



NEXLER AQUAMINERAL 2K Pro

Chemical-resistant two-component sealing micro-mortar

TECHNICAL DATA

| | |
|---|--|
| Ingredients | |
| - liquid component A | aqueous plastic dispersion |
| - powder component B | modified cement compound |
| Mixing ratio by weight of the components | 1 : 2,5 (liquid component : powder component) |
| Time of suitability for use after mixing the ingredients | 45 mins |
| Maximum thickness of an applied layer | 1 - 2 mm |
| Number of layers | min. 2 |
| Time interval between applying individual layers | 4 - 6 h |
| Permeability to CO₂ | $s_p > 50$ m |
| Water vapour permeability | Class II ($5 \text{ m} \leq s_p \leq 50 \text{ m}$) |
| Capillary absorption and permeability to water | $< 0,1 \text{ kg/m}^2 \times \text{h}^{0,5}$ |
| Thermal compatibility | $\geq 0,8 (0,5)^{\circ} \text{ N/mm}^2$ |
| Chemical resistance | no visible damage (XA3) |
| Resistance to strong chemical aggression | reduction of hardness by less than 50% (Shore method) |
| Crack bridging ability | Class A3 (-20°C) |
| Adhesion strength by pull off test | $\geq 0,8 (0,5)^{\circ} \text{ N/mm}^2$ |
| Permissible surface loading: | after approx: |
| - with rain | - 12 h |
| - with pedestrian traffic | - 24 h |
| - pressurised water | - 7 days |
| Backfilling the excavation | after approx. 3 days |
| Bonding of ceramic cladding | after approx 24 h |
| Consumption: | |
| - per a 1 mm layer | approx. 1,5 kg/m ² |
| - damp-proof insulation | thickness of a bound coating 2 mm: 3,0 kg/m ² |
| - water tanks | thickness of a bound coating 3 mm: 4,5 kg/m ² |
| - anti-corrosive protection of concrete | thickness of a bound coating 3 mm: 4,5 kg/m ² |
| - XA3 environment | thickness of a bound coating 3 mm: 4,5 kg/m ² |
| Substrate and ambient temperature during application and binding | from +5°C to +25°C |
| Reference document | EN 1504-2:2004 |

^a The value in brackets is the lowest accepted value of any reading.

PROPERTIES

- Chemical resistance of class XA3
- Low water vapour diffusion resistance (allows water to evaporate from a dampened structure)
- Inhibits the carbonation of concrete
- Watertight
- Resistant to sulphate environment
- Resistant to frost and de-icing salts
- Resistant to seawater, liquid manure, water acidified to pH ~4
- Higienic Certificate



CHEMICAL RESISTANCE OF CLASS XA3



VAPOUR-PERMEABLE



ANTI-CORROSIVE PROTECTION OF CONCRETE

APPLICATION

- Waterproofing:
 - Open and closed storage tanks for water and other liquids for chemical resistance class XA3
 - Wastewater treatment plant infrastructure facilities (settling tanks, biological reactors, segmentation tanks, sand traps, sewers)
 - Biogas plants (biological reactors, fermentation tanks, post-fermentation tanks and methane storage tanks, silage silos)
 - Agricultural installations (liquid manure tanks, septic tanks, domestic water tanks excluding drinking water)
 - Hydrotechnical structures (retention reservoirs, pylons, abutments, quays)
 - Concrete structures such as floors, foundation walls and footings, retaining walls, etc.
- Anti-corrosion protective coatings on a concrete substrate



FOR INDOOR AND OUTDOOR USE



VERTICAL HORIZONTAL



TROWEL



BRUSH

PACKAGING

Poland

- Set: 19 kg (bags 2 x 6,85 kg + liquid 6,3 kg)
- Quantity per pallet - 19 kg - 33 sets

Export

- Set: 19 kg (bags 2 x 6,85 kg + liquid 6,3 kg)
- Quantity per pallet: - 19 kg - 33 sets

METHOD OF USE

▪ CONDITIONS OF USE

The temperature of the substrate and air during the works should be from $+5^{\circ}\text{C}$ to $+25^{\circ}\text{C}$.

Works should not be carried out during precipitation and strong sunlight.

