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THESSALONIKI: Ionias Str., GR 57009 Kalochori, Thessaloniki, Greece, Tel.: +30 2310 467275, Fax: +30 2310 463442

## Neoproof® Polyurea

### Description of the product

**Neoproof® Polyurea** is a 2-component, pure aliphatic, brushable polyurea waterproofing coating for roofs, when mechanical durability and outstanding waterproofing properties are required. Does not require special application equipment. It forms a blister-free, non-penetrating against moisture film, providing zero water absorption and remarkably high resistance against UV and mechanical stress.

### Applications

- Roofs made of concrete, cement boards, mosaic, cement slurries
- Rooftops with resistance to stagnant water
- Metallic surfaces, such as pipes, after the application of the proper primer (use **Neopox® Special Primer 1225** in the cases where anticorrosive protection is needed)
- New or old polyurethane waterproofing layers
- Top-coat over fast-setting sprayable aromatic polyurea
- Protection of polyurethane foam insulation

### Properties/Advantages

- Prevents moisture penetration, providing complete sealing
- Offers increased resistance to bending and stretching
- Very high mechanical strength
- No need of special application equipment
- Remarkable resistance against UV
- Excellent bonding to all building substrates such as concrete, plaster, masonry, metal, wood
- Blister free coating. No appearance of holes in the surface during the curing of material
- Dries and cures quickly
- Long pot life
- Crack bridging properties
- Easy to apply
- Long-lasting waterproofing protection
- Ideal solution for waterproofing walkable roofs
- Resistant to temperatures from -35°C to +80°C

### Technical Characteristics



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## Neoproof<sup>®</sup> Polyurea

Mixing ratio (by weight)	13:8
Solids by weight (ASTM D5201)	>85%
Service temperature	-35°C min / +80°C max
Hardness Shore A (EN ISO 868:2003/ASTM 2240)	78
Hardness Shore D (EN ISO 868:2003/ASTM 2240)	30
Absorption Coefficient (EN 1062-3:2008)	0.00 kg/m <sup>2</sup> min <sup>0.5</sup>
Substrate humidity	<4%
Application temperature	+5°C to +35°C
Elongation at break (ASTM D412)	420%
Tensile strength at break (ASTM D412)	11,1N/mm <sup>2</sup>
Adhesion to concrete (ASTM D4541)	>3N/mm <sup>2</sup>
Total Reflectance (SR%) (ASTM E 903-96)	87
Total Emittance Coefficient (ASTM E408-71)	0,85
Solar Reflectance Index (SRI) (ASTM G159-98)	109
Resistance to fatigue movement - multiple crack bridging (TR-008)	1000 cycles at -10°C (W3-25 years)
Consumption	1-1,2 kg/m <sup>2</sup> (for 2 layers, on cementitious substrate)

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**Neoproof® Polyurea** has been tested successfully acc. to the European standard **ETAG 005** for liquid applied roof waterproofing kits (Polyurea-based) by the Dutch state-owned certification body **KIWA Nederlands**.

<b>Working life</b>	W3, 25 years (test report P 10248-3b-E)
<b>Climatic zones</b>	M and S (moderate and severe climate)
<b>User Load</b>	P1 to P4 (from low to special)
<b>Roof slope</b>	S1 to S4 (<5% till >30%)
<b>Lowest surface temperature</b>	TL3 (-20°C)
<b>Highest surface temperature</b>	TH2 (60°C)
<b>Resistance to wind loads</b>	>50KPa
<b>Watertightness</b>	Passed

**Neoproof® Polyurea** is certified acc. to ETAG-005 with the European Technical Assessment **ETA 18/0563**, following inspection by the German KIWA Building Materials Laboratory.

