



# **KÖSTER NB Elastic White**

**Technical Data Sheet W 234 033** 

Issued: 2018-11-09

- 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

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

KÖSTER NB Elastic White is a light colored, waterproof, elastic, wearresistant 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

water up to

rechnical Data	
Density (powder and liquid	approx. 1.7 g / cm3
component)	
Color	light beige
Binder contents (synthetic comp.)	min. 52 % by weight
Application temperature	min. + 2 °C
Elongation at break	> 30 %
Tensile strength	$> 0.8 \text{ N} / \text{mm}^2$
Crack bridging (2 mm layer	< 0.4 mm
thickness)	
Adhesive tensile strength	$> 1.0 \text{ N} / \text{mm}^2$
Waterproof against pressurized	7 bar

Pot life approx. 2 hours Resistant to foot traffic resistant after approx. 24 hours Application of following layersafter 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

 $1.29 \text{ g/m}^2 \cdot 24 \text{ h}$ Sd value 422 m μ value  $2.2 \cdot 10^{5}$ 

### 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 damprooms; 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 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
- 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 highpressure water to be cleared of any adhesion-inhibiting substances.

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

KÖSTER BAUCHEMIE AG • Dieselstraße 1-10 • D-26607 Aurich • Tel. 04941/9709-0 • Fax -40 • info@koester.eu • www.koester.eu

KÖSTER NB Elastic White 1/3



The surface roughness must be levelled according to the depth. Level surfaces with a surface roughness depth ≥ 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.

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)

MTD Consumption Layers Case 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

### Safety

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

Pallet content: 693 kg (21 unit of 33 kg each) Pallet size: Euro pallet (1.2 m × 0.8 m × 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 663 030
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 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	Prod. code W 901 030
Sheet 3-400	
KÖSTER NR 1 Bruch for clurrice	Prod. code W 913 001

KÖSTER NB 1 Brush for slurries Prod. code W 913 001 KÖSTER Peristaltic Pump Prod. code W 978 001

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.

KÖSTER BAUCHEMIE AG • Dieselstraße 1-10 • D-26607 Aurich • Tel. 04941/9709-0 • Fax -40 • info@koester.eu • www.koester.eu

KÖSTER NB Elastic White 2/3



Technical Data Product Name: KÖSTER NB Elastic White

Material Class Elastic Cementitious Coating

Temperature range for application  $+ 5^{\circ}\text{C}$  to  $+ 35^{\circ}\text{C}$  Consumption approx.  $3.6 - 4.5 \text{ kg} / \text{m}^2$  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 ++

Substrate

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
 +

Performance

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 +++
Crack bridging ++
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

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.

KÖSTER BAUCHEMIE AG • Dieselstraße 1-10 • D-26607 Aurich • Tel. 04941/9709-0 • Fax -40 • info@koester.eu • www.koester.eu

KÖSTER NB Elastic White 3/3