



# KÖSTER ECB 2.0

Technical Data Sheet RE 820

Issued: 2018-06-06

## 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 ( $\leq -50^{\circ}\text{C}$ )
- 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	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 TPO Metal Composite Sheet	Prod. code RT 910 002 B
KÖSTER TPO Metal Composite Coil	Prod. code RT 910 030 B

KÖSTER Roof Drain Vertical DN 125	Prod. code RT 914 001 S
KÖSTER Roof Drain Angled DN 70	Prod. code RT 914 002 A
KÖSTER Universal Roof Drain Extension for roof drain without TPO-seal	Prod. code RT 914 003 A
KÖSTER System Roof Vent DN 100	Prod. code RT 915 004
KÖSTER Base for System Roof Vent DN 100	Prod. code RT 915 005
KÖSTER Vapor Barrier FR	Prod. code RT 920 075

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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 <b>0761</b> <b>15</b>	<b>KÖSTER BAUCHEMIE AG</b> Dieselstraße 1-10, 26607 Aurich  <b>KÖSTER ECB 2.0</b> <b>EN 13956 0761-CPR-0422</b> <b>EN 13967 0761-CPR-0423</b> <b>Roofing- und Waterproofing membrane from Ethylene-Copolymer-          Bitumen with embadded glass fleece</b>	
Length according nach DIN EN 1848-2	20 m <sup>1)</sup>	
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	
<b>Description</b> according to DIN SPEC 20000-201 / 20000-202 <b>Color</b> <b>Visible defects</b> according to DIN EN 1850-2 <b>Geradheit</b> nach to DIN EN 1848-2 <b>Flatness</b> according to DIN EN 1848-2 <b>Area related weight</b> according to DIN EN 1849-2 <b>Water tightness</b> according to DIN EN 1928 (Verf. B) <b>Reaction to liquid chemicals including water</b> according to DIN EN 1847 <b>External fire exposure</b> according to DIN CEN/TS 1187; DIN 4102-7; DIN EN 13501-5 <b>Reaction to fire</b> according to EN 13501-1 <b>Resistance to shock loads (Hail)</b> according to DIN EN 13583 Rigid Substrate Flexible Substrate <b>Peel strength of the overlap seam</b> according to DIN EN 12316-2 <b>Weld seam shear resistance</b> according to DIN EN 12317-2 <b>Water vapor diffusion resistance</b> according to DIN EN 1931 <b>Elongation at break</b> according to DIN EN 12311-2 Tensile strenght longitudinal/transverse Elongation longiudinal/transverse <b>Resistance to shock loads</b> according to DIN EN 12691 Method A Method B <b>Resistance to static loading</b> according to nach DIN EN 12730 Method A Method B <b>Tear continuation resistance</b> according to DIN EN 12310-2 <b>Root penetration resistance</b> <sup>3)</sup> <b>Dimensional stability</b> according to DIN EN 1107-2 längs/quer <b>Folding at low temperatures</b> according to DIN EN 495-5 <b>Behavior under UV irradiation, elevated temperatures, and water</b> according to DIN EN 1297 (1000 h) <b>Ozone resistance</b> according to DIN EN 1844 <b>Behavior upon exposure to bitumen</b> according to DIN EN 1548 <b>Durability against heat storage</b> to DIN EN 1296, DIN EN 1928 (Verf. A) <b>Tear resistance (nail shaft)</b> to DIN EN 12310-1	<b>DIN EN 13956: 2012</b> <b>Flexible sheets for waterproofing - Plastic and rubber sheets for roof waterproofing</b>  DE/E1-ECB-BV-E-GV-2,0 black Free of visible defects $\leq 50$ mm $\leq 10$ mm 2010 g /m <sup>2</sup> 400 kPa/72h dicht passed (Verf. B)  Broof(t1) <sup>2)</sup>  Class E  $\geq 34$ m/s $\geq 45$ m/s $> 400$ N/50 mm  Failure outside of the seam $\mu = 175.000$  $\geq 6$ N/mm <sup>2</sup> (method B) $\geq 600$ % (method B)  $\geq 900$ mm $\geq 1500$ mm  $\geq 20$ kg $\geq 20$ kg $\geq 250$ N given $\leq 0,25$ % $\leq - 50$ °C passed: Level 0  passed: Cracking stage 0 passed  watertight  $\geq 500$ N	<b>DIN EN 13967:2012</b> <b>Flexible sheets for waterproofing - Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet</b>  BA-ECB-BV-E-GV-2,0 black Free of visible defects $\leq 50$ mm  2010 g /m <sup>2</sup> 400 kPa/72h dicht watertight (Verf. A)  -  Classe E  - -  Failure outside of the seam $\mu = 175.000$  $\geq 6$ N/mm <sup>2</sup> (method B) $\geq 600$ % (method B)  $\geq 900$ mm $\geq 1500$ mm  $\geq 20$ kg $\geq 20$ kg $\geq 250$ N - $\leq 0,25$ % - -  - watertight  watertight  $\geq 500$ 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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