

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, nonpenetrating 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







Neoproof® Polyurea

Technical Characteristics



Mixing ratio (by weight) Solids by weight (ASTM D5201) >85% Mixing ratios (weight prop.) 13A:8B Service temperature -35°C min / +80°C max Hardness Shore A (EN ISO 868:2003/ASTM 2240) 78 Hardness Shore D (EN ISO 30
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Service temperature -35°C min / +80°C max Hardness Shore A (EN ISO 868:2003/ASTM 2240) Hardness Shore D (EN ISO 30
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868:2003/ASTM 2240) Hardness Shore D (EN ISO 30
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Absorption Coefficient (EN 1062- 3:2008) 0.00 kg/m² min ^{0,5}
Substrate humidity <4%
Application temperature +5°C to +35°C
Elongation at break (ASTM D412) 420%
Tensile strength at break (ASTM D412) 11,1N/mm²
Adhesion to concrete (ASTM D4541) >3N/mm ²
Total Reflectance (SR%) (ASTM E 903-96) 87
Total Emittance Coefficient (ASTM 0,85
Solar Reflectance Index (SRI) (ASTM 109
Resistance to fatigue movement - 1000 cycles at -10°C (W3-25 years) multiple crack bridging (TR-008)
Consumption 1-1,2 kg/m² (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.**

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





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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**. 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® Polyurea** is applied after good stirring with brush, roller, or airless spray, 24 hours after the priming with **Acqua Primer NP**. **Neoproof® Polyurea** is applied in two layers without dilution.

Special Notes

- Neoproof® 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® Polyurea** may be reinforced with specially designed non-woven polyester tissue **Neotextile® 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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Colours	White. Other colours available upon request.
Packaging	Sets of 21kg and 5,25kg in tin cans (components A&B have fixed weight proportion)
Tools cleaning	Use solvent Neotex® 1021 immediately after application.
Stain removal	Use solvent Neotex® 1021 when the stains are still fresh and damp. In case of hardened stains, use mechanical means.
Storage stability	Part A: 2 years (5-45°C) in sealed tin cans. Part B: 1 year (5-35°C) in sealed tin cans.

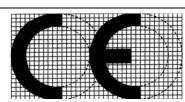
The information supplied in this datasheet, concerning the uses and the applications of the product, is based on the experience and knowledge of NEOTEX® SA. It is offered as a service to designers and contractors in order to help them find potential solutions. However, as a supplier, NEOTEX® SA does 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.





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DoP No. Neoproof Polyurea: ETA - 18/0563

ETAG 005

NEOPROOF POLYUREA

Surface Protection System for concrete Coating

Permeability to CO₂ : SD>50

Permeability to water vapour : Class II

Capillary absorption and

Permeability to water W<0,1kg/m²h^{0,5}

Crack bridging : NPD

Ability

Adhesion strength : ≥1,5N/mm²

Reaction to fire : Euroclass F

Dangerous substances : Comply with 5.3