



# NEXLER RENOBUD R 102

## Bonding mortar for repairing concrete

### TECHNICAL DATA

<b>Composition</b>	dry mixture of top-quality cement binder, quartz fillers and performance additives
<b>Bulk density of dry mix</b>	1,05 - 1,25 g/cm <sup>3</sup>
<b>Mixing ratio</b>	8,00 - 8,75 l : 25 kg (water : dry mix)
<b>Maturation time</b>	approx. 5 mins
<b>Processing time</b>	approx. 2 h
<b>Open time</b>	min. 15 mins
<b>Adhesion to concrete</b>	min. 1,5 MPa
<b>Application temperature</b>	from +5°C to +25°C
<b>Pull out strength of coated steel in concrete (bond adhesion of coating to steel and alkali resistance)</b>	pass
• Shear adhesion (coated steel to concrete)	
<b>Corrosion protection and workability</b>	pass
<b>Consumption</b>	approx. 1,2 kg/m <sup>2</sup> of dry mix
<b>Reference document(s)</b>	PN-EN 1504-7:2007

### PROPERTIES

- Good adhesion to concrete and reinforcing steel due to a unique formula based on cement binder and powder resins
- Durable connection between the substrate and repair layers
- Effective corrosion protection for reinforcement in reinforced concrete structures – high content of corrosion inhibitors provides long-lasting protection for the reinforcement elements
- Fluid consistency and thixotropic properties that allow the product to easily cover any unevenness of the substrate, reaching hard-to-reach areas
- Quick and easy distribution on horizontal and vertical surfaces



FROST-RESISTANT



VERY GOOD ADHESION



VAPOUR PERMEABILITY

### APPLICATION

- Bonding layer and surface preparation prior to application of NEXLER RENOBUD R 103 and NEXLER RENOBUD R 105 products
- Component of the NEXLER RENOBUD system for repairs of structural and finishing elements such as balconies, terraces, ceilings, binding joists, columns, stairs, as well as frame structures, monolithic structures, tanks, cooling towers, chimneys and other concrete elements both structural and non-structural
- Corrosion protection of reinforcement in the RENOBUD R system
- For indoor and outdoor use



TERRACES AND BALCONIES



REPAIR OF CONCRETE STRUCTURES



PAINT BRUSH



PAINT BROOM BRUSH

### PACKAGING

#### Poland

- Packaging: 25 kg
- Quantity per pallet: - 25 kg - 42 pcs.

#### Export

- Packaging: 25 kg
- Quantity per pallet: - 25 kg - 42 pcs.

## METHOD OF USE

### ■ CONDITION OF USE

The temperature of the substrate and air during the works should be from +5°C to +25°C.

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

### ■ SUBSTRATE PREPARATION

**Concrete substrate:** The surface must be properly prepared before applying **NEXLER RENOBUD R 102**. The concrete substrate must be made of concrete of min. C20/25 grade, with a strength of at least 1,5 MPa measured by the pull-off method. It must be clean and free of oil, grease, cement laitance and other substances that impair adhesion. Clean the substrate mechanically, remove dust and any loose layers. Concrete substrates that are significantly deteriorated, soiled or chemically or biologically corroded should be subjected to special treatments such as sandblasting, shot-blasting, milling, fungi removal. The substrate must be properly mechanically roughened before the product is applied.

**NEXLER RENOBUD R 102** should be used on a matt-damp substrate. The surface of the concrete should be uniformly dark and matt, without light-coloured spots or water stagnation. Immediately before applying the product, wet the substrate with water to a matt-damp state. Porous and dry substrates should be saturated with water a minimum of 1 day before application.

**Rebars:** Prior to the application of **NEXLER RENOBUD R 102**, the rebars should be cleaned of any rust film and other elements that can result in separation or accelerate corrosion. The exposed surfaces of the reinforcement elements should be thoroughly cleaned, for example by sandblasting, removing rust and any other dirt, up to a cleanliness grade of SA 2.

In the case of bars with a fully or largely exposed surface, the concrete around them should be chiselled in such a way that after reprofiling the lagging made of **NEXLER RENOBUD R 103** mortar has a minimum thickness of 1,5 cm.

When using a closing layer of **NEXLER RENOBUD R 105**, the total thickness of the layers should be at least 1,5 cm.

### ■ PRODUCT CONTROL

Check the production date on the packaging before use. The product should not be incorporated beyond its shelf life. The product should not be objectionable (e.g. contain lumps, clumps, mechanical impurities) after opening. The mortar should be dry after opening the packaging, with no visible signs of moisture. Do not use a product that bears signs of freezing. After mixing with water, the mortar should be homogeneous and free of lumps and clumps resulting from under-mixing. Properly mixed, the product spreads easily over the surface and does not run off.

### ■ PRODUCT PREPARATION

Before use, **NEXLER RENOBUD R 102** should be poured into a vessel with a measured quantity of clean water and mixed with a slow speed mixer until a homogeneous consistency is obtained. If partial use is assumed, the product should be prepared maintaining the weight ratio of the components. Use 1 kg of dry mix per 0,32 - 0,35 l of water. After the maturing time of 5 minutes, mix the material again. The mixed material, ready for processing, should be used within 2 hours. The thickened material cannot be stirred and processed again.

