

Neoproof® Polyurea F

Description of the product

Neoproof® Polyurea F is a highly durable, 2 component brushable polyurea, waterproofing coating for roofs, when mechanical durability and outstanding waterproofing properties are required. . Concerning the reaction to fire, it is classified as Class E according to EN 13501-1, test method EN ISO 11925-2:2010. It does not require special application equipment. It forms a blister-free non-penetrating against moisture film providing zero water absorption with resistance to UV and mechanical stress. It can be used for the protection of metal structures, prestressed concrete, brickwork, wooden surfaces, etc. When the temperature exceeds 200 ° C (390 ° F), the specific components of the product react to form a multicellular non-flammable foam, which protects the substrate against a small flame attack for a short period of time, allowing fire extinguishers to intervene.

Applications

- Roofs made of concrete, cement boards, mosaic, cement slurries
- Rooftops with resistance to stagnant water
- Metallic surfaces 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
- Protection of polyurethane foam insulation

Properties/Advantages

- Capable of resisting, for a short period, a flame attack without substantial flame spread
- Prevents moisture penetration, providing complete sealing
- Offers increased resistance to bending and stretching
- Very high mechanical strength
- No need of special application equipment
- UV stable
- 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

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- Resistant to temperatures from -35°C to +80°C

Technical Characteristics

Reaction to fire (EN 13501-1)	Class E (Fs<150mm in 20s)
Solids by weight (ASTM D5201)	>84%
Service temperature	-35°C to +80°C
Hardness Shore A (EN ISO 868:2003/ASTM 2240)	73
Hardness Shore D (EN ISO 868:2003/ASTM 2240)	22
Consumption	1-1.2 kg/m ² (for 2 layers, on cementitious substrate)
Water vapour permeability	Class II
Capillary absorption and permeability to water	W < 0,1 kg/m ² h ^{0,5}
Permeability to CO ₂	s _D >50 m
Absorption Coefficient (EN 1062-3:2008)	0.00 kg/m ² min ^{0,5}
Substrate humidity	<4%
Application temperature	+5°C to +35°C
Elongation (ASTM D412)	400 %
Tensile strength at break (ASTM D412)	8.6 N/mm ²
Adhesion to concrete (ASTM D4541)	> 3N/mm ²

Pot life

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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Temperature	Time
5 °C	100 minutes
23 °C	80 minutes
35 °C	45 minutes

Tack free

Temperature	Time
5 °C	8 hours
23 °C	3 hours
35 °C	2 hours

Recoat / Walkability

Temperature	Time
5 °C	24 hours
23 °C	18 hours
35 °C	10 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 (15-20% 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® Polyurea F** is applied after good stirring, with brush, roller or airless spray, 24 hours after the priming with **Acqua® Primer NP**. **Neoproof® Polyurea F** is applied in two layers without dilution.

Special Notes

- **Neoproof® Polyurea F** 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

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place under temperature between +5°C and +35°C.

- For demanding applications or when covering cracks bigger than 1,5 mm, **Neoproof® Polyurea F** 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.

Colours	White
Packaging	Sets of 19 kg 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 stain is 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.

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