




KÖSTER Deuxan 2C

Technical Data Sheet W 252 032

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- 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

 1020	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 14 W 252 EN 15814:2012 KÖSTER Deuxan 2C Polymer modified bitumen thick film sealant (PMB) for the waterproofing of underground structures
Watertightness Crack bridging ability Resistance against water Bending properties at low temperatures Stability at high temperatures Reaction to fire Compressive strength Durability of watertightness and reaction to fire	Class W2A Class CB2 No discoloration of the water / No debonding of the inlay No cracks No sliding and yielding Class E Class C2A passed

Features

KÖSTER Deuxan 2C is a two component, polystyrene-free, fibrated, polymer modified bitumen thick film sealant for the secure waterproofing of building structures. The coating bridges cracks in the substrate against pressurized water. KÖSTER Deuxan2C is radon-proof.

Technical Data

Material base	bitumen / rubber with a reactive powder
Density of the mixture	1.07 g / cm ³
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	gas radon 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 / m²). 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 / m²) by spray application. Strongly absorbent surfaces may require up to 250 g / m².

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

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

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.

after each other using a plastering trowel or steel float. 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 / m²). 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 / m²). 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/m²

Cleaning

Clean tools with water immediately after use. Clean cured material with KÖSTER Universal Cleaner.

Packaging

W 252 032 32 kg hobbock; liquid component
24 kg, powder component 8 kg

Storage

Store the material cool but frost free. In originally sealed containers it can be stored for a minimum of 6 months.

Safety

The powder component contains cement. Avoid skin contact. Observe all governmental, state, and local safety regulations when installing the material.

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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