

Rhepanol® fk with welding edge



Product name:	Rhepanol® fk with welding edge
Manufacturer/supplier:	FDT FlachdachTechnologie GmbH & Co. KG Eisenbahnstraße 6-8 68199 Mannheim Germany
Production plant:	Hemsbach
Type of application:	Synthetic roofing membrane with welding edge, suitable for all kind of application types except green roofs. For the installation, the application guidelines of the manufacturer have to be observed.
FPC certificate no.:	1343-CPD-K06-0660.15
FPC issue of certification:	06
European standard:	EN 13956
Product description:	Synthetic roofing membrane made of PIB with fleece backing and compatible with bitumen. Nominal thickness of the sealing layer is 1.5 mm.
Standard membrane dimensions:	15 m x 1.05/0.65/0.52/0.35 m x 2.5 mm 10 m x 1.05 m x 2.5 mm

Rhepanol® fk with welding edge 1.5 mm

Properties	EN standard	Results
External fire performance	DIN CEN/TS 1187	B _{roof} (t1) (Testing according DIN CEN/TS 1187 with different roof build-ups. Testing reports can be requested separately.)
Reaction to fire	DIN EN ISO 11925-2 DIN EN 13501-1	class E
Water vapour property μ	DIN EN 1931 (method B)	$\geq 260,000$
Tensile strength	DIN EN 12311-2 (method A)	≥ 400 N/50 mm
Elongation at break	DIN EN 12311-2 (method A)	$\geq 50\%$
Joint peel resistance	DIN EN 12316-2	≥ 150 N/50 mm
Joint shear resistance	DIN EN 12317-2	≥ 200 N/50 mm (fracture outside the joint area)
Resistance to impact rigid substrate flexible substrate	DIN EN 12691	≥ 700 mm ≥ 700 mm
Resistance to static load	DIN EN 12730 (method A/B)	≥ 20 kg
Hail resistance rigid substrate flexible substrate	DIN EN 13583	≥ 25 m/s ≥ 35 m/s
Tear resistance	DIN EN 12310-2	≥ 150 N
Dimensional stability	DIN EN 1107-2	$\leq 0.5\%$
Foldability at low temperature	DIN EN 495-5	≤ -40 °C (foldability up to -60 °C proofed by external testing laboratory)
Exposure to bitumen	DIN EN 1548	passed
Chemical resistance	DIN EN 1847 (List annexe C)	passed
UV exposure	DIN EN 1297	class 0 (5,000 h)
Watertightness	DIN EN 1928 (method B)	≥ 400 kPa

FDT legal notice

We refer emphatically to the fact, that all details mentioned, especially the application and utilisation recommendation for the products and their system accessories, have been developed under normal conditions, and based on our knowledge and experience. Appropriate storage and usage of the products are assumed. A warranty or reliability of a finished project cannot be deduced because of varying materials, substrates and differing work conditions, neither by any indications nor from verbal statements, irrespective of any legal positions. For the possible accusation that FDT acted intentionally or grossly negligent, the user has to supply evidence that they provided FDT with all information and details necessary for an appropriate and correct evaluation through FDT in written form, immediately available and complete. The user is responsible for ensuring that the products are suitable for the given application. It is FDT's right to change product specifications without notice. Property rights of third parties are to be considered. In addition our particular sales and delivery terms are valid. The latest version of our product data sheet is obligatory, which can be requested directly through FDT.

All information as well as all technical and drawing data comply with current technical standards and are based on our experience. National standards and regulations must be observed.

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Product information

Rhepanol fk – roofing membrane for all application methods

Rhepanol fk with welding edge is made of polyisobutylene (PIB) with an integrated 1.0 mm thick synthetic fleece backing and a fleece free edge. The roofing membranes are sealed homogeneously at the seams by hot air welding. The fleece backing provides additional protection against stresses originating from the substrate. Furthermore, the fleece backing permits diffusion and ensures secure fastening onto the substrate.

Characteristics

- Roofing membrane made of polyisobutylene according to DIN EN 13956, compatible to bitumen, with polyester fleece backing, 1.5 mm thick plus fleece thickness 1.0 mm
- Weather-resistant, even without additional surface protection
- Resistant to atmospheric influences such as UV radiation or exhaust gas from industrial and heating plants
- Remains flexible, even at temperatures as low as –60 °C
- Outstanding resistance to natural ageing
- Free of plasticisers, chlorine, halogens, bitumen and PVC, resistant to rotting, non-porous (factory high-frequency testing)
- Resistant to flying sparks and radiant heat according to DIN CEN/TS 1187, confirmed by official test certificates
- Reaction to fire: class E according to DIN EN 13501-1
- Hail-resistant according to EN 13583
- Thermal conductivity according DIN 52612-1: 0.26 W/mk
- Linear coefficient to thermal expansion: $4 \times 10^{-5} \text{ K}^{-1}$
- Certified with an Environmental Product Declaration (EPD) according to ISO 14025 and EN 15804

Rhepanol fk is highly resistant to most substances commonly used in the construction of roofs. Beyond that we confirm resistance to further materials/substrates on request.

Where exposure to high concentrations of organic solvents, lacquers, fats and oils is likely, we recommend further advice from our Technical Support Team.

Quality assurance

Rhepanol fk is subject to constant in-house and external quality control. The in-house quality assurance system for the whole company has been certified according to DIN EN ISO 9001, the world's most strict quality standard, and is constantly monitored by TÜV SÜD Management Service GmbH.

Range of application:

Rhepanol fk with welding edge can be applied in different ways depending on the substrate.

- Mechanically fastened with Gripfix system
- Mechanically fastened and hot air welded
- Loose-laid with ballast (not for green roofs)
- Bonded fixing

Ecology and environment:

Rhepanol fk has gone through a life cycle assessment according to DIN EN ISO 14040 ff. carried out by the independent institute C.A.U. GmbH (Gesellschaft für Consulting und Analytik im Umweltbereich) (Company for Ecological Consulting and Analytics Ltd). FDT will be glad to send you on request a summary of the life cycle assessment and the Environmental Product Declaration. Rhepanol is not a dangerous good according to the EU Ordinance on Hazardous Substances.

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