▪ SUBSTRATE PREPARATION

The suitable substrate is concrete min. C20/25 class. Do not apply to concrete sealed with crystallising mortars.

The substrate intended for product application must be clean, load-bearing, even, porous (or with a rough surface finish) and seasoned. The substrate must not be frozen, frosty, stagnant water must not occur. The substrate should be cleaned mechanically, dust, any loose layers, sharp protruding edges and impurities that worsen adhesion should be removed. If there are cavities, honeycombing, gravel pockets and other unevenness in the substrate, it should be repaired, filled with suitable mortars from the NEXLER RENOBUD R series.

Special attention should be paid to the preparation of the substrate at the joints of elements (corners, joints of vertical and horizontal surfaces).

Embed a sealing tape in all corners, e.g. NEXLER Sealing Tape 120/120 or make a facet (rounding) with a radius of approx. 5 cm with a NEXLER RENOBUD R 103 mortar. Sealing of installation passages using **AQUAMINERAL 2K Pro** is only a supporting coating insulation of system seals (e.g. sealing chains, bentonite cords), the use of which is necessary.

Immediately prior to application, the prepared mineral substrate should be slightly moistened, avoiding water stagnation. Substrates with a regular absorbency, dust-free do not require priming. Highly absorbent substrates and those containing gypsum require priming with NEXLER Gruntofol.

▪ PRODUCT PREPARATION

AQUAMINERAL 2K Pro is a two-component product supplied in a single container. Pour approximately 80% of the liquid component into a clean container. Then gradually pour in the powder component and mix both components with a low-speed stirrer until a homogeneous mass is obtained. Once homogenised, pour in the remaining liquid component, continue mixing. After the maturing time of 5 minutes, mix the material again.

For application of the first layer, it is recommended to add clean, cool water to the previously prepared mortar in an amount of up to 3% of weight of the mixture, and mix again.

The mixed, ready-to-use material should be used within 45 minutes.

The matured material cannot be stirred and processed again.

▪ APPLICATION METHOD

AQUAMINERAL 2K Pro can be applied with a brush or trowel.

In order to close the pores in the substrate, it is necessary to rub in a first, thin layer with a brush. Before applying each successive layer (between applying successive layers), maintain a technological break of approx. 4 – 6 hours, for the layer to dry. Then, apply the mortar in a minimum of two layers with the notched side of a steel trowel, then smooth with the smooth side of the trowel. Apply successive layers perpendicular to the previous layer. The recommended application thickness per layer is 1 mm (no thicker than 2 mm).

After approx. 24 hours, ceramic cladding can be bonded to the dried compound.

During setting, the coating should be protected from precipitation, frost, overly rapid evaporation of water and large temperature differences for approx. 12 hours.

▪ CONTROL OF PERFORMANCE

Thickness of a layer should be checked by material consumption control on a dedicated surface. In addition, it is recommended to measure the thickness of the freshly applied sealing layer with special inspection plates. The measurement area should be filled with putty immediately.

After it has dried, a properly made coating should be a uniform, clean coating, without flakes and other defects. The coating should adhere closely to the substrate.

Particular attention should be paid to corners and areas where plumbing and other components pass through partitions – these need to be assessed for proper embedding of tapes, corners and cuffs.

The occurrence of colour variations or possible discolouration on the surface of the coating is related to the varying humidity of the air and substrate and to the varying thickness of the coating. This does not indicate a defect in the product and does not affect the quality of the applied layer.

TOOLS AND TOOL CLEANING

Slow speed stirrer, brush, masonry brush, steel trowel, spray equipment.

Wash tools with water during work and after their completion, and wipe dry. If the product dries, clean the tools mechanically. The bound material is difficult to remove.

STORAGE AND TRANSPORT

The shelf life of the product is 12 months from production date.

Store in dry and cool rooms, at temperature from $+5^{\circ}\text{C}$ to $+25^{\circ}\text{C}$, in tightly sealed, original packaging. Protect the material from water and moisture. The product is sensitive to negative temperatures.

NOTES

Works should be carried out in accordance with technical conditions, manufacturer's instructions, health and safety standards and regulations.

