

# Neopox® Primer WS



## Solvent-free epoxy primer for damp surfaces

### Description

Two-component, solvent-free epoxy primer, suitable for damp surfaces. Also acts as a water vapour barrier (**Class III**) when applied in increased thickness. Offers permanent solution in floors where the concrete substrate is wet and the surface is saturated with water.



### Field of applications

- Damp concrete floors (with water gathered in the pores - without rising moisture) which will be covered with resinous systems or coatings (**Epoxol®**, **Neopox®**, **Neodur®**)
- As a primer of cementitious substrates which will be covered with **Neoproof® Polyurea** waterproofing systems
- As a water vapour barrier
- As a binder for resin mortars intended for smoothing, levelling, repairing, etc.
- As a bonding agent between old and new concrete

### Packing

Sets (A+B) of 10kg, 5kg and 1kg

### Properties - Advantages

- Excellent adhesion on cementitious substrates, even when they are saturated with water
- Acts as a water vapour barrier (**Class III**) when applied in increased thickness
- High chemical resistance (alkalis, dilute acids, etc)
- Suitable for mixing with quartz sand of various grain sizes for the creation of multi-purpose resin mortars
- Ideal for stabilization and sealing concrete and other porous substrates

### Certificates – Test reports

- CE Certification according to EN 1504-2
- Test report by the external independent quality control laboratory Geoterra (No. 2021/483\_6)  
*Classified under **Class III** with respect to water vapour permeability acc. to EN ISO 7783 (Sd>50m for thickness of ~0,60mm)*
- Technical report of adhesion test on a surface saturated with water



- Certified for its performance in terms of reaction to fire as part of the self-levelling systems **Epoxxol® Floor, Neodur® Floor SF and Neodur® CM** acc. to EN 13501-1  
*System classification B<sub>fl</sub>-s1 based on classification reports No. 1480\DC\REA\24\_3, 6 & 9 acc. to EN 13501-1 and individual test reports acc. to EN ISO 9239-1 (No.1480\DC\ REA\24\_1, 4 & 7) and acc. to EN ISO 11925-2 (No. 1480\DC\REA\24\_2, 5 & 8) by the independent accredited laboratory CSI S.p.A.*
- Complies with the V.O.C. content requirements acc. to the E.U. Directive 2004/42/CE



### Technical characteristics

Mixing ratio A:B (by weight)	100:60
Density (EN ISO 2811-1)	1,07kg/L (±0,05)
Solids content by weight	~100%
Solids content by volume	~100%
Adhesion strength (EN 1542)	≥3N/mm <sup>2</sup>
Liquid water permeability (EN 1062-3)	<0,1kg/m <sup>2</sup> h <sup>0,5</sup>
Permeability to CO <sub>2</sub> – Diffusion-equivalent air-layer thickness Sd (EN 1062-6)	>50m
Water vapor permeability – Diffusion-equivalent air-layer thickness Sd (EN ISO 7783)	54,1m (Class III – dense against water vapour / coating thickness 0,63mm)
<b>Consumption: • 200-300gr/m<sup>2</sup> for one layer (depending on the absorptivity of the substrate)</b>	
• ≥650gr/m <sup>2</sup> as a water vapour barrier	

### Application conditions

Substrate moisture content	<90% (no ponding water or rising moisture)*
Relative air humidity (RH)	<80%
Application temperature (ambient - substrate)	+5°C min. / +35°C max.

*\*The max. limit of 90% moisture content refers to the ability of **Neopox® Primer WS** to properly adhere to cementitious substrates where moisture content is measured to be up to 90% at the time of application. However, the risk of bubbling and/or loss of adhesion at a later stage, due to water vapours rising, is not necessarily eliminated, particularly if moisture from deeper within the substrate begins to rise to the surface. This type of risk is greater when the dry film thickness of the priming layer is low.*

*To minimize such risk then, especially in situations where there is moisture deeper within the concrete, it is recommended to apply **Neopox® Primer WS** at a higher consumption rate, in order to create a more effective water vapour barrier. In particular, and especially in the case of concrete slabs that are saturated with water, it is advisable that multiple layers of **Neopox® Primer WS** are applied at a total dry film thickness of at least 0,6mm, for adequate protection against rising moisture.*

## Curing details

Pot life (+25°C, RH 50%)	20 minutes
Drying time (+25°C, RH 50%)	12 hours
Dry to recoat - overcoat (+25°C, RH 50%)	24 hours
Full hardening	~7 days

*\* Low temperatures and high humidity during application and/or curing prolong the above times, while high temperatures reduce them*

## Instructions for use

### Substrate preparation

#### Concrete

The concrete must be min. Grade C20/25, with a tensile strength of  $\geq 1,5\text{MPa}$ , and allowed to cure for at least 28 days, taking all the necessary maintenance measures during its curing period. The cementitious substrate must be properly prepared mechanically (e.g. grinding, shot blasting, milling etc.) to smooth out the irregularities, achieve an open-textured surface and ensure optimum adhesion.

