



# KÖSTER ECB 2.0

**Technical Data Sheet RE 820** 

Issued: 2024-03-26

# 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 ( $\leq$  -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**

See last page

#### **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 KÖSTER Contact Adhesive	Prod. code RE 820 052 U Prod. code RT 102
KÖSTER External Corner black 90	Prod. code RT 901 001 B
degrees	
KÖSTER Internal Corner black 90	Prod. code RT 902 001 B
degrees KÖSTER Round Corner Patch black	Prod. code RT 903 001 B
KÖSTER TPO Metal Composite Sheet	Prod. code RT 903 001 B
black	
KÖSTER TPO Metal Composite Coil	Prod. code RT 910 030 B
black	
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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	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		
0761			
15			
angth according pach DIN EN 1949 2		ladded glass fieece	
Length according nach DIN EN 1848-2 Width according DIN EN 1848-2	20 m <sup>1)</sup> 2,10; 1,50; 1,05; 0,75; 0,525; 0,35; 0,25 m		
Nominal thickness DIN EN 1849-2	2,0 mm		
	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 /m <sup>2</sup>	2010 g /m <sup>2</sup>	
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) <sup>2)</sup>	-	
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	$\geq 45 \text{ m/s}$		
Peel strength of the overlap seam according to DIN EN	> 400 N/50 mm	_	
12316-2			
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	$\mu = 175.000$	$\mu = 175.000$	
Elongation at break according to DIN EN 12311-2		μ	
Tensile strenght longitudinal/transverse	$\geq$ 6 N/mm <sup>2</sup> (method B)	$\geq$ 6 N/mm <sup>2</sup> (method B)	
Elongation longiudinal/transverse	$\geq 600 \%$ (method B)	$\geq 600 \%$ (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	$\geq 20 \text{ kg}$	$\geq 20 \text{ kg}$	
Tear continuation resistance according to DIN EN 12310-2	≥ 250 N	≥ 250 N	
Root penetration resistance <sup>3)</sup>	given		
<b>Dimensional stability</b> according to DIN EN 1107-2 längs/quer	≤ 0,25 %	≤ 0,25 %	
Folding at low temperatures according to DIN EN 495-5	≤ 0,23 % ≤ - 50°C		
Behavior under UV irradiation, elevated temperatures, and		_	
water according to DIN EN 1297 (1000 h)			
Ozone resistance according to DIN EN 1844	passed: Cracking stage 0	_	
Behavior upon exposure to bitumen according to DIN EN	passed	watertight	
1548		waterugrit	
Durability against heat storage	watertight	watertight	
to DIN EN 1296, DIN EN 1928 (Verf. A)	waterugin	waterlight	
Tear resistance (nail shaft) to DIN EN 12310-1	≥ 500 N	≥ 500 N	
1) Special lengths available on request 2) Requirements are met			

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

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