

## Neoproof® PU Fast-2L r/f System

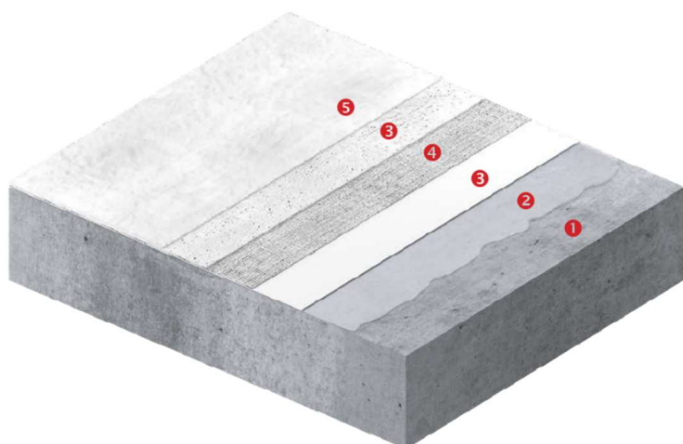
**Fast-drying** reinforced, water-based, aliphatic polyurethane waterproofing system, with high resistance to early rain and mechanical stress. **Ideal for exposed walkable roofs.**

- ✓ Quick application: Full completion of the waterproofing system within one day
- ✓ Resistant to early rain – Suitable for applications all year long
- ✓ Excellent resistance to ponding water
- ✓ High mechanical strength
- ✓ Long-lasting resistance to UV radiation
- ✓ Certified cool roofing properties (for the white colour shade)
- ✓ Eco-friendly & user-friendly



Substrate: Concrete – Cement screed		
System Build-up – Indicative Consumptions		
Layer	Product	Consumption
Primer*	Revinex® (diluted with water 1:4)	~50gr/m <sup>2</sup> for one layer
Waterproofing layers	Neoproof® PU Fast	~2-2,5kg/m <sup>2</sup> overall
(1) "Wet-on-wet" application of two layers with the fabric positioned in between (2) One unreinforced applied on top		
Reinforcement	Neotextile®	~1,1m <sup>2</sup> /m <sup>2</sup>

\* See primer table for alternative appropriate primers for cementitious substrates



### System Characteristics

#### Tensile strength at break (ASTM D412)

>4,5MPa

#### Adhesion strength (EN 1542)

≥2,5N/mm<sup>2</sup>

#### Hardness (ASTM D2240)

68 (Shore A)

#### Impact resistance (EN ISO 6272)

≥2Nm

#### Total Reflectance SR% (ASTM E903-12)

84% (white)

#### Solar Reflectance Index SRI (ASTM E1980)

106 (white)

#### 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

#### Service temperature

-15°C min. / +80°C max.

- ① Cementitious substrate
- ② Primer: **Revinex®** diluted with water 1:4 (or alternative proper **NEOTEX®** primer)
- ③ Waterproofing layers (1):  
**Neoproof® PU Fast**
- ④ Reinforcement: **Neotextile®**
- ⑤ Final waterproofing layer (2):  
**Neoproof® PU Fast**



### System Description

Fast-drying reinforced, water-based, aliphatic polyurethane waterproofing system, with high resistance to early rain, ideal for the long-term protection of exposed roofs. It forms an impermeable to moisture membrane, with high resistance to UV radiation and mechanical stress.

Presents very high resistance to early rain and is certified for its cool roofing properties (for the white colour shade).

### Indicative Fields of Application

Exposed roofs and walkable terraces where high mechanical properties, excellent resistance to ponding water and long-term effective protection of the substrate are required. Particularly suitable for projects where quick completion is essential.

### Main System Products

**Neoproof® PU Fast:** *Fast-drying*, one-component water-based aliphatic polyurethane waterproofing coating for roofs, with high resistance to early rain, ideal for the long-term protection of exposed roofs. It forms an impermeable to moisture membrane, with high resistance to UV radiation and mechanical stress which guarantees the long-lasting protection of the substrate.

**Neotextile®:** Non-woven polyester fabric of 50gr/m<sup>2</sup> weight, suitable for the reinforcement of cold-applied waterproofing coatings. Does not require high material consumption to be impregnated.

**Revinex®:** Multi-purpose copolymer emulsion. Upon dilution with water, acts as an ideal water-based primer for the stabilization of cementitious surfaces which will be covered with water-based waterproofing systems, creating an excellent bridge of adhesion for the subsequent coating.

