




## KÖSTER NB Elastic White

Technical Data Sheet W 234 033

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- Official test certificate, MPA (Institute for testing of non-metal materials) in Clausthal – Zellerfeld
- Test Certificate for approval by the building authorities, MPA (Institute for testing of non-metal materials) in Claust.-Zellerf.
- Test Certificate, College of Ostfriesland, water vapour permeability
- Test Certificate: Sealing against radon

## 2 component, light colored, elastic mineral waterproofing

 <p>0761</p>	<p><b>KÖSTER BAUCHEMIE AG</b>  <b>Dieselstraße 1-10, 26607 Aurich</b>  <b>13</b>  <b>W 234</b>  <b>EN 1504-2:2004</b>  <b>Surface protection products -</b>  <b>Coating</b>  <b>EN 1504-2: ZA. 1d und ZA. 1e</b></p>
<p>Cross cut  CO<sub>2</sub>-permeability  Water vapor permeability  Capillary absorption and permeability to water  Frost - thaw with chloride attack  Adhesion strength by pull off test  Reaction to fire  Artificial weathering</p>	<p>NPD  SD ≥ 200 m  SD = 21.2 m (Klasse II)  w = 0.016 kg/m<sup>2</sup> x h<sup>0.5</sup>    MW = 1.5 N / mm<sup>2</sup>  MW = 1.4 N / mm<sup>2</sup>  Class E  NPD</p>

### Features

KÖSTER NB Elastic White is a light colored, waterproof, elastic, wear-resistant coating with excellent adhesion to all mineral substrates. The material can bridge cracks. It is abrasion resistant and resistant to corrosive liquids such as dilute acids and alkalis. It possesses a good UV-resistance and is radon proof.

### Advantages:

- Crack bridging.
- Resistant to foot traffic.
- Ideal for balconies and terraces and also under tile.
- Suitable for moist surfaces.
- Together with KÖSTER NB 1 Grey suitable for negative side waterproofing.
- Cement based system.
- Suitable for mineral substrates such as concrete and brick walls.
- Radon proof.

### Technical Data

Density (powder and liquid component)	approx. 1.7 g / cm <sup>3</sup>
Color	light beige
Binder contents (synthetic comp.)	min. 52 % by weight
Application temperature	min. + 2 °C
Elongation at break	> 30 %
Tensile strength	> 0.8 N / mm <sup>2</sup>
Crack bridging (2 mm layer thickness)	< 0.4 mm
Adhesive tensile strength	> 1.0 N / mm <sup>2</sup>
Waterproof against pressurized water up to	7 bar

Pot life	approx. 2 hours
Resistant to foot traffic resistant	after approx. 24 hours
Application of following layers after	approx. 2 days
Results of the test certificate from the Material Testing Institute of Bremen with an average layer thickness of 1.917 mm:	
CO <sub>2</sub> permeability	1.29 g/m <sup>2</sup> · 24 h
Sd value	422 m
μ value	2.2 · 10 <sup>5</sup>

### Fields of Application

Coatings made of KÖSTER NB Elastic White are resistant to wear, elastic, and waterproof. Such coatings can be used for areas subject to mechanical stresses and for areas which might be subject to cracking such as waterproofing layers on terraces and balconies, as protection for concrete surfaces accessible for maintenance, as waterproofing for water tanks, swimming pools, and wet and damp-rooms underneath tiles and ceramic coverings. If a waterproofing (2 layers) is made of KÖSTER NB Elastic White, the material can also be used as a tile adhesive, (applied as a third layer). It is not suited for waterproofing against negative side water pressure and it is not suited for waterproofing roofs.

- Waterproofing balconies and terraces, swimming pools from the positive side, water tanks, basins and wet and damp-rooms; also before laying ceramic tiles.
- Waterproofing plasterboard, render or cementitious surfaces, lightweight cement blocks, and marine-grade plywood.
- Protection of cementitious renders or concrete with cracks due to shrinkage and against water infiltration.
- Protection of concrete pillars and beams against the penetration of carbon dioxide.
- Protection of structures with an inadequate layer of concrete over the reinforcement rods against the penetration of aggressive elements.
- Flexible protection layer of new concrete structures or repaired structures.
- Protection of concrete surfaces which may come into contact with sulfates, sea water, and de-icing salts such as sodium or calcium chloride.

### Substrate

The substrate has to be sound, solid and clean. Absorbent substrates should be primed with KÖSTER Polysil TG 500. Non-absorbent substrates are pre-wetted until they are damp. Avoid standing water on the area to be sealed.

### Application

#### New construction:

It is necessary to prepare the substrate correctly to achieve the guaranteed durability. The edges must be rounded with appropriate tools and the surface of the walls must be intensively cleaned with high-pressure water to be cleared of any adhesion-inhibiting substances.

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The surface roughness must be levelled according to the depth. Level surfaces with a surface roughness depth  $\geq 5$  mm (i.e. voids and any irregularities in joints or breakouts) with KÖSTER Repair Mortar Plus or KÖSTER Repair Mortar with the addition of a maximum of 30% KÖSTER SB Bonding Emulsion added to the mixing water.

In case of surface roughness depth of  $\leq 5$  mm or by negative side water incursion (i.e. surface irregularities, unevenness or small defects and break outs etc.) level the surface with KÖSTER NB1 Grey with the addition of KÖSTER NB 1 Flex in the mixing water, applied with the KÖSTER Brush for Slurries.

Prime mineral substrates with KÖSTER Polysil TG 500 using a large brush or spray pump. Weakly absorbent or non-absorbent substrates must be pre-wet with water until they are moist.