For information on how to deal with symptoms of disease, allergies or irritation of the skin or eyes, please refer to the Safety Data Sheet (www.nexler.com).

The remaining content of the product and container should be handed over to authorized companies.

GENERAL RECOMMENDATIONS

Technical data and information on the method of use are given for a temperature of $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and a relative air humidity of 55%. In other conditions, the setting (drying) time may change significantly.

The consumption of the product given in this sheet depends on the preparation of the substrate.

SAFETY INFORMATION

Component A: May cause an allergic skin reaction. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Wash hands and exposed parts of the body thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Dispose of contents/container according to the instructions of the manufacturer or person authorized to dispose of waste.

Component B: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Wash hands and exposed parts of the body thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Dispose of contents/container according to the instructions of the manufacturer or person authorized to dispose of waste.

IMPORTANT INFORMATION

Please refer to the detailed conditions of use of the product before use.

We guarantee the quality of our materials as part of our terms of sale and delivery.

For buildings with special requirements that are not covered by this manual, we provide our Customers with our own professional advisory service.

The manufacturer has no influence on the improper use of the material, its use for other purposes or under conditions other than those described above. The guarantee only covers the quality of the delivered product. The correct and therefore effective use of the product is not subject to our control.

Neither the manufacturer nor his authorized representative may be held liable for any loss incurred as a result of improper use or storage of the product.

Employees of the company are authorized to provide technical information only and solely in accordance with this technical data sheet. Information other than that contained in this sheet should be confirmed in writing.

If you have any doubts, consult the manufacturer.

Once we have issued a new technical data sheet, this manual is no longer valid.

CONTACT DETAILS

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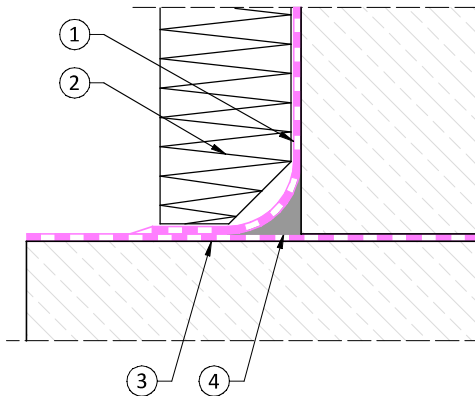
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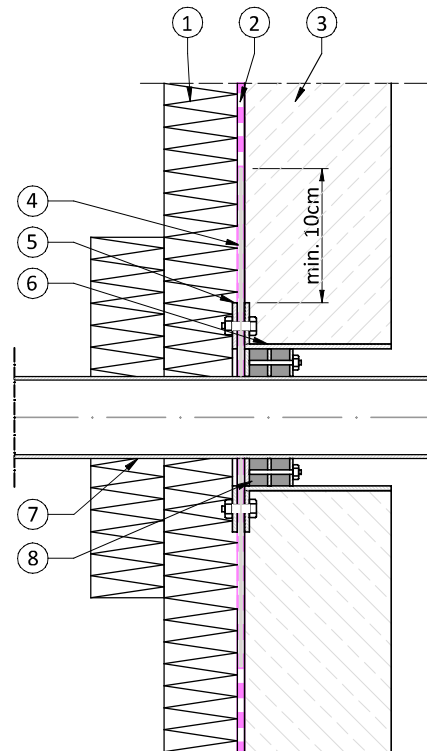
DETAILS

Detail of the joint between foundation wall and footing



1. Vertical waterproofing – **NEXLER AQUAMINERAL 2K Pro**
2. Thermal insulation – EPS or XPS boards bonded by NEXLER BITFLEX 1KP
3. Horizontal waterproofing – **NEXLER AQUAMINERAL 1K Ultra**
4. Sloping (profiling) layer NEXLER RENOBUD R 103

Detail of the sealing of an installation pipe passage through a foundation wall



1. Thermal insulation – XPS or EPS boards bonded with NEXLER BITFLEX 1KP
2. Vertical waterproofing – **NEXLER AQUAMINERAL 2K Pro**
3. Foundation wall
4. Sealing sleeve
5. Movable flange
6. Fixed flange
7. Installation pipe
8. Sealing chain