



## KÖSTER Deuxan 2C (UK)


Technical Data Sheet W 252 032 (UK)

Issued: 2020-06-12

- BBA Certification 18/5509i1 Resistance to Water and Water Vapour, Resistance to Mechanical Damage, Durability
- Industry classification "Deuxan" registered at the German patent office, K 50 863
- Official test certificate for approval by the building authorities P-2005-4-3472/02-K by the MPA for construction engineering in Dresden, Waterproofing against pressurized and non-pressurized water
- Official test Certificate by the MPA Dresden – according to the guideline of the Association of the German Chemical Industry "Guideline for the design and the application of waterproofing of construction members with ground contact using polymer modified bitumen thick film sealants" from June 1996 in accordance with DIN 18195
- Official test certificate by the AMPA Hannover – slotted disk water pressure test
- Tested for tightness against radon gas

## Crack-bridging, robust, 2 component polymer modified bitumen thick film sealant for waterproofing construction members



|   |   |
|---|---|
| <br>1020   | KÖSTER BAUCHEMIE AG<br>Dieselstraße 1-10, 26607 Aurich<br>14<br>W 256<br>EN 15814:2012<br><b>KÖSTER Deuxan Professional<br/>         Polymer modified bitumen thick<br/>         film sealant (PMB)<br/>         for the waterproofing of<br/>         underground structures</b> |
| Watertightness<br>Crack bridging ability<br>Resistance against water<br><br>Bending properties at low<br>temperatures<br>Stability at high temperatures<br>Reaction to fire<br>Compressive strength<br>Durability of watertightness and<br>reaction to fire | Class W2A<br>Class CB2<br>No discoloration of the water / No<br>debonding of the inlay<br>No cracks<br><br>No sliding and yielding<br>Class E<br>no classification<br>passed  |

### Technical Data

|   |   |
|---|---|
| Material base   | bitumen / rubber with a reactive powder |
| Density of the mixture  | 1.07 g / cm <sup>3</sup>                |
| Heat resistance   | + 70 °C                                 |
| Elongation at break   | approx. 100 %                           |
| Waterproof after full cure (in accordance to DIN 1048 part 5) | waterproof up to 5 bar                  |
| Curing time at + 20 °C  | approx. 24 hours                        |
| Min. temperature during curing                                | + 2 °C                                  |
| Mixing time   | min. 3 minutes                          |
| Pot life  | approx. 90 minutes                      |

|                             |                    |
|-----------------------------|--------------------|
| Application temperature     | + 5 °C to + 35 °C  |
| Substrate temperature       | + 5 °C to + 30 °C  |
| Effectiveness against radon | gasradon gas-proof |

### Fields of Application

KÖSTER Deuxan 2C is designed for the secure and permanent exterior waterproofing of basement walls, foundations, floor plates, etc. and for intermediate waterproofing of balconies, terraces without inhabited sub-structures as well as for wet and damp rooms. Since waterproofing is carried out depending on the loading conditions, the loading conditions have to be determined by the planner prior to the application.

KÖSTER Deuxan 2C has been successfully used against pressurized water for many years (Consumption min. 6 kg / m<sup>2</sup>). The coating is also suitable for intermediate waterproofing underneath screeds and for bonding insulation and drainage boards.

### Substrate

The substrate should be dry or slightly damp, (no visible water), frost-free, free of tar and oil and free of loose particles. Remove mortar residues, break edges, and vertical and horizontal inside corners and transitions should be rounded out by installing fillets. Mineral substrates always have to be primed with KÖSTER Polysil TG 500 (approx. 100 – 130 g / m<sup>2</sup>) by spray application. Strongly absorbent surfaces may require up to 250 g / m<sup>2</sup>.

Priming is not necessary on polystyrene substrates.

Surface roughness and irregularities up to 5 mm are filled with a scraped layer of KÖSTER Deuxan 2C. Allow the scraped layer to dry far enough so that it will not be damaged by the application of the waterproofing layer. Scraped layers do not count as waterproofing layers.

If defects are deeper than 5 mm, level them beforehand with KÖSTER Repair Mortar mixed with 20 % KÖSTER SB Bonding Emulsion in the mix water.

### Application

#### Fillets

Fillets (leg length 4 – 6 cm) using KÖSTER Repair Mortar (Consumption per m: approx. 2.5 kg) must be applied at least 24 hours prior to beginning the waterproofing application in the wall / floor junction. When waterproofing polystyrene materials, the fillet (leg length: 2 cm) is made with KÖSTER Deuxan 2C. The area waterproofing can always only be applied after the fillet has fully cured.

