

Covercrete

UV & Anti-Carbonation Coating for Concrete Walls & Soffits

Description

A protective waterborne acrylic surface treatment, designed to significantly reduce the diffusion rate of carbon dioxide into concrete, thus providing a highly durable, weather resistant surface which will maintain its anti-carbonation properties over many years. Covercrete is suitable for application to all concrete structures, including highways, tunnels, buildings, car parks, etc and as 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

- Provides superior ingress protection to any structure
- Unifies appearance of elevations after concrete repair works
- Ready to use, rapid drying formulation
- Easy to apply by brush or roller
- Also available in Sprayable grade
- Excellent adhesion to all surfaces
- Damaged areas easily re-coated
- Extremely durable & weather resistant protection
- Independently tested by Taywood Engineering

Technical Information

Coverage	4-8 m ² per litre
Dry film thickness (for 2 coats)	240 µm @ 4m ² per litre 200 µm @ 5m ² per litre
Drying time (see Limitations)	1-6 hours
Specific gravity	1.4
pH	8.5
Total solids	65%
Minimum application temperature	5°C
Film tensile strength	11 MPa
Film elongation	100%
Flash point	Non-flammable

N.B. Coverage will be affected by surface profile and porosity.

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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 Covercrete be applied to assess its suitability.

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).



Technical properties of Covercrete

Properties	Standard	Performance Requirements	Declared Value
Appearance			Pigmented emulsion
S.G.	EN ISO 2811-1		1.40
pH			8.5
Non-volatile matter	EN ISO 3251		60-70 %
Viscosity	EN ISO 3219		7700 centipoise*
Drying time (see Limitations)	EN ISO 1517		1-6 hours
Application temperatures			5°C to 35°C
Coverage			4 to 8 m ² per litre
Dry film thickness (2 coats)			240 µm @ 4m ² per litre 200µm @ 5m ² per litre
Film tensile strength	BS 2782-3		11 MPa
Film elongation	BS 2782-3		100 %
Flash point			Non-flammable
Permeability to CO ₂	EN 1062-6	CO ₂ S _d >50 m	>200 m
Diffusion resistance to CO ₂			1.06 x10 ⁻⁷ cm ² /s ⁻¹
(Dry film thickness of 150µm) R. Value Sc. Value			210 metres 520 mm
Water vapour diffusion S _d	EN ISO 7783-1	S _d <5m	0.3m Class I
Capillary absorption & permeability to water (EN1062-3)	EN 1062-3	<0.1 kg/m ² .h ^{0.5}	<0.1 kg/m ² .h ^{0.5}
Thunder shower cycling (EN13687-2)	EN 13678-2	≥0.8 MPa	1.0 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 performance standards.

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

* Contact Nufins technical department for viscosity of Covercrete Sprayable

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 Nu cem HB Mortar (see separate TDS).

Priming

Certain substrates and conditions require Stabilising Primer WB applied by brush or roller onto the dry prepared surface.

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

Do not apply the Covercrete until the primer is dry.

Application Instructions

Covercrete may be applied by brush or medium nap roller.

Covercrete Sprayable is applied by airless spray equipment; for sprayed application contact our technical department.

Apply the first coat onto prepared surfaces. The second coat should be applied at any time after the first coat has dried.

Cleaning

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

Packaging

Covercrete is available in 5 litre & 10 litre drums.

Covercrete Sprayable is available in 10 litre drums & 1000 litre IBC

Stabilising Primer WB is available in 5 litre & 10 litre drums.

Storage

Shelf life of Covercrete 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, low air flow and low temperatures will extend drying time for inter-coat applications.

Do not use where concrete is to be submerged under water.

Where the contractor has deemed that an existing coating is stable and well-bonded, light abrasion will improve adhesion of Covercrete.

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.