

Technical Data Sheet Issue: 03-02-2023

## PROOFMATE EK

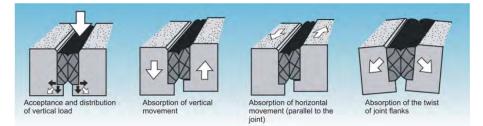
## **Properties:**

*PROOFMATE EK* box profiles are compression seals of various sizes based on EPDM (ethylene propylene diene copolymer).

*PROOFMATE EK* is used for the sealing of expansion and construction joints and as a joint completion profile.

Due to its top-quality material basis *PROOFMATE EK* profiles are chemically resistant to de-icing salt, fuels, lubricants, UV radiation and ozone.

The pre-stressed *PROOFMATE EK* profile, that is bonded with *FIX-O-FLEX*, absorbs cross, longitudinal and vertical movements of a building construction. The special inner ribbing facilitates permanent shape stability of the profile in any position.



Technical data:	<u>Substance data:</u> Colour Material basis Shore A hardness Tensile strength Elongation at break	black EPDM 70 ± 5 approx. 13 MPa approx. 290 %	DIN ISO 7619-1 DIN EN ISO 527 DIN EN ISO 527
	<u>Ageing 7d / -10°C rel. change:</u> Shore A hardness	+ 7	DIN 53508
	<u>Ageing 7d / 100°C rel. change:</u> Shore A hardness Tensile strength Elongation at break	+ 2 0 % 0 %	DIN 53508
	<u>Compression set:</u> 22 h at 100°C 22 h at -25°C Technical data were determined on s	approx. 10 % approx. 45 %	DIN ISO 815

Technical data were determined on sheets.

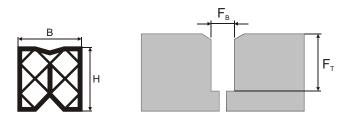
## **Processing:**

*PROOFMATE EK* compression profiles can be installed directly into the properly prepared joint if there is no mechanical stress on the joint edges.

The joints are milled in parallel to the depth that is required for the chosen profile size, if the joints have not already been prepared in the formwork of a new building. There must be no cracks, breaks, or severe unevenness.



The selection of the appropriate impact profile depends on the joint dimensions and the expected joint movements, which cause the joint dimensions to change temporarily. A profile inserted at minimum pave width can still be compressed by joint movements up to the min. joint opening. If movements cause the joint to widen, this is possible for the functionality of the respective profile up to the max. joint opening.



B = profile width, H = profile height

 $F_{\scriptscriptstyle B}$  = minimum joint width required for installing the profile

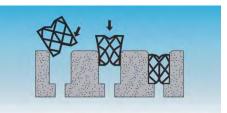
 $F_{T}$  = minimum joint depth required for correct functioning

	Profile dimensions		Installation dimensions [mm]		Joint opening [mm]						
EK-Profile	Wide [mm]	Height [mm]	Length [m]	Permissble elongation [mm]	Joint width min. F <sub>B</sub>	Joint width max.	Joint depth min. F⊤	min.	max.	Profile weight [kg/lfm]	Con- sumption Adhesive [g/lfm]
15-25	36	35	30	12	24	30	45	18	30	0,5	105
20-40	46	37	30	20	30	40	50	20	40	0,8	112
27-49	56	55	30	22	38	49	65	27	49	1,4	165
30-60	68	70	20	30	45	60	85	30	60	2,4	210
35-70	80	87	20	35	55	70	100	35	70	3,7	260
50-95	107	90	10	45	72	95	110	50	95	4,7	270
55-120	135	100	12	65	90	120	130	55	120	5,7	285

The consumption data for the adhesive are average values and may vary slightly depending on the joint size and substrate condition.

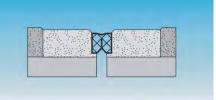
PROOFMATE EK is installed by compressing and then pressing the profile into the joint, on the flanks of which an approx. 1-2 mm thick layer of PROOFMATE F or FIX-O-FLEX adhesive (see table for consumption values) has been applied. The pasty consistency of the adhesive creates a sliding effect, which facilitates the insertion of the profile. The substrate preparation required for adhesive application must be carried out according to the specifications in the technical data sheet of the selected adhesive.

Please take care that the compression seal is not stretched or excessively compressed lengthwise to the joint. Under no circumstances may it be twisted.





A robust edge protection is required if there is any mechanical stress on the joint edges, e.g. in traffic areas. PC mortar, e.g. *HYDROPOX* mortar, can be used to achieve such an adequate edge protection



Safety information:	No special measures required	
Packaging:	Rolls or bundles in carton or on pallets (depending on profile type)	
Storage:	Shelf life at least 24 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:	<u>Recommendation:</u> 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.	
Test certificates:	Functional testing of <i>PROOFMATE EK</i> compression profile for sealing of expansion joints; MFPA Leipzig 2007	
	Verification of sound insulation of joint filler - <i>PROOFMATE EK</i> compression profile; ift Rosenheim 2010	
	Determination of chemical resistance to jet fuel and de-icing agents; TPH Bausysteme GmbH 2010	
	PROOFMATE EK - Verification of fire behaviour according to DIN 4102-1; Prüfinstitut Hoch Fladungen 2012	
	FIX-O-FLEX and PROOFMATE EK - Verification of fire behaviour according to DIN 4102-1; Prüfinstitut Hoch Fladungen 2012	



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.

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