### Mixing and area waterproofing

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.

Add the powder to the liquid component in portions and continually mix both components intensively with each other using a slow rotating stirring device until the material becomes a paste-like, lump-free, homogeneous mass (mixing time is min. 3 minutes).

KÖSTER Deuxan 2C is always applied in two layers. Scraped layers for levelling the substrate (surface preparation) are not considered a waterproofing layer. KÖSTER Glass Fiber Mesh is embedded into the first layer while it is still fresh. The layers have to be applied shortly after each other using a plastering trowel or steel float. KÖSTER Deuxan 2C can be spray applied with proper spraying equipment, including the KÖSTER Peristaltic Pump.

The waterproofing layer has to be free of flaws, even and in the required thickness. The actual layer thickness must nowhere be less than the required minimum thickness and in no case exceed it by more than 100 %.

The waterproofing layer of the wall area has to extend at least 10 cm onto the front of the floor slab or foundation. External waterproofing has to be connected in all areas to the existing horizontal waterproofing. Do not expose the material to frost, rain and water or to direct sunlight until it has fully cured. The minimum dry layer thickness must be:

-3 mm thick in case of waterproofing against ground moisture and non-retained seepage as well as non-pressurized water (wet layer thickness 4.0 mm = 4.0 kg / m<sup>2</sup>). Embed KÖSTER Glass Fiber Mesh at corners, fillets and areas strongly in danger of cracking.

-4 mm thick in case of waterproofing against retained seepage (wet layer thickness 6 mm = 6 kg / m<sup>2</sup>). Embed KÖSTER Glass Fiber Mesh into the first layer.

Seal expansion joints by applying KÖSTER Joint Tape 20 / KÖSTER Joint Tape 30 in the joint areas of the thick film sealant. Avoid water seeping in behind the coating. Allow the waterproofing to cure fully before stressing the material (depends on the weather, but at the earliest after 24 hours).

### Pipe and cable penetrations

Apply KÖSTER Deuxan 2C in a fillet shape around the feed through or penetration and embed KÖSTER Glass Fiber Mesh into it. It is necessary to make sure that the material of the installed parts is compatible with the waterproofing material. The same applies when waterproofing against pressurized water.

### Protection and drainage layer

Prior to backfilling, the fully cured coating must be protected from mechanical damage. We recommend the use of KÖSTER Protection and Drainage Sheet 3-400. Polystyrene drainage boards and perimeter insulation are to be fully bonded. In order to avoid vertical movement of the waterproofing when backfilling the excavation pit, the surface of the protection or respective drainage boards should be covered with a gliding layer of polyethylene. All cases allow for bonding with KÖSTER Deuxan 2C. Avoid stress points on the waterproofing. Dimple sheets, corrugated boards and the like are not suitable protection layers. Drainage is recommended. Make sure not to damage the fillets when backfilling and compacting non-cohesive soils.

In case of horizontal waterproofing on floor areas, embed KÖSTER Glass Fiber Mesh between the waterproofing layers. Install two gliding layers of polyethylene foil prior to applying the screed.

### Horizontal waterproofing layers

In case of horizontal waterproofing of floor areas, embed KÖSTER Glass Fiber Mesh into the complete waterproofing area. Install two gliding layers of polyethylene foil prior to applying the screed.

### Consumption

4 - 6 kg / m<sup>2</sup>

### Packaging

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32 kg hobbock; liquid component  
24 kg, powder component 8 kg

### Related products

|   |                      |
|---|----------------------|
| KÖSTER KB-Pox Adhesive                        | Prod. code J 120 005 |
| KÖSTER Joint Tape 20                          | Prod. code J 820 020 |
| KÖSTER Joint Tape 30                          | Prod. code J 830 020 |
| KÖSTER Polysil TG 500                         | Prod. code M 111     |
| KÖSTER NB 1 Grey                              | Prod. code W 221 025 |
| KÖSTER Glass Fiber Mesh                       | Prod. code W 411     |
| KÖSTER Repair Mortar                          | Prod. code W 530 025 |
| KÖSTER SD Protection and Drainage Sheet 3-400 | Prod. code W 901 030 |
| KÖSTER Universal Cleaner                      | Prod. code X 910 010 |
| KÖSTER Drill Stirrer                          | Prod. code X 911 001 |

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