GROUTS

EUCOCRETE NWP

WATERPROOFING, CORROSION PROTECTION AND RESTORATION

EUCLID CHEMICAL

PACKAGING

20kg Bag.

STORAGE

Store in original, undamaged packaging in a clean, dry, protected location.

DESCRIPTION

Eucocrete NWP is a unique brushable penetrative fine cementitious coating specially designed for waterproofing and protection of old and new concrete against positive and negative water pressure. Eucocrete NWP prevents the penetration of water and other liquids into the concrete by causing reactions that produce non-soluble cementitious formations within the pores and capillaries of concrete. These formations grow in the presence of water, blocking pores, capillaries and minor shrinkage cracks, thus waterproofing concrete.

PRODUCT CHARACTERISTICS

FEATURES/BENEFITS

- Significantly increases impermeability of concrete
- Resists extreme hydrostatic pressure from either positive or negative surface of the concrete slab
- Can be applied to the positive and negative side of the concrete surface
- Can seal hairline cracks up to 0.5mm
- Enhances the properties of the concrete against reinforcement corrosion
- Significantly reduces chloride penetration
- Allows concrete to breath
- Does not require a dry surface
- Withstands a water head of 50 metres

PRIMARY APPLICATIONS

- Concrete Water Reservoirs
- Water Treatment and Sewage Plants
- Swimming Pools
- Underground Tunnels
- Foundations
- Chemical and Fertilizer Plants
- Bridge Pylons, Beams and Decks

APPEARANCE

Grey powder.

COVERAGE

Applied Thickness 3.0mm - Appropriate m² per 20kg bag = 3.5 - 4m².
Applied Thickness 5.0mm - Appropriate m² per 20kg bag = 2 - 2.5m².

TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

PROPERTY	STANDARD	TYPICAL VALUES
Grain Size		Max 0.6mm
Layer Thickness		3mm-5.0mm
Fresh Wet Density		Approx 2200 kg/m³
Mixing Water per 20kg Pail		3.3-3.7 litres
Working Time		30 minutes
Temperature for Application		5 to 40°C
Final Hardening		4-8 hours
Impermeability	DIN 1048	Waterproof
Chloride ion diffusion	NT Build 443-1955-11	Reduced approx 2 times (1.53 E-^{11})
Impact Abrasion	AS/NZS 4469.9.2003	Resistance is significantly increased
Compressive Strength (MPa)	AS/NZS 2350.11-2001	1 day: 21.7 7 days: 40.5 28 days: 43.5
Flexural Strength (MPa)	ASTM Designation: C348-97	28 days: 5.5
Bond Strength (MPa)		28 days: 4.5
Carbonation	"Colour-metric Method"	Resistance is significantly increased
Water Absorption		Decreased by approx 3 times
Steel Reinforcement	"Polarisation curves method"	Steel corrosion is inhibited
Crack Resistance	"Ring Method"	Crack resistance
Acidic Medium Resistance at pH 3-4		Approx 2 times higher than conventional Portland cement mortar

WARRANTY: Tremco CPG Australia Pty Ltd products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG Australia written instructions and (b) in any application recommended by Tremco CPG Australia, but which is proved to be defective, will be replaced free of charge. Any information provided by Tremco CPG Australia in this document in relation to Tremco CPG Australia's goods or their use is given in good faith and is believed by Tremco CPG Australia to be appropriate and reliable. However, the information is provided as a guide only, as the actual use and application will vary with application conditions which are beyond our control. Tremco CPG Australia makes no representation, guarantee or warranty relating to the accuracy or reliability of the information and assumes no obligation or liability in connection with the information. To the extent permitted by law, all warranties, expressed or implied are excluded.

DIRECTIONS FOR USE

Surface Preparation: Remove any weak, spalling, unconsolidated concrete and any existing coating(s) which may contribute to adhesion issues. If repair mortar is required, please refer to the Eucocrete HBM product data sheet. If steel reinforcement is exposed, all rust, loose material and other contaminants which may contribute to bonding or corrosion issues shall be totally removed and treated accordingly. All concrete surfaces are to be prepared by high pressure water blasting, wire brushing or grit blasting to create a rough surface and to open the pore structure of the concrete. Totally remove any dust, debris and loose material which may contribute to adhesion issues before priming of the concrete substrate. Any surface imperfections are to be repaired with a suitable cementitious re-profiling mortar such as Eucocrete HBM. Eucocrete HBM is to be used for all fillets, and the negative waterproofing detail application.

Priming: Eucocrete Activator is to be applied as a primer on the concrete surface to passivate the steel reinforcement embedded beneath the concrete and completely harden the surface, creating an appropriate adhesion platform and thus the increased bond strength of Eucocrete NWP. Apply Eucocrete Activator at the rate of 3-5m2 per litre on the dry touch concrete substrate. Allow the Eucocrete Activator to be touch dry to a wet dull lustre and puddle free. An additional coat(s) may be required depending on the porosity of the concrete substrate.

Mixing: Normal clean water required is 3.3 – 3.7 litres per 20kg bag of Eucocrete NWP. Place the minimum required amount of clean water into a clean mixing bucket. While mixing slowly, gradually add Eucocrete NWP. If necessary, add additional clean water until a mix of the desired workability is obtained. Once the desired consistency is obtained, mix product for a further 2–3 minutes. The working time for Eucocrete NWP is 30 minutes. Low sheer mechanical mixer is suitable. It is highly recommended to mix the full 20kg bag of Eucocrete NWP for all applications.

Water Seepage: Before the application of Eucocrete NWP, all water seepage must be stopped by using Vandex Plug – please refer to the Vandex Plug product data sheet for application. Water seepage, no matter the flow, may not allow Eucocrete NWP to cure