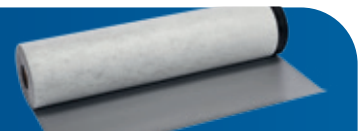


CE Data sheet

Rhepanol® hfk



Product name:	Rhepanol® hfk
Application type acc. to DIN SPEC 20000-201: DIN SPEC 20000-202:	DE/E1 PIB-BV-K-PV-1.5 BA PIB-BV-K-PV-1.5
Manufacturer/supplier:	FDT Flachdach Technologie GmbH Eisenbahnstraße 6-8 68199 Mannheim Germany
Production plant:	Mannheim
Type of application:	Synthetic roofing membrane for all application methods (mechanically fastened, bonded, ballasted or green roofs) as well as waterproofing membrane used in the area of building waterproofing. For installation, the application guidelines of the manufacturer have to be observed.
FPC certificate no.:	1343-CPD-K15-1541.16 1343-CPD-K15-1541.17
FPC issue of certification:	14/15
European standard:	EN 13956/EN 13967
Product description:	Compatible with bitumen, homogeneous, fleece-backed synthetic roofing membrane. The nominal thickness of the waterproofing layer is 1.5 mm.
Standard membrane dimensions:	15 m x 1.50 m x 2.5 mm, 15 m x 1.00 m x 2.5 mm, 15 m x 0.50 m x 2.5 mm

Rhepanol hfk 1.5 mm
DE/E1 PIB-BV-K-PV-1.5
BA PIB-BV-K-PV-1.5

Essential characteristics	Performance	Test Standard
Water tightness	≥ 400 kPa/72 h	DIN EN 1928 (B)
External fire performance	B _{roof} (t1) <small>Testing according DIN CEN/TS 1187 with different roof build-ups. Testing reports can be requested separately.</small>	DIN CEN/TS 1187
Reaction to fire	Class E	DIN EN 13501-1
Joint peel resistance	≥ 150 N/50 mm	DIN EN 12316-2
Joint shear resistance	≥ 200 N/50 mm (tear off outside the joint seam)	DIN EN 12317-2
Tensile strength	≥ 400 N/50mm	DIN EN 12311-2 (A)
Elongation	≥ 50 %	DIN EN 12311-2 (A)
Resistance to impact rigid substrate flexible substrate	≥ 700 mm ≥ 3,500 mm	DIN EN 12691 (A/B)
Tear resistance	≥ 150 N	DIN EN 12310-2
Dimensional stability	≤ 1 %	DIN EN 1107-2
Resistance to root penetration	root- and rhizome-resistant	FLL DIN EN 13948
Foldability at low temperature	≤ -50 °C	DIN EN 495-5
UV exposure	Class 0 (5,000 h)	DIN EN 1297
Hail resistance rigid substrate flexible substrate	≥ 25 m/s ≥ 35 m/s	DIN EN 13583
Water vapour property μ	≥ 160,000 ± 30 %	DIN EN 1931 (B)
Nail shank tear resistance	≥ 300 N	DIN EN 12310-1
Durability of water tightness against ageing	passed	DIN EN 1296 (96 d) DIN EN 1928 (B) (24 h/60 kPa)
Durability of water tightness against chemicals	passed	DIN EN 1847 (28 d/+23 °C) DIN EN 1928 (B) (24 h/60 kPa)
Resistance to static load	≥ 20 kg	DIN EN 12730 (A/B)
Chemical resistance	passed (List annex C from DIN EN 13956)	DIN EN 1847
Behavior when exposed to bitumen	passed	DIN EN 1548
Dangerous substances	see footnote ¹⁾	–

¹⁾ European harmonised standards for testing methods do not exist, therefore the testing and declaration for the release of substances must be obtained in regards of national regulations/requirements

Product information

Rhepanol® hfk - the roofing membrane for all application methods

Rhepanol hfk is made of polyisobutylene (PIB), with an integrated 1.0 mm thick synthetic fleece backing and an unbacked edge. In the seam area, the roofing membranes are homogeneously connected by hot air welding. The fleece backing provides additional protection against stresses originating from the substrate. Furthermore, the fleece backing allows diffusion and ensures secure fastening onto the substrate.

Material characteristics

- Roofing membrane made of polyisobutylene according to DIN EN 13956/DIN EN 13967, compatible to bitumen, with polyester fleece backing, 1.5 mm thick plus fleece thickness 1.0 mm, application type according to DIN SPEC 20000-201 DE/E1 PIB-BV-K-PV-1.5, application type according to DIN SPEC 20000-202 BA PIB-BV-K-PV-1.5
- Root and rhizome resistant according to the FLL method without the use of herbicides
- Weather-resistant, even without additional surface protection
- Resistant to atmospheric influences such as UV radiation or industrial and heating exhaust gases
- Remains flexible, even at temperatures as low as -50 °C
- Outstanding resistance to natural ageing
- Free of plasticisers, chlorine, halogens, bitumen and PVC, resistant to rotting, non-porous
- Resistant to flying sparks and radiant heat according to DIN CEN/TS 1187, confirmed by official test certificates for roof slopes up to 20°. For roof slopes over 20° must be used Rhepanol hfk-bs.
- Reaction to fire: Building material class B 2, DIN 4102 or class E according to DIN EN 13501-1
- Hail-resistant according to EN 13583
- Thermal conductivity according to DIN 52612-1: 0.26 W/mk
- Resistant against red algae
- Also suitable for non-sloping surfaces
- Suitable for rainwater retention (retention roof)
- No shattering
- Fulfills the requirements for green roof subsidies (Hamburg or Berlin, Germany)
- Can be connected to Rhepanol fk using hot air welding

Rhepanol hfk is highly resistant to most substances commonly used in the construction of roofs.

Beyond that we confirm resistance to further materials/substrates on request. If organic solvents, paints, greases and oils have had a long-term effect, clarification is required on a case-by-case basis.

Desired color and metal roof optics

In combination with our Rhepanol roof color and the Rhepanol standing seam profile, the look of metal roofs can be realistically reproduced (e. g. copper roof), but company logos and colored roofs are also possible in the color of your choice.

Quality assurance

Rhepanol hfk is subject to constant quality control through internal and external monitoring. The internal quality assurance system of the entire company is certified according to DIN EN ISO 9001, the world's most stringent quality standard, and is regularly checked by TÜV SÜD Management Service GmbH.

Range of application

Depending on the supporting deck and the substrate conditions, Rhepanol hfk can be applied in different ways

- mechanically fastened in the seam
- mechanically fastened in the Gripfix system or in the combination of seam and Gripfix system
- loose laid with ballast (also for green roofs)
- bonded fixing

Ecology and environment

- Certified with an Environmental Product Declaration (EPD) according to DIN ISO 14025 and DIN EN 15804
- Listed in the DGNB-Navigator (www.dgnb-navigator.de)
- Rhepanol is not a hazardous substance in the sense of the EU Hazardous Substances Regulation

Storage conditions

- The roofing membranes retain their product properties in unopened and undamaged original packaging
- Store material in original packaging until processing
- Carefully reseal opened packaging units when storing outdoors
- Store rolls horizontally only
- Protect rolls from direct sunlight, rain and snow

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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