### Restoration:

Clean the surface with high pressure water jet (approx. 400 bar) following proper methods to clear any adhesion-reducing materials. Old coatings must be removed down to a clean mineral substrate.

Protect strongly moistened substrates where the moisture is visible and the color of the surface is dark due to moisture by applying KÖSTER NB 1 Grey at least one day prior to waterproofing. Apply with a KÖSTER Brush for Slurries against negative side water incursion.

Clean the joints from loose grout and mortar approx. 2 cm deep and subsequently fill with KÖSTER Repair Mortar Plus with a maximum of 30% KÖSTER SB Bonding Emulsion added to the mixing water.

Level rough surfaces with a surface roughness depth of  $\geq 5$  mm (i.e. voids and any irregularities in joints or breakouts) with KÖSTER Repair Mortar Plus or KÖSTER Repair Mortar with a maximum of 30% KÖSTER SB Bonding Emulsion added to the mixing water.

In case of surface roughness depth of  $\leq 5$  mm or by negative side water incursion (i.e. surface irregularities, unevenness or small defects and break outs etc.) level the surface with KÖSTER NB1 Grey with the addition of KÖSTER NB 1 Flex in the mixing water, applied with the KÖSTER Brush for Slurries.

Prime mineral substrates with KÖSTER Polysil TG 500, applied in one work step undiluted to the surface until full saturation (in case of highly absorbent surfaces, apply two coats) by brush or spraying.

### Preparation of the product and application:

Thoroughly mix both components using a slowly rotating stirring device, while slowly adding the powder component into the liquid component. KÖSTER NB Elastic White is applied in at least two coats using a trowel or a brush. On areas which are especially in danger of cracking, KÖSTER Glass Fiber Mesh is embedded into the fresh first layer. Apply at least a second coat on top. On wall / floor intersections, corners, and details, KÖSTER Superfleece is always embedded into the fresh first layer. Freshly applied KÖSTER NB Elastic White must be protected from frost and rain until fully cured. Average drying time per layer at  $+20$  °C and 65 % relative humidity is 24 hours.

### Consumption

approx. 3.6 - 4.5 kg/m<sup>2</sup>

Consumption(MTD = Min. dry layer thickness)

Case	MTD	Consumption	Layers
Ground moisture	2 mm	min. 3,6 kg	min. 2
non-retained seepage water	2 mm	min. 3,6 kg	min. 2
Retained seepage water	2,5 mm	min. 4,5 kg	min. 2
Puntual Waterproofing	2 mm	min. 3,6 kg	min. 2

### Cleaning

Clean tools immediately after use with water. Cured material has to be

mechanically removed.

### Packaging

W 234 033

33 kg: powder - 25 kg bag, liquid - carton (2 x 4 kg foil bags)

### Storage

Store the material in a cool, frost free and dry environment. In originally sealed packages, the material can be stored for a minimum of 6 months.

### Safety

Wear protective gloves and goggles when processing the material. Observe all governmental, state, and local safety regulations when processing the material.

### Other

Pallet content: 693 kg (21 unit of 33 kg each)

Pallet size: Euro pallet (1.2 m x 0.8 m x 0.14 m)

### Related products

KÖSTER BD Flex Tape K 120	Prod. code B 931
KÖSTER Polysil TG 500	Prod. code M 111
KÖSTER Restoration Plaster White/Fast	Prod. code M 663
KÖSTER NB 1 Grey	Prod. code W 221 025
KÖSTER NB Elastic Grey	Prod. code W 233 033
KÖSTER Glass Fiber Mesh	Prod. code W 411
KÖSTER Superfleece	Prod. code W 412
KÖSTER Repair Mortar	Prod. code W 530 025
KÖSTER Repair Mortar Plus	Prod. code W 532 025
KÖSTER SB Bonding Emulsion	Prod. code W 710
KÖSTER NB 1 Flex	Prod. code W 721 008
KÖSTER SD Protection and Drainage Sheet 3-400	Prod. code W 901 030
KÖSTER NB 1 Brush for slurries	Prod. code W 913 001
KÖSTER Peristaltic Pump	Prod. code W 978 001

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Technical Data		Product Name: KÖSTER NB Elastic White
Material Class		Elastic Cementitious Coating
Temperature range for application		+ 5°C to + 35°C
Consumption approx.		3.6 – 4.5 kg / m <sup>2</sup>
Layers		2 / no primer (W)
Color		Light beige
Solvent-Free		Yes
Can be plastered over		+
Mode of application		Trowel, Brushable , Sprayable
Suitable for negative side waterproofing		Sandwich-Waterproofing / over KÖSTER NB 1 Grey
Waiting time until backfilling		>48 hours
Simplicity of application		++
<b>Substrate</b>		
Masonry		+++
Cementitious plaster		+++
Concrete		+++
Polystyrene		+
Old Bitumen membranes / coats		++
Moisture condition of surface		Dry or moist
Plaster		+++
Concrete or ceramic bricks		+++
Screeds		+++
Old ceramic substrates		+++
Gypsum		+
<b>Performance</b>		
Waterproofing against max. load condition		Pressurized Water
Time until rainproof		Approx. 8 hours
Chemical resistance		Good
Tested to be radon proof		Yes
Permeability to vapor diffusion		Medium
UV-resistance		Long term resistant
Abrasion resistance		+++
<b>Crack bridging</b>		++
Embedding of a mesh		Yes

Lower+ Medium++ High+++

W wetting is sufficient (substrates should be moist). In case of highly absorbent substrates prime with KÖSTER Polysil TG 500

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