KÖSTER
Waterproofing Systems

KÖSTER TPO Pro 1.5

Technical Data Sheet RT 815 150 Pro

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- Certificate of conformity of factory production control 0761-CPR-0422 MPA Braunschweig

TPO / FPO roofing and waterproofing membrane with centrally embedded glass fleece

Features
This robust waterproofing membrane is conformed to DIN EN 13967:2012 and it is classified as a moisture barrier Type T. The KÖSTER TPO Pro 1.5 membrane is highly tear resistant and provides a very high flexibility, so that even large cracks are bridged securely.

- Uniform material quality (no difference between upper and lower side)
- a significant proportion of pure, recycled polyethylene
- seam bonding with hot air welding
- and weather resistant
- Aging and rot resistant
- High cold flexibility (≤ -50 °C)
- UV-stable
- Compatible with bitumen
- Compatible with polystyrene
- Suitable for all types of insulation
- Resistant against normal mechanical stresses
- Resistant to microorganisms and rodent attack
- Free of softeners and chlorine
- Harmless to health, water, soil, animals and plants
- Environmentally friendly
- Recyclable

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Fields of Application
KÖSTER TPO Pro Roofing and Waterproofing Membranes are used to waterproof flat roofs in cases of direct exposure to weathering. The membranes can be mechanically fastened or installed with ballast.

Substrate
For KÖSTER TPO Pro roofing membranes which have been exposed to weathering for a certain period of time, it is essential to carry out welding tests before further welding. If the welding result is unsatisfactory, the membrane must be roughened in the welding area with suitable grinding equipment. Alternatively, the KÖSTER TPO Cleaner can be used to pre-treat the weld seam.

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 815 150 Pro	1.5 mm x 1.50 m x 20 m

Other
Due to the use of recycled raw materials, slight color differences may occur in different production batches. This has no impact on the quality and durability of the KÖSTER TPO Pro roofing membrane. We recommend paying attention to the batch number when laying and using it in individual construction phases.

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 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

R - Roofing membranes, roof waterproofing

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CE 0761 15	**KÖSTER BAUCHEMIE AG** **Dieselstraße 1-10, 26607 Aurich** **KÖSTER TPO Pro 1.5** **EN 13956 0761-CPR-0422** **EN 13967 0761-CPR-0423** **FPO (PE) roofing and waterproofing membrane made of flexible Polyolefin 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	
	DIN EN 13956: 2012 waterproofing of flat and sloped roofs. Application by loose laying with ballast or mechanical fastening	**DIN EN 13967:2012 Vapor Barrier Type T**
Designation according DIN SPEC 20000-201 and DIN SPEC 20000-202	DE/E1-FPO-BV-E-GV-1,5	BA-FPO-BV-E-GV-1,5
Color	light grey	light grey
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	1490 g /m²	1490 g /m²
Water tightness according to DIN EN 1928 (Method B)	400 kPa/72h 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	Broof(t1)[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	≥ 38 m/s	
Peel resistance of the overlap according to DIN EN 12316-2	≥ 400 N/50 mm	-
Shear resistance of the overlap according to DIN EN 12317-2	Failure beyond the overlap	Failure beyond the overlap
Water vapor diffusion resistance according to DIN EN 1931	μ = 85.000	μ = 85.000
Tensile characterisitcs according to DIN EN 12311-2		
Tensile strength	≥ 5 N/mm² (Method B)	≥ 5 N/mm² (Method B)
Elongation at break	≥ 350 % (Method B)	≥ 350 % (Method B)
Resistance to shock loads according to DIN EN 12691		
Method A	≥ 400 mm	≥ 400 mm
Method B	≥ 1000 mm	≥ 1000 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	≥ 175 N	≥ 175 N
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: Cracking level 0	-
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	≥ 400 N	≥ 400 N

1) Requirements are met for roof structures tested by KÖSTER in Germany. Information on this is available from KÖSTER.

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