### System Properties & Advantages

- Quick application: Full completion of the waterproofing system within one day
- Resistance to early rain in just 30 minutes after application of the final layer
- High mechanical strength – ideal solution for walkable roofs
- Excellent resistance to ponding water
- Long-lasting resistance to UV radiation and adverse weather conditions
- Certified cool roofing properties (for the white colour shade)
- Remains elastic in a broad range of temperatures from -15°C to +80°C
- No signs of blisters or craters on the surface, during the curing phase
- Increased hardness and crack-bridging properties
- May also be applied on damp surfaces (not fully wet)
- Easy application by roller or airless spray
- Eco-friendly & user-friendly (consists of water-based & one-component products)
- Long service life secured

## Certificates – Test Reports

**Neoproof® PU Fast**

- CE Certification acc. to EN 1504-2  
*Certificate of Conformity No. 1922-CPR-0386*
- Certified cool roofing material by the National Center for Scientific Research “Demokritos”  
*Reflectance and emissivity report by the Advanced Ceramics & Composites laboratory of the research center NCSR “Demokritos”*
- Test report by the external independent quality control laboratory Geoterra  
(No. 2023-702\_1)
- Fulfills the requirement LEED v4.1: SS Credit – Heat Island Reduction - Option 1 – High Reflectance Roof, Initial SRI ≥ 82
- Complies with the V.O.C. content requirements acc. to the E.U. Directive 2004/42/CE



Certified by:  
NCSR  
DEMOKRITOS

**Revinex®**

- Qualified for use in LEED projects globally regarding its use as a primer, by showing compliance with the specifications for VOC emissions and VOC content, as attested by the external independent specialized laboratory of Eurofins - Fulfills the requirement LEED v4 & v4.1 (beta): EQ Credit - Low-Emitting Materials, achieving the highest classification in terms of TVOC emissions ( $<0,5\text{mg}/\text{m}^3$ ), combined with VOC content  $<1\text{g}/\text{l}$ 
  - Attestation LEED v4 and v4.1 (beta): EQ Credit - Low-Emitting Materials
  - VOC Emission Test report No. 392-2024-00234602 –  
*Regulation: CDPH (California Department of Public Health) v.1.2-2017*
  - VOC Content Test report No. 392-2024-00234605 – *Regulation: SCAQMD (South Coast Air Quality Management District) Rule 1113 (2016)*
- Certification of compliance with the French regulation regarding indoor VOC emissions - Classified in the highest emission class A+
  - Attestation French VOC Regulation: VOC emission class A+
  - VOC Emission Test report No. 392-2024-00234602 – *French VOC Regulation: Decree of March 2011 and Arrête of April 2011 and French CMR components: Regulation of April and May 2009*
- Complies with the V.O.C. content requirements acc. to the E.U. Directive 2004/42/CE

## Technical Characteristics of Main System Products

	Neoproof® PU Fast	Revinex®
Density (EN ISO 2811-1)	1,35kg/L ( $\pm 0,1$ )	1,04kg/L ( $\pm 0,05$ )
VOC content	$<10\text{g}/\text{l}$	$<1\text{g}/\text{l}$
Liquid water permeability (EN 1062-3)	$<0,1\text{kg}/\text{m}^2\text{h}^{0,5}$	-
Permeability to CO <sub>2</sub> – Diffusion-equivalent air-layer thickness Sd (EN 1062-6)	$>50\text{m}$	-
Water vapour permeability – Diffusion-equivalent air-layer thickness Sd (EN ISO 7783)	$<5\text{m}$ (Class I)	-



### System Application Conditions

Substrate moisture content	<6%
Relative air humidity (RH)	<80%
Application temperature (ambient - substrate)	+10°C min. / +40°C max.

### Curing Details

	Neoproof® PU Fast	Revinex®
Dry to recoat - overcoat (+23°C, RH 50%)	4 hours (valid <i>for the reinforced base coat</i> )	3 hours
Full hardening	~ 7 days	
<i>* Low temperatures and high humidity during application and/or curing prolong the above times, while high temperatures reduce them</i>		

### Appropriate primers on cementitious substrates

Primer	Description - Details
Revinex® (diluted with water 1:4)	Water-based primer of high adhesion on cementitious substrates
Acqua Primer NP	Water-based epoxy primer
Vinyfix® Primer	Solvent-based primer based on vinyl resins, ideal for stabilizing brittle substrates

### System Method Application

#### Substrate preparation

- For the concrete substrate, all necessary maintenance measures must be observed during its curing period, which should be at least 28 days from its laying.
- The cementitious substrate must be properly prepared mechanically (e.g. grinding, water-jetting, etc.) to smooth out the irregularities, achieve an open-textured surface and ensure optimum adhesion.
- The surface must be dry and protected from rising moisture, stable, clean and free of dust, oil, grease, etc. Loose friable material must be fully removed by brushing or sanding with a suitable machine and a high suction vacuum cleaner.
- The surface must be as smooth and flat as possible, as well as continuous (ie without voids, cracks etc.). Repairs to the substrate, filling of joints, blowholes/voids and surface leveling must be carried out using appropriate repairing products, such as the non-shrinking cementitious repairing mortar **Neorep®**, the acrylic mastic **Jointex®** and the polyurethane sealant **Neotex® PU Joint**, after proper priming.

**Priming**

For the stabilization of the substrate and sealing of pores, as well as for creating the optimum conditions for stronger adhesion and higher coverage of the subsequent waterproofing system, it is recommended to apply the copolymer emulsion **Revinex®**, diluted with water 1:4 w/w (1 part **Revinex®** : 4 parts water), in one layer by roller.

