NCB™

DSC402

A tintable, non-cementitious basecoat for embedding reinforcing mesh and providing a grout coat for Custom Brick™ Finishes

Description

NCB is a fully formulated water-based acrylic product. It is a highly flexible and crack-resistant base and grout coat that is tintable to a wide variety of colours.

Uses

- NCB is used as a base coat to embed reinforcing mesh in a Dryvit system.
- NCB is used as the grout coat for with the Custom Brick Finish System.
- NCB is used as the base coat for re-skimming existing lamina during repair and remediation.

Coverage

Approximately 10.2-12.1 m^2 (110-130 ft^2) per 29.5 kg (65 lb.) pail. Approximately 18.6-23.2 m^2 (200-250 ft^2) when used as a grout.

Properties

Working Time - When the NCB is contained in an open pail, there is no working time limit. Small amounts of water can be added continuously to the pail to adjust the workability. Partially used containers of NCB, when tightly sealed, may be used the next day.

Drying Time - NCB dries and develops physical properties by the evaporation of water.

Drying time depends upon the air temperature, relative humidity and wind conditions. Under average drying conditions [21 °C (70 °F), 55% R.H.], NCB will be dry in 24 hours. Protect NCB from rain for at least 24 hours. Under adverse drying conditions (low temperature and high relative humidity), NCB should be protected until it is cured hard.

Testing Information

For individual test data on this product's properties, refer to the chart included with this document.

Application Procedure

FOR COMPLETE APPLICATION INSTRUCTIONS, REFER TO THE APPROPRIATE DRYVIT SYSTEM APPLICATION INSTRUCTIONS.

Job Conditions - Air and surface temperature for the application of the NCB material must be 4 °C (40 °F) or higher and must remain so for a minimum of 24 hours. When used as a grout coat for Custom Brick finishes, air and surface temperature must be 13 °C (55 °F) or higher and must remain so for a minimum of 24 hours.

Temporary Protection - Shall be provided at all times until the adhesive, base coat, finish and installation of permanent flashings, sealants, etc. are completed to protect the wall from inclement weather and other sources of damage.

Surface Preparation

- Base Coat: NCB is intended for use in a Dryvit system. The insulation board shall be properly installed to an approved substrate using an approved Dryvit adhesive. The adhesive shall be properly cured, all EPS insulation board joints tightly butted, joints wider than 1.6 mm (1/16 in) slivered with insulation board to create a tight fit and the surface rasped to a smooth and level plane.
- Grout Coat: NCB may be used as the grout coat for the Custom Brick application. The base coat shall have cured a minimum of 24 hours and shall be dry, clean and free of any contaminants prior to applying the Custom Brick NCB Grout Coat.
- Skim Coat: The existing finish must be dry and free of any contaminants prior to applying the NCB material.

Mixing – Mix NCB to a smooth, homogeneous consistency with a "Twister" paddle or equivalent mixing blade, powered by a 12.7 mm (1/2 in) drill, at 450-500 rpm. A small amount of clean, potable water may be added to adjust workability.

Tinting - NCB may be tinted to provide a coloured base or grout coat. Ten standard colours and many custom colours are available.

Application

Base Coat - For base coat application, all insulation board irregularities greater than 1.6 mm (1/16 in) must be sanded flush. Apply the base coat to the entire surface of the insulation board. Fully embed the Dryvit reinforcing mesh in the wet base coat troweling from the center to the edge of the reinforcing mesh so as to avoid wrinkles. The reinforcing mesh shall be continuous at all corners and lapped or butted in accordance with Dryvit's recommendations. The overall minimum base coat thickness shall be sufficient to fully embed the reinforcing mesh. The recommended method is to apply the base coat in two applications. All areas requiring higher impact resistance shall be detailed on the plans and described in the contract documents. The products shall be installed in accordance with Dryvit's recommendations.

Grout Coat – Air temperature for application of NCB Grout must be between 13 °C (55 °F) and 38 °C (100 °F) and must remain so for 24 hours. With a stainless steel trowel, apply NCB Grout over the dry base coat. Apply the NCB Grout to a uniform thickness not exceeding 1.6 mm (1/16 in). Allow to dry a minimum of 24 hours prior to adhering custom Brick templates.

Skim Coat – Apply the NCB material over the entire surface of the existing finish in a uniform thickness [approximately 1.6 mm (1/16 in) thick]. When specified, fully embed the Dryvit reinforcing mesh as described in the base coat application previously.

Clean-Up - Clean tools with water while the NCB material is still wet.

Storage
NCB must be stored at 4 °C (40 °F) or above in tightly sealed containers out of direct sunlight.

Cautions and Limitations
- While drying, the NCB must not be exposed to the formation of dew on its surface. This could lead to localized delamination and the formation of blisters.
- Before applying Dryvit finish to the NCB base coat, insure that the surface is thoroughly and uniformly dry. Particular attention must be paid to areas of mesh overlap where the NCB is thicker and will take longer to dry. Application of finish to an incompletely dried base coat will result in mottled appearance.
- Do not use NCB as an adhesive.
- NCB is not recommended to embed reinforcing mesh at EPS edges that will receive sealant.

Technical and Field Services
Available upon request.

NCB Testing

Test	Test Method	Criteria	Results
Surface Burning Characteristics	ASTM E 84	ICC and ANSI/EIMA 99-A-2001 Flame Spread <25 Smoke Developed <450	Passed
Water Vapour Transmission	ASTM E 96 Procedure B	ICC: Vapour Permeable No ANSI/EIMA Criteria	14.7 Perms
Accelerated Weathering	ASTM G 155 (Xenon Arc)	ICC: 2000 hours: No deleterious effects[1]	5000 hours: No deleterious effects[1]
Freeze-Thaw Resistance	ASTM E 2485/ICC-ES Proc: ICC ES (AC219*)	No deleterious effects[1] after 10 cycles	Passed – No deleterious effects[1] after 10 cycles
Water Resistance	ASTM D 2247	ICC and ANSI/EIMA 99-A-2001 14 days: No deleterious effects[1]	14 days: No deleterious effects[1]
Tensile Bond[2]	ASTM C 297/E 2134 (formerly EIMA 101.03)	ICC and ANSI/EIMA 99-A-2001: Minimum 104 kPa (15 psi) – substrate or insulation failure	>104 kPa (15 psi)
Water Penetration	ASTM E 331	No water penetration beyond the inner-most plane of the wall after 15 minutes at 137 Pa (2.86 psf)	Passed 15 minutes at 137 Pa (2.86 psf)
Ignitability	NFPA 268	No ignition at 12.5 kw/m^2 at 20 minutes	Passed
Fire Resistance	ASTM E 119	No effect on the fire resistance of a rated wall assembly	Passed 1 hour and 2 hour
Intermediate Multi-Story Fire Test	NFPA 285 (UBC 26-9)	1. Resist flame propagation over the exterior surface 2. Resist vertical spread of flame within combustible core/component of panel from one story to the next 3. Resist vertical spread of flame over the interior surface from one story to the next 4. Resist lateral spread of flame from the compartment of fire origin to adjacent spaces	Passed

1. No cracking, checking, rusting, crazing, erosion, blistering, peeling, or delamination when viewed under 5x magnification.
2. Sample consists of NCB Base Coat applied over 1" EPS.
* AC219 – Acceptance Criteria for EIFS

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