### Pot life

Temperature	Time
5 °C	140 minutes
23 °C	100 minutes
35 °C	60 minutes

### Tack free

Temperature	Time
5 °C	10 hours
23 °C	5 hours
35 °C	3 hours

## Neoproof<sup>®</sup> Polyurea

### Recoat / Walkability

Temperature	Time
5 °C	24 hours
23 °C	18 hours
35 °C	12 hours

### Instructions for use

**Surface preparation:** The surfaces should be smooth and continuous (i.e. without holes, cracks, bays, etc.). In the opposite case, they should be treated accordingly (e.g. with puttying). Moreover, they should be clean, dry and free from dust, oils, greases and loose material. Prior to the application, for the filling of the pores, the enhancement of the adhesion and the higher coverage of the material, it is suggested to apply **Acqua Primer NP**, diluted with water (10-15% by weight). The substrate temperature must be higher than +12°C.

**Application:** Mix the two parts adding Part B to Part A under stirring (400rpm) for 2-3 minutes. **Neoproof<sup>®</sup> Polyurea** is applied after good stirring with brush, roller, or airless spray, 24 hours after the priming with **Acqua Primer NP**. **Neoproof<sup>®</sup> Polyurea** is applied in two layers without dilution.

### Special Notes

- **Neoproof<sup>®</sup> Polyurea** should not be applied under wet conditions, or if wet conditions are expected to prevail during the curing period of the product.
- Application conditions: Surface moisture: < 4%, Relative atmosphere moisture: <85%. The application should take place under temperature between +5°C and +35°C.
- For demanding applications or when covering cracks bigger than 1,5 mm, **Neoproof<sup>®</sup> Polyurea** may be reinforced with specially designed non-woven polyester tissue **Neotextile<sup>®</sup> 100gr**. In such cases, at least three coats of the product are required.
- In cases of inverted roof insulation or insufficient thermal insulation is recommended to use appropriate roof ventilation.

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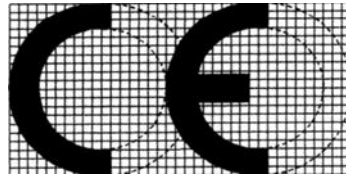
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## Neoproof<sup>®</sup> Polyurea

<b>Colours</b>	White. Other colours available upon request.
<b>Packaging</b>	Sets of 21kg and 5,25kg in tin cans (components A&B have fixed weight proportion)
<b>Tools cleaning</b>	Use solvent <b>Neotex<sup>®</sup> 1021</b> immediately after application.
<b>Stain removal</b>	Use solvent <b>Neotex<sup>®</sup> 1021</b> when the stains are still fresh and damp. In case of hardened stains, use mechanical means.
<b>Storage stability</b> n	<b>Part A:</b> 2 years (5-45°C) in sealed tin cans. <b>Part B:</b> 1 year (5-35°C) in sealed tin cans.

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## Neoproof® Polyurea



1922

NEOTEX S.A.  
V. Moira str., P.O. Box 2315  
GR 19600 Industrial Area Mandra, Athens, Greece

16

1922-CPR-0386

DoP No. Neoproof Polyurea /4950-16

EN 1504-2

Neoproof Polyurea

Surface protection system for concrete  
Coating

Water vapour permeability	:	Class I
Capillary absorption and permeability to water	:	$W < 0,1 \text{ kg/m}^2 \text{ h}^{0,5}$
Adhesion strength	:	$\geq 0,8 \text{ N/mm}^2$
Permeability to CO <sub>2</sub>	:	$s_D > 50 \text{ m}$
Reaction to fire	:	Euroclass F
Dangerous substances	:	comply with 5.3

The information supplied in this datasheet, concerning the uses and the applications of the product, is based on the experience and knowledge of NEOTEX® SA .It is offered as a service to designers and contractors in order to help them find potential solutions. However, as a supplier, NEOTEX® SA does not control the actual use of the product and therefore cannot be held responsible for the results of its use. As a result of continual technical evolution, it is up to our clients to check with our technical department that this present data sheet has not been modified by a more recent edition.