROPOX EPG*).

There are no special requirements as regards the dampness of the substrate. *PROOFMATE F* adhesive can be applied to both dry and slightly moist substrates (matt glossy surfaces without a glossy water film, pores not saturated with water). Wet, water saturated substrates must be dried before application.

Any fillets or rounding off in corners that are required must be carried out using a restoration mortar compatible with the system e.g. *HYDROPOX C*. Sharp edges must be chamfered in order to prevent damage to the *PROOFMATE FD-SK* tape.

Before application of the sealing system, any rock pockets, sinkholes, rigid joints or imperfections must be filled in flush with the surface using a restoration mortar, e.g. *HYDROPOX C*, that is compatible with the system.

Application:

The adhesive *PROOFMATE F* delivered in 600 ml aluminium foil sausages is applied with a Z2 manual caulking gun in 15 mm thick beads onto the clean prepared substrate. The distribution on the surface is to be done by a B3 toothed spatula to ensure a homogeneous layer of about 1.5 mm thickness.

The *PROOFMATE FD-SK* tape is pressed onto the adhesive layer from inside to outside with the help of a hand roll. The pressure has to be enough to eliminate any eventual air bubbles underneath the band and avoiding at the same time the adhesive to be squeezed out of the edges. Excess of adhesive outside the band are to be removed prior to the sealing.

When overlaps are required, e.g. at roll ends, angles or T-shaped endings, these shall be of at least 50 mm in full bonding according to the polymer welding guideline DVS 2225-5. In the execution of angles or T-shaped endings, eventual ledges and protrusions in the surface of the hot melt layer are to be equalized with the use of *PROOFMATE SK* hot melt tape or *PROOFMATE SK* hot melt wire.

Welding:

The correct welding of the *PROOFMATE FD-SK* tape with membranes of TPO/TPE/FPO is done according to the polymer welding guideline DVS 2225-5 either in WE (Warm gas Extrusion welding) or in WU (Warm gas Overlap welding) system. In the execution of angles or T-shaped endings, eventual ledges and protrusions in the surface of the hot melt layer are to be compensated before welding with an additional polymeric membrane and equalized with the use of *PROOFMATE SK* hot melt tape or *PROOFMATE SK* hot melt wire.

Safety information:

PROOFMATE F is not classified as hazardous according to Regulation (EC) 1272/2008 (CLP).

Even in the case of not classified products, the standard precautionary measures applicable for chemical products should be observed.

It is therefore necessary, before beginning processing, to become familiar with the precautions and safety advice as indicated in the material safety data sheet.

Packaging:

PROOFMATE FD-SK tape 20 m rolls

PROOFMATE F 600 ml aluminium foil sausages

Bigger packaging on request

Storage:

PROOFMATE FD-SK tape

Shelf life at least 24 month in original packaging when stored in dry conditions between 15-25°C.

PROOFMATE F

Shelf life at least 9 month in original packaging when stored in dry conditions between 15-25°C, protected from heat, frost and direct sunlight.

After the expiration the use of the product is generally not recommended, unless an approval has been provided by TPH. This approval can only be obtained by the quality assurance department of TPH releasing the material after verification of main properties being within specification.

Disposal:

PROOFMATE FD-SK tape

Recommendation:

Small quantities of product residues can be disposed of as normal domestic waste. Dispose of bigger quantities must be effected in accordance with the corresponding local regulations.

PROOFMATE F

Small quantities of cured product residues can be disposed of as normal domestic waste. Dispose of not cured product components must be effected in accordance with the corresponding local regulations. For further information please refer to the material safety data sheets.

Legal notice:

The correct and thus successful application of our products is not subject to our control. A guarantee can be issued for the quality of our products within the framework of our sales and supply conditions, however not for successful processing. All data and specifications in this specification sheet are based on the present state of the art and the right to changes and adaptations for the sake of development remains explicitly reserved. The consumption specifications designated by us can be only average empirical values, where deviations are possible on an individual basis and therefore cannot be excluded by us.

TPH Bausysteme GmbH
Nordportbogen 8
D-22848 Norderstedt

Tel.: +49 (0)40 / 52 90 66 78-0
Fax: +49 (0)40 / 52 90 66 78-78
e-mail info@tph-bausysteme.com
Web www.tph-bausysteme.com

The logo for TPH Waterproofing Systems, featuring the letters 'TPH' in a bold, blue, sans-serif font, followed by a period, and the words 'Waterproofing Systems' in a smaller, italicized, blue, sans-serif font below it.