*Consumption of **Revinex®**: 50gr/m<sup>2</sup> in one layer (in case of increased porosity a second layer may be required)*

*\*In case of application of an alternative proper primer for cementitious substrate (see table), please consult the respective technical data sheet of the product for the application details*

**Application of waterproofing layers**

Once the primer is dry to overcoat – specifically after 3 hours (+23°C, RH 50%) - the fast-drying cold-applied aliphatic polyurethane waterproofing coating **Neoproof® PU Fast** is applied, diluted ~5% w/w with clean water.

The material is applied reinforced with the specially designed non-woven polyester fabric **Neotextile®** of 50gr/m<sup>2</sup> weight (“wet-on-wet” application of two layers with the fabric positioned in between), taking care so that no wrinkles or bubbles are created. It is recommended that the rolls of the reinforcement overlap by 10cm.

After ~4 hours (+23°C, RH 50%), it is recommended to apply an additional unreinforced layer of the cold-applied aliphatic polyurethane waterproofing coating **Neoproof® PU Fast**, undiluted, by roller or airless spray, in a vertical or different direction than the previous one.

*Consumption of **Neoproof® PU Fast**: 2-2,5kg/m<sup>2</sup> in total*

**Special Notes**

- In case of new cement screed and soon after its laying, it is recommended to create suitable joints (per 15-20m<sup>2</sup> of surface area and at a depth approximately equal to ¼ of the thickness of the cement screed), which shall then be properly sealed (eg with closed-cell PE foam cord and **Neotex® PU Joint** after proper priming of their sides with **Neotex® PU Primer**). It is also necessary to create expansion joints around the perimeter, as above, and with a minimum width of 1cm. Any existing joints of the concrete slab should be transferred to the new substrate.
- Any incorrect evaluation of the joint movement while covering them with the resinous system, as well as any insufficient or incorrect repair of the existing joints and cracks, may lead to the creation of cracks that are transferred from the substrate to the waterproofing system
- The system should not be applied under extremely wet conditions (i.e. out of specification) or if rainy weather is expected immediately after application
- Substrate temperature during application and curing must be at least 3°C above dew point to avoid condensation issues
- The application is continued sufficiently in the vertical surfaces of the roof (min. 30cm), in order to form a uniform waterproofing membrane. It is recommended in any case to cover the upstands entirely and to continue the waterproofing application in their horizontal sections.
- In case of a non-white final surface and in order to ensure that a completely uniform colour shade is achieved over the entire application surface, it is recommended that the material used for the finish comes from the same production batch.





- Any metallic elements (plain carbon steel – iron) are recommended to be primed with the water-based, anti-corrosive primer **Neotex® Metal Primer** prior to the application of the waterproofing system. In case of stainless or galvanized steel or aluminium, the application of the water-based primer **Neotex® Inox Primer** is recommended instead.

### Maintenance Instructions

- The total hardening of the film occurs app. 7 days after the application of the final layer, depending also on the atmospheric conditions. During this period, it is advisable that access to the application area is prohibited or limited only to specialized personnel. *No flood test should be done before such time period has elapsed.*
- It is recommended to annually inspect the coating for any damage caused by accidental impact or misuse
- In case of need for local repairs, **Neoproof® PU Fast** is re-applied in its original dry film thickness at the minimum, after cleaning and priming (if necessary) the affected area.
- Periodic cleaning by water-jetting is advisable (combined with a neutral washing agent, if needed), especially in case of heavy accumulation of dirt, dust and pollutants on the surface

The information referred on the use and the application, are offered as a service to designers and manufacturers in the sense of facilitating the finding of possible solutions and is based on the experience and knowledge of NEOTEX® S.A.. Due to the development of knowledge and methods, it is at the discretion of each interested party to be informed by the NEOTEX® technical department as to whether this brochure has been replaced by a more recent one. The measurable technical data stated in the current technical data sheet are based on laboratory tests and may differ from the results of other individual measurements due to conditions beyond the control of NEOTEX®. The durability of the system is directly related to the condition of the substrate and the type of load (mechanical, chemical) to which the substrate is subjected. It is important that the application is done in accordance with the applicable official technical data sheets (TDS) of the materials and that the use of the surface is within the specifications of the materials. As a producer and supplier, NEOTEX® S.A. does not control the application, the substrate conditions or the actual use of the products and therefore cannot be held responsible for the final result or any failures caused by poor application or omissions, inadequate substrate conditions or due to the end use of the products

**HEADQUARTERS - PLANT**  
V. Moira str., Xiropigado  
**LOGISTICS SALES & CENTER**  
Loutsas str., Voro

P.O. Box 2315, GR 19600  
Industrial Area Mandra  
Athens, Greece  
T. +30 210 5557579

**NORTHERN GREECE BRANCH**  
Ionias str., GR 57009  
Kalochori, Thessaloniki, Greece  
T. +30 2310 467275

[www.neotex.gr](http://www.neotex.gr) ● [export@neotex.gr](mailto:export@neotex.gr)

