



KÖSTER TPO 1.5 FR

Technical Data Sheet RT 815 150 FR W

Issued: 2025-07-22

Certificate of conformity of the factory production control 0761-CPR-0422 MPA Braunschweig,
Official Test Report according to 1204/0445/23 DIN EN 13956 MPA Braunschweig

TPO / FPO roofing membrane with glass fleece center reinforcement

Features

KÖSTER TPO FR membranes are hot-air-welding roofing and waterproofing membranes made of thermoplastic polyolefins (FPO/TPO) based on Polyethylene with centrally embedded glass fleece reinforcement. KÖSTER TPO FR membranes are classified as Broof(t2) and Broof(t3) and are only available in white color with an SRI > 85. The KÖSTER TPO FR membranes can be applied with different application methods such as mechanical fastening and loose-laid under ballast.

- Plastic waterproofing membrane made of high quality thermoplastic polyolefins based on polyethylene (PE)
- central glass fleece insert
- uniform material quality (no difference between upper and lower side)
- homogeneous seam bonding with hot air welding
- temperature and weather resistant
- classified according to Broof (t2)/(t3)
- aging and rot resistant
- high cold flexibility ($\leq -30^{\circ}\text{C}$)
- UV-stable
- bitumen compatible
- polystyrene compatible
- suitable for all types of insulation
- resistant against normal mechanical stresses
- resistant to microorganisms and rodent attack
- environmentally friendly
- free of softeners and chlorine
- safe for health, water, soil, and plants
- recyclable

Technical Data

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Fields of Application

KÖSTER TPO FR roofing membranes are used to waterproof unventilated and ventilated flat roofs, pitched roofs, green roofs and roof gardens with ballast and in cases of direct exposure to weathering.

Application

Please refer to the TPO Installation Instructions and the Technical Manual for TPO of KÖSTER BAUCHEMIE AG for correct application of KÖSTER TPO Roofing and Waterproofing Membranes.

Cleaning

Aged membranes can be mechanically cleaned by sanding or with KÖSTER TPO Cleaner.

Packaging

RT 815 150 FR W 1.5 mm x 1.50 m x 20 m

Other

For the manufacturer's warranty of KÖSTER BAUCHEMIE AG for TPO roofing membranes, the inspection of and compliance with the


KÖSTER Roof Inspection and Maintenance Manual is mandatory.

Related products

KÖSTER Contact Adhesive	Prod. code RT 102
KÖSTER TPO Cleaner	Prod. code RT 105 002
KÖSTER External Corner light grey 90 degrees	Prod. code RT 901 001
KÖSTER Internal Corner light grey 90 degrees	Prod. code RT 902 001
KÖSTER TPO Metal Composite Sheet light grey	Prod. code RT 910 002
KÖSTER TPO Metal Composite Coil light grey	Prod. code RT 910 030
KÖSTER Wall connection profile 60 mm	Prod. code RT 919 003
KÖSTER Bar for membrane fastening	Prod. code RT 919 004

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.

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 0761 15	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich KÖSTER TPO 1.5 FR EN 13956 0761-CPR-0422 TPO / FPO roofing membrane with central glass fleece insert
Length according to DIN EN 1848-2	20 m
Width according to DIN EN 1848-2	1.50 m
Effective thickness according to DIN EN 1849-2	1.5 mm
<p>Designation according to SPEC 20.000-201</p> <p>Color</p> <p>Visible Defects according to DIN EN 1850-2</p> <p>Straightness according to DIN EN 1848-2</p> <p>Flatness according to DIN EN 1848-2</p> <p>Mass per unit area according to DIN EN 1849-2</p> <p>Water tightness according to DIN EN 1928 (Method B)</p> <p>Exposure to liquid chemicals, including water according to DIN EN 1847</p> <p>Exposure to external fire according to DIN CEN/TS 1187; DIN 4102-7; DIN EN 13501-5</p> <p>Reaction to fire according to EN 13501-1</p> <p>Resistance to hail according to DIN EN 13583</p> <p>Rigid substrate</p> <p>Soft substrate</p> <p>Peel resistance of the overlap according to DIN EN 12316-2</p> <p>Shear resistance of the overlap according to DIN EN 12317-2</p> <p>Water vapor diffusion resistance according to DIN EN 1931</p> <p>Tensile characteristics according to DIN EN 12311-2</p> <p>Tensile strength</p> <p>Elongation at break</p> <p>Resistance to shock loads according to DIN EN 12691</p> <p>Method A</p> <p>Method B</p> <p>Resistance to static loading according to DIN EN 12730</p> <p>Method A</p> <p>Method B</p> <p>Tear continuation resistance according to DIN EN 12310-2</p> <p>Root penetration resistance</p> <p>Dimensional stability according to DIN EN 1107-2</p> <p>Folding at low temperatures</p> <p>according to DIN EN 495-5</p> <p>Behavior under UV irradiation, elevated temperatures, and water according to DIN EN 1297 (1000 h)</p> <p>Ozone resistance according to DIN EN 1844</p> <p>Exposure to bitumen according to DIN EN 1548</p> <p>Durability against heat storage</p> <p>according to DIN EN 1296, DIN EN 1928 (Method A)</p>	<p>DIN EN 13956: 2012 waterproofing of flat and sloped roofs. Application by loose laying with ballast or mechanical fastening</p> <p>DE/E1-FPO-BV-E-GV-1,5</p> <p>white</p> <p>free from visible defects</p> <p>≤ 50 mm</p> <p>≤ 10 mm</p> <p>1900 g/m²</p> <p>400 kPa/72h dicht</p> <p>passed (Method B)</p> <p>Broof(t2)/(t3)¹⁾</p> <p>Class E</p> <p>≥ 30 m/s</p> <p>≥ 38 m/s</p> <p>≥ 400 N/50 mm</p> <p>Failure beyond the overlap</p> <p>SD: > 500 m</p> <p>≥ 5 N/mm² (Method B)</p> <p>≥ 400 % (Method B)</p> <p>≥ 800 mm (Method A)</p> <p>≥ 700 mm</p> <p>≥ 1250 mm</p> <p>≥ 15 kg</p> <p>≥ 20 kg</p> <p>≥ 140 N</p> <p>given</p> <p>≤ 0.2 %</p> <p>≤ - 30 °C</p> <p>passed: Level 0</p> <p>passed</p> <p>passed</p> <p>watertight</p>

¹⁾ Requirements are met for roofs tested by KÖSTER in Germany. Further information can be requested from KÖSTER.

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