

Proflex A

UV & Anti-Carbonation Elastomeric Coating for Concrete Walls & Soffits

Description

A high build waterborne acrylic surface treatment designed to impart a decorative semi-matt waterproof and protective film to concrete structures, buildings, carparks, underground precincts and tunnels. Proflex A protects concrete from ingress of rain water, other water borne pollutants and minimises the possibility of carbonation. It is also suitable for protective and decorative treatment to asbestos cement roofs, brick/block work, slate felt, asphalt and Uniflex membrane. Proflex A has been designed to meet the requirements of EN 1504 Part 2.

Colours Available: White, Flake Grey, Light Grey, Magnolia, Corn, Mushroom, Black (other colours on request).


Advantages

- Prevents rainwater ingress whilst allowing structure to breathe
- Excellent adhesion to a variety of substrate types
- Crack-bridging 2mm for static cracks
- Inbuilt flexibility with film elongation of 370%
- Reduces CO₂ diffusion rate & protects from chloride attack
- High UV & atmospheric pollutant resistance
- Equivalent concrete cover is 260mm @ 268µm DFT
- Independently tested by Taywood Engineering

Technical Information

Polymer type	Acrylic
Coverage	2-5m ² per litre
Dry film thickness (Per coat)	265µm @ 2m ² per litre 150µm @ 3.5m ² per litre 106µm @ 5m ² per litre
Drying time (see Limitations)	1-6 hours
S.G.	1.37
Total solids	65 %
Minimum application temperature	5°C
Film tensile strength	0.7 MPa
Film elongation	370 %
Crack bridging properties	Static cracks ≤2mm
Flash point	Non-flammable

NB. Proflex A will be affected by surface profile and porosity

 0086	
Nufins, Kingston House, 3 Walton Road, Pattinson North, District 15, Washington, Tyne & Wear. NE38 8QA 23 0086-CPR-774186	
EN 1504-2 Surface protection system Coating	
Permeability to CO ₂	S _d >50 m
Permeability to water vapour	Class I
Capillary absorption & permeability to water	<0.1 kg/m ² .h ^{0.5}
Adhesion	≥0.8 MPa
Dangerous substances	Complies with 5.4

Surface Preparation

Preparation shall be such as to leave dry, clean, sound substrates, free from chemical contamination. Oil, grease, dirt, moss, lichen, paint, plaster, dust, loose particles and laitance must be removed by effective cleaning methods to achieve a textured surface; water-blasting or grit-blasting are recommended.

New concrete should be a minimum of 28 days old.

Where strength or surface stability of the substrate be in doubt, then we recommend that a trial area of Proflex A be applied to assess its suitability.



Technical properties of Proflex A

Properties	Standard	Performance Requirements	Declared Value
Appearance			Pigmented emulsion
S.G.	EN ISO 2811-1		1.37
pH			8.5
Non-volatile matter	EN ISO 3251		60-70 %
Viscosity	EN ISO 3219		17000 centipoise
Drying time (see Limitations)	EN ISO 1517		1-6 hours
Application temperature			5°C to 35°C
Coverage			2-5m ² per litre
Dry film thickness (Per coat)			265µm @ 2m ² per litre 150µm @ 3.5m ² per litre 106µm @ 5m ² per litre
Film tensile strength	BS 2782-3		0.7 MPa
Film elongation	BS 2782-3		370 %
Crack bridging properties			Static Cracks ≤2 mm
Flash point			Non-flammable
Permeability to CO ₂	EN 1062-6	CO ₂ s _d >50 m	>50 m
Diffusion resistance to CO ₂			3.78 x10 ⁻⁷ cm ² /s ⁻¹
Dry film thickness of 268µm R. Value Sc. Value			106 metres 260 mm
Water vapour diffusion S _d		s _d <5m	s _d = 0.7 m Class I
Water vapour transmission rate			0.059 kg/m ² /24 Hours
Capillary absorption & permeability to water	EN 1062-3	<0.1 kg/m ² .h ^{0.5}	<0.1 kg/m ² .h ^{0.5}
Adhesion	EN 1542	≥0.8 MPa	≥0.8 MPa
Thunder shower cycling	EN 13678-2	≥0.8 MPa	≥0.8 MPa
Artificial weathering			No visual defects

Technical data shown are statistical results and do not correspond to guaranteed minima.

Tolerances are those described in appropriate standards.

All tests were conducted under laboratory conditions at 23°C, unless otherwise stated.

1 N/mm² = 1 MPa

1 kN/mm² = 1 GPa

Surface Preparation (continued)

Small and minor defects to the concrete surface should be made good using a repair medium that is compatible with the coating such as Nupatch Cosmetic. Large repairs can be undertaken using Nucem HB Mortar (see separate TDS).

Priming

For most situations it is advisable to apply Stabilising Primer WB in one coat by brush or roller onto the dry prepared surface. Do not apply the Proflex A until the primer is dry.

Appearance	Single part milky white liquid
S.G.	1.0
Solids content	24 %
Coverage	5 - 8 m ² per litre
Bond Strength	>2.0 MPa

Application Instructions

Proflex A may be applied by brush or medium nap roller. Actual coverage depends on surface profile & porosity. Do not overwork. For sprayed application contact our technical department.

One application is normally sufficient but if applying in two coats, allow the first coat to fully dry.

Application to Roofs

Prepare surfaces as described above. Suspect or damaged areas such as cracks in old asphalt, flashing, covings, splits, fish-mouths around bolt heads, vent pipes and upstands should be treated first with a thick heavy brush coat prior to overall treatment. For added protection reinforcement tape can be incorporated into the initial application. For application to tiles or slates, Proflex A should be brushed against the lay of the tiles. As soon as the first coat is dry, apply the second coat by brushing at right-angles to the first.

Clean all equipment used for application of Stabilising Primer WB and Proflex A immediately after use with clean water.

Packaging

Proflex A is available in 5 litre & 20 litre drums.

Stabilising Primer WB is available in 5 litre drums.

Storage

Shelf life of Proflex A and Stabilising Primer WB is 12 months when stored unopened in dry, normal conditions and away from direct sunlight. Protect from frost.

Health & Safety

Product Safety Data Sheets (SDS) are available from Nufins. SDS sheets are provided to help customers satisfy their safe handling, use and disposal needs as well as assist with any conformance requirements made locally by health and safety regulations.

SDS are continually updated to provide the latest information to our customers. We therefore recommend contacting our head office to obtain the most recent and accurate SDS before handling and using any product.

Limitations

Do not apply at temperatures below 5°C or in damp conditions or when rain is expected.

High humidity, air flow and low temperatures will extend drying time for inter-coat applications.

Proflex A is not suitable for application to substrates which will be submerged or where standing water is likely to occur.

Disclaimer

The information contained herein is to the best of our knowledge true and accurate and is given in good faith but without warranty. The user will be deemed to have satisfied themselves independently as to the suitability of our products for their own particular purpose. In no event shall Nufins be liable for consequential or incidental damages.

Users must always refer to the most recent issue of the Technical Datasheets, copies of which will be supplied on request.

Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors. Technical contacts are available to provide further information and arrange demonstrations.