The surface must be sufficiently dry and protected from rising moisture, stable, clean and free of dust, grease, oil, etc. Loose friable material must be fully removed by brushing or sanding with a suitable machine and a high suction vacuum cleaner.

In case of application on wet surface, any water excess must be removed. The surface must be as smooth and flat as possible, as well as continuous (ie without voids, cracks etc.)

#### Application (as a primer)

The two components A & B are mixed in the predetermined ratio and stirred mechanically for app. 2-3 minutes with a low-speed stirrer, until the mixtures become homogenous. The surface is then covered in one layer by roller, brush, or airless spray. In cases of increased substrate porosity, an additional priming layer may be required.

#### Application (as resin mortar for repairing - levelling)

After the mixing of components A & B of **Neopox® Primer WS**, Quartz Sand M-32 is added under continuous stirring, in a ratio of 1:0,5-1:2 w/w (depending on the application) until the mixture becomes homogeneous. The mixture is then applied by smooth trowel on the already primed substrate.

## Special notes

- **Neopox® Primer WS** should not be applied under wet conditions, or if wet conditions are expected to prevail during the application or the curing period of the product.
- The components should not have been stored at very low or very high temperatures, especially before mixing. Mixing and stirring of the mixture should be preferably done in the shade. The stirring of the mixture must be done mechanically and not manually with a rod, etc.

- Excessive stirring of the material should be avoided, in order to mitigate the risk of air entrapment. After stirring the mixture, it is recommended to apply the material shortly in order to avoid the development of high temperatures and potential hardening inside the can.
- The substrate temperature must be at least 3°C above dew point to reduce the risk of condensation or blooming on the floor finish.
- Due to the nature of the material, the direct and permanent exposure of the final coating to UV radiation may cause the phenomenon of chalking over time.
- **Neopox® Primer WS** should be applied after at least 2 weeks have passed from laying new concrete
- In case that an extended period of time (>36 hours) has passed between successive layers, it is recommended to lightly sand the surface of the previous layer, in order to avoid possible adhesion problems of the next layer.
- Depending on the intended use and the desired workability of the resulting resin mortar, **Neopox® Primer WS** can be mixed with greater quantities of quartz sand.

<b>Appearance</b>	Transparent-yellowish
<b>Appearance (after the application)</b>	Glossy
<b>Packing</b>	Sets (A+B) of 10kg, 5kg and 1kg in metal cans
<b>Cleaning of tools – Stains removal</b>	By <b>Neotex® 1021</b> immediately after the application. In case of hardened stains, by mechanical means only.
<b>Volatile organic compounds (V.O.C.)</b>	V.O.C. limit acc. to the E.U. Directive 2004/42/CE for this product of category AjSB: 500g/l (Limit 1.1.2010) - V.O.C. content of the ready-to-use product <500g/l
<b>UFI code</b>	<i>Component A:</i> SEE0-60XA-P00C-1AP5 <i>Component B:</i> DK70-T00A-U00Q-141S <i>Component A (Winter):</i> SEE0-60XA-P00C-1AP5 <i>Component B (Winter):</i> 0EH0-X037-D00P-592E
<b>Versions</b>	<b>Neopox® Primer WS Winter</b> , for faster curing in conditions of low temperatures and increased humidity. Mixing ratio 6,25A : 3,75B w/w
<b>Storage stability</b>	2 years, if kept in the original sealed packaging, protected from frost, humidity and exposure to solar radiation.

<b>CE</b>	
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DoP No.: 4950-74  <b>EN 1504-2</b>  <b>Neopox® Primer WS</b>  Surface protection products  Coating	
Water vapour permeability	Class III
Adhesion strength	≥1,5N/mm <sup>2</sup>
Capillary absorption and permeability to water	W<0,1Kg/m <sup>2</sup> h <sup>0.5</sup>
Permeability to CO <sub>2</sub>	S <sub>D</sub> >50m
Reaction to fire	Euroclass F
Dangerous substances	Complies with 5.3

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