KÖSTER
Waterproofing Systems

KÖSTER ECB 2.0

Technical Data Sheet RE 820

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Ethylene Copolymer Bitumen (ECB) based waterproofing membrane with centrally embedded glass fiber mesh

Features
- 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
- recyclable

Technical Data
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Fields of Application
KÖSTER ECB 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 ECB Roofing and Waterproofing Membranes can be used for the waterproofing wet rooms, tanks, waterproofing horizontal and vertical surfaces of structures and/or structural members according to DIN EN 18533.

Application
For the application of KÖSTER ECB Membranes, please adhere to the KÖSTER Installation Instructions for roofing membranes.

Packaging

RE 820 025	2.0 mm x 0.25 m x 20 m
RE 820 035	2.0 mm x 0.35 m x 20 m
RE 820 052	2.0 mm x 0.525 m x 20 m
RE 820 075	2.0 mm x 0.75 m x 20 m
RE 820 105	2.0 mm x 1.05 m x 20 m
RE 820 150	2.0 mm x 1.50 m x 20 m
RE 820 210	2.0 mm x 2.10 m x 20 m

Related products

KÖSTER ECB 2.0 U	Prod. code RE 820 052 U
KÖSTER Contact Adhesive	Prod. code RT 102
KÖSTER External Corner black 90 degrees	Prod. code RT 901 001 B
KÖSTER Internal Corner black 90 degrees	Prod. code RT 902 001 B
KÖSTER Round Corner Patch black	Prod. code RT 903 001 B
KÖSTER TPO Metal Composite Sheet black	Prod. code RT 910 002 B
KÖSTER TPO Metal Composite Coil black	Prod. code RT 910 030 B
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 ECB 2.0 EN 13956 0761-CPR-0422 EN 13967 0761-CPR-0423 Roofing- und Waterproofing membrane from Ethylene-Copolymer-Bitumen with embadded glass fleece	
Length according nach DIN EN 1848-2	20 m[1)]	
Width according DIN EN 1848-2	2,10; 1,50; 1,05; 0,75; 0,525; 0,35; 0,25 m	
Nominal thickness DIN EN 1849-2	2,0 mm	
	DIN EN 13956: 2012 Flexible sheets for waterproofing - Plastic and rubber sheets for roof waterproofing	**DIN EN 13967:2012 Flexible sheets for waterproofing - Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet**
Description according to DIN SPEC 20000-201 / 20000-202	DE/E1-ECB-BV-E-GV-2,0	BA-ECB-BV-E-GV-2,0
Color	black	black
Visible defects according to DIN EN 1850-2	Free of visible defects	Free of visible defects
Geradheit nach to DIN EN 1848-2	≤ 50 mm	≤ 50 mm
Flatness according to DIN EN 1848-2	≤ 10 mm	
Area related weight according to DIN EN 1849-2	2010 g /m²	2010 g /m²
Water tightness according to DIN EN 1928 (Verf. B)	400 kPa/72h dicht	400 kPa/72h dicht
Reaction to liquid chemicals including water according to DIN EN 1847	passed (Verf. B)	watertight (Verf. A)
External fire exposure according to DIN CEN/TS 1187; DIN 4102-7; DIN EN 13501-5	Broof(t1)[2)]	-
Reaction to fire according to EN 13501-1	Class E	Classe E
Resistance to shock loads (Hail) according to DIN EN 13583		
Rigid Substrate	≥ 34 m/s	-
Flexible Substrate	≥ 45 m/s	
Peel strength of the overlap seam according to DIN EN 12316-2	> 400 N/50 mm	-
Weld seam shear resistance according to DIN EN 12317-2	Failure outside of the seam	Failure outside of the seam
Water vapor diffusion resistance according to DIN EN 1931	μ = 175.000	μ = 175.000
Elongation at break according to DIN EN 12311-2		
Tensile strenght longitudinal/transverse	≥ 6 N/mm² (method B)	≥ 6 N/mm² (method B)
Elongation longiudinal/transverse	≥ 600 % (method B)	≥ 600 % (method B)
Resistance to shock loads according to DIN EN 12691		
Method A	≥ 900 mm	≥ 900 mm
Method B	≥ 1500 mm	≥ 1500 mm
Resistance to static loading according to nach DIN EN 12730		
Method A	≥ 20 kg	≥ 20 kg
Method B	≥ 20 kg	≥ 20 kg
Tear continuation resistance according to DIN EN 12310-2	≥ 250 N	≥ 250 N
Root penetration resistance [3)]	given	-
Dimensional stability according to DIN EN 1107-2 längs/quer	≤ 0,25 %	≤ 0,25 %
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 stage 0	-
Behavior upon exposure to bitumen according to DIN EN 1548	passed	watertight
Durability against heat storage to DIN EN 1296, DIN EN 1928 (Verf. A)	watertight	watertight
Tear resistance (nail shaft) to DIN EN 12310-1	≥ 500 N	≥ 500 N

1) Special lengths available on request 2) Requirements are met for roofs tested by KÖSTER in Germany. Further information can be requested from KÖSTER 3) Applies only to green roofs

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