### ■ APPLICATION METHOD

Work should begin with making a protective layer for reinforcement. Apply the prepared **NEXLER RENOBUD R 102** mortar evenly with a brush to the cleaned rebars. After securing the reinforcement, **NEXLER RENOBUD R 102** should be applied evenly to the substrate by firmly rubbing it in with a paint brush or broom brush. When applying the bonding layer, the mortar should be applied to an area slightly larger than the repair area so that the next system layer of **NEXLER RENOBUD R 103** or **NEXLER RENOBUD R 105** can be applied according to the 'wet on wet' principle. If the bonding layer dries out before the next mortar is applied, it must be applied again.

The repaired surface, during and immediately after the work, should be protected against precipitation and excessive drying.

### ■ CONTROL OF PERFORMANCE

Check that the product is evenly applied and covers the entire surface. Check the progress of drying before further work is carried out. The bonding layer must not be completely dry before the next mortar is applied. A well-applied layer should be permanently bonded to the substrate and should not detach. The bonding layer should not be too smooth but should have a suitable, slightly rough texture that ensures adequate adhesion of subsequent layers.

## TOOLS AND TOOL CLEANING

Low-speed mixer, brush, paint broom brush.

Wash tools with water during work and after its completion, and wipe dry. If the product dries, clean the tools mechanically. Once the material sets, it is difficult to remove.

## STORAGE AND TRANSPORT

The shelf life of the product is 12 months from production date specified on the packaging. Store in dry and cool rooms in tightly sealed original packaging. The product must be protected against damp and frost. The product must be protected from heat and direct sunlight.

## **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](http://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 drying time of the mortar depends on the degree of absorbency of the substrate and the surrounding temperature and humidity conditions.

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

The mixed product is frost-sensitive before setting.

## **SAFETY INFORMATION**

Causes skin irritation. May cause 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. Avoid breathing dust. Wash hands and exposed parts of the body thoroughly after handling. Wear protective gloves/protective clothing/eyeprotection/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.

## **CONTACT DETAILS**

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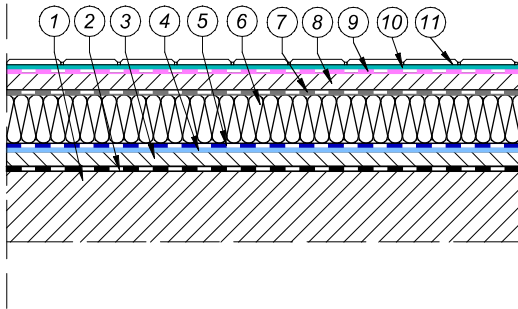
## **ISSUE DATE**

This Technical Data Sheet was issued on 24.02.2025.

Once we have issued a new Technical Data Sheet, this one is no longer valid.

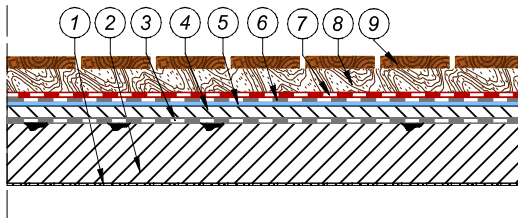
## DETAILS

### Terrace



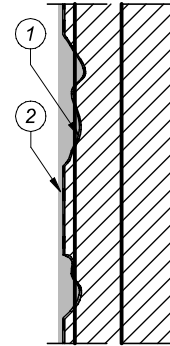
1. Reinforced concrete slab
2. Bonding layer **NEXLER RENOBUD R 102**
3. Sloping layer made of NEXLER RENOBUD R 103 / NEXLER RENOBUD R 105 repair mortar
4. Bituminous primer NEXLER BITFLEX Primer
5. Vapour barrier NEXLER ALU S40
6. Thermal insulation made of EPS or XPS boards
7. Self-adhesive bituminous felt NEXLER PLAN PYE G200 S30 SP
8. Concrete pressure screed
9. Under-tile insulation NEXLER AQUAMINERAL 2K Ultra
10. Adhesive mortar
11. Ceramic tile cladding

### Balcony repair



1. Plaster
2. Reinforced concrete slab
3. Bonding layer **NEXLER RENOBUD R 102**
4. Sloping layer with filling of defects made of NEXLER RENOBUD R 103 or NEXLER RENOBUD R 105 repair mortar
5. Bituminous primer NEXLER BITFLEX Primer
6. Weldable underlayer bituminous felt NEXLER PREMIUM PYE PV200 S40
7. Weldable top layer bituminous felt NEXLER PREMIUM PYE PV250 S53H
8. Joists on bituminous felt pads or supports
9. Wear layer - cladding of wooden or composite boards

### Reinforced concrete wall



1. Bonding layer **NEXLER RENOBUD R 102**
2. Repair of damaged wall surface NEXLER RENOBUD R 105