



KÖSTER NB 4000

Technical Data Sheet W 236 025

Issued: 2019-09-06

- certification report from KIWA Dresden according to the test requirements for Mineral Thick Film Sealants (PZ DD 4349 / 01 / 2010)
 - MPA Test Report (1200/574/15b) - Pan from 03.08.2017 crack bridging capability

Two component, crack bridging, mineral thick film waterproofing. Quickly rainproof, can be plastered over

Features

KÖSTER NB 4000 is a polymer modified mineral coating for waterproofing building structures inside and outside.

It is resistant to rain soon after application and can be exposed to pressurized water after 24 hours. It is viscoplastic and crack bridging. KÖSTER NB 4000 is free of bitumen, UV stable, and can be used for adhering insulation boards.

It can be applied to slightly moist substrates, can be painted and stuccoed over with foundation base plasters. KÖSTER NB 4000 can be filled with kiln-dried quartz sand to create fillets and fill surface roughness.

Technical Data

Color	dark grey
Solids	approx. 90 % by weight
Density (+ 20 °C)	1.1 g / cm ³
Application temperature	+ 2 °C to + 30 °C
Working time	approx. 45 min.
Rain resistant after	approx. 2 hours
Bonding of insulation boards	approx. 4 hours
Backfill	approx. 16 hours

Fields of Application

KÖSTER NB 4000 is suited for waterproofing building structures inside and outside, especially in the restoration of buildings. Can be applied over old bituminous or mineral waterproofing layers. It can be filled with kiln dried silica sand to make a scratch coat or fillet mortar. When used as Polymer Modified Sealing Slurry, it can also be used under tiles and slabs and according to loading case W4-E as a horizontal barrier under masonry walls.

Substrate

The substrate can be dry or slightly moist. It must be clean, free of oil and grease, and free of loose particles. Soft (for example aerated concrete), strongly salt contaminated and absorbent substrates must be prepared with KÖSTER Polysil TG 500 (consumption 100 - 130 g / m², for strongly absorbent substrates up to 250 g / m² possible). Existing fillets should be checked for their functionality and, if necessary, recreated. Edges are to be chamfered.

Damaged concrete or plaster areas as well as cracks and holes with a depth of more than 5 mm are to be repaired with KÖSTER WP Mortar or KÖSTER NB 4000 filled with quartz sand. Defects, blowholes, holes smaller than 5 mm, and old bituminous substrates are prepared with an unfilled scratch coat which will also reduce the likelihood of bubbling.

Scratch coats are made from 2 parts of KÖSTER NB 4000 and 1 part Quartz Sand CT 483 (0.06 - 0.36 mm).

Application

Mixing

Fill the liquid component into a mixing vessel which is large enough to

accommodate the liquid and the powder component. Add the powder component to the liquid component in portions while continually mixing with a double paddle slow rotating electrical mixer. Mix both components intensively until a homogeneous, paste-like, lump-free consistency is reached. Minimum mixing time is 3 minutes.

Application

KÖSTER NB 4000 is applied in 2 coats by trowel or sprayed with the KÖSTER peristaltic pump, max. hose length 10 m. The second coat is to be applied as soon as can be done so without damaging the first coat. The layers must be free of defects, even and in the recommended layer thickness. The actual dry layer thickness must not be less than the recommended minimum and must not exceed it by more than 100 %. Areas prone to or in danger of cracking should have KÖSTER Glass Fiber Mesh imbedded in the fresh first layer. The area waterproofing of the wall must be overlapped at least 10 cm onto the front of the floor slab or the foundation. The external waterproofing must be connected to the existing horizontal waterproofing in all areas. Protect the fresh coating from rain and frost, from exposure to water, as well as strong sunlight until the coating has fully cured. If a longer pot life is desired, such as when working in warm or sunny conditions, a retarding agent can be provided by KÖSTER upon request. Provide a mechanical protection (for example KÖSTER SD Protection and Drainage Sheet) before backfilling.

Consumption

Approx. 2.4 - 4.8 kg/m²

Explanation of the consumption tables:

W1-E: Soil moisture and non-pressurized water according to DIN 18533: 2017-07

W2.1-E: Moderate exposure to pressurized water (immersion depth ≤ 3 m) according to DIN 18533: 2017-07

W2-B: Tank waterproofing according to DIN 18535: 2017-07 up to ≤ 10 m filling height

W3-E: Non-pressurized water on soil-covered ceilings according to DIN 18533: 2017-07

W4-E: Splash water and soil moisture on the wall base as well as capillary water in and under walls according to DIN 18533: 2017-07

DFT: minimum dry film thickness

WFT: wet film thickness

When used as a Flexible Waterproofing Slurry:

Water exposure class	DFT	WFT	consumption
NS	[mm]	[mm]	[kg / m ²]
W1-E	3.0	3.2	ca. 3.6
W2.1-E	4.0	4.2	ca. 4.8
W2-B	4.0	4.2	ca. 4.8
W3-E	3.0	3.2	ca. 3.6
W4-E	2.0	2.1	ca. 2.4

Consumption in accordance with DIN 18533. The Flexible

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.

