KÖSTER
Waterproofing Systems

KÖSTER TPO 2.0 F W

Technical Data Sheet RT 820 F W

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Test Reports/Certificates
EPD-KBC-20160014-IBC1-DE Environmental Product Declaration according to the ISO 14025 and EN 15804,
Official Test Report according to 1200/057/15 DIN EN 13956 MPA Braunschweig,
Official Test Report according to 5278/015/14 DIN EN 13967 MPA Braunschweig,
Certificate of conformity of the factory production control 0761-CPR-0422 MPA Braunschweig,
Certificate of conformity of the factory production control 0761-CPR-0423 MPA Braunschweig,
Official Test Report according to FLL 19/16 Hochschule Weihenstephan,
Fish test A14-02548 BMG Zürich,
Official Test Report acccording to ETAG 006 4/2015 I.F.I. Aachen,
Report SRI P15-104/2 Fraunhofer IBP

White TPO Roofing and Waterproofing membrane with centrally embedded glass fleece and an additional polyester fleece backing with high SRI value (106)

Features
- Plastic waterproofing membrane made of high quality thermoplastic polyolefins based on polyethylene (PE)
- high SRI value of 106 (Solar Reflectance Index)
- central glass fleece insert
- Polyester fleece backside
- uniform material quality (no difference between upper and lower side)
- homogeneous seam bonding with hot air welding
- temperature and weather resistant
- aging and rot resistant
- high cold flexibility (≤ -50 °C)
- UV-stable
- root resistant
- compatible with bitumen
- compatible with polystyrene
- 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

Technical Data
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Fields of Application
KÖSTER TPO Roofing and Waterproofing Membranes are used to waterproof unventilated and ventilated flat roofs, pitched roofs, green roofs, terraces, balconies, roof gardens and underground garages with ballast and in cases of direct exposure to weathering. KÖSTER TPO Roofing and Waterproofing Membranes can be used for the waterproofing of basements, wet rooms and tanks.

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.

Packaging

RT 820 105 F W	2.0 mm x 1.05 m x 20 m
RT 820 150 F W	2.0 mm x 1.50 m x 20 m

Related products

KÖSTER PUR Membrane Adhesive	Prod. code RT 101
KÖSTER 2C PUR Membrane Adhesive	Prod. code RT 104 001
KÖSTER TPO 2.0 U	Prod. code RT 820 U
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 Round Corner Patch light grey	Prod. code RT 903 001
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
KÖSTER Hand press for KÖSTER 2C PUR Membrane Adhesive	Prod. code RT 999 001

R - Roofing membranes, roof waterproofing

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CE 0761 15	**KÖSTER BAUCHEMIE AG** **Dieselstraße 1-10, 26607 Aurich** **KÖSTER TPO 2.0 F W** **EN 13956 0761-CPR-0422** **EN 13967 0761-CPR-0423** **TPO (PE) roofing and waterproofing membrane with central glass fleece insert and fleece laminated underside**	
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	2.0 mm	
Total thickness DIN EN 1849-2	2.8 mm	
	DIN EN 13956: 2012 waterproofing of flat and sloped roofs. Application by loose laying with ballast, mechanical fastening, full surface, or strip adhesion.	**DIN EN 13967:2012 Vapor Barrier Type T**
Designation according SPEC 20000-201 and SPEC 20000-202	DE/E1-FPO-BV-E-GV-K-PV-2,0	BA-FPO-BV-E-GV-K-PV-2,0
Color	white (SRI 106)	white (SRI 106)
Visible Defects according to DIN EN 1850-2	free from visible defects	free from visible defects
Straightness according to DIN EN 1848-2	≤ 50 mm	≤ 50 mm
Flatness according to DIN EN 1848-2	≤ 10 mm	
Mass per unit area according to DIN EN 1849-2	2215 g /m²	2215 g /m²
Water tightness according to DIN EN 1928 (Method B)	400 kPa/24h watertight	400 kPa/72h watertight
Exposure to liquid chemicals, including water according to DIN EN 1847	passed (Method B)	watertight (Method A)
Exposure to external fire according to DIN CEN/TS 1187; DIN 4102-7; DIN EN 13501-5	$B_{roof}(t1)$; $B_{roof}(t4)$ [1)]	-
Reaction to fire according to EN 13501-1	Class E	Class E
Resistance to hail according to DIN EN 13583		
Rigid substrate	≥ 25 m/s	-
Soft substrate	≥ 43 m/s	
Peel resistance of the overlap according to DIN EN 12316-2	> 500 N/50mm	-
Shear resistance of the overlap according to DIN EN 12317-2	Failure beyond the overlap	Failure beyond the overlap
Tensile characterisitcs according to DIN EN 12311-2		
Tensile strength	≥ 1000 N/50 mm (Method A)	≥ 1000 N/50 mm (Method A)
Elongation at break	≥ 50 % (Method A)	≥ 50 % (Method A)
Resistance to shock loads according to DIN EN 12691		
Method A	≥ 700 mm	≥ 700 mm
Method B	≥ 1500 mm	≥ 1500 mm
Resistance to static loading according to DIN EN 12730		
Method A	≥ 20 kg	≥ 20 kg
Method B	≥ 20 kg	≥ 20 kg
Tear continuation resistance according to DIN EN 12310-2	≥ 350 N	≥ 350 N
Root penetration resistance [2)]	FLL-tested	-
Dimensional stability according to DIN EN 1107-2	≤ 0.2 %	≤ 0.2 %
Folding at low temperatures according to DIN EN 495-5	≤ - 50 °C	-
Behavior under UV irradiation, elevated temperatures, and water according to DIN EN 1297 (1000 h)	passed: Level 0	-
Ozone resistance according to DIN EN 1844	passed	-
Exposure to bitumen according to DIN EN 1548	passed	watertight
Durabilty against heat storage according to DIN EN 1296, DIN EN 1928 (Method A)	watertight	watertight
Tear resistance (nail shank) according to DIN EN 12310-1	≥ 500 N	≥ 500 N

1) Requirements are met for roofs tested by KÖSTER. Further information can be requested from KÖSTER. 2) Applies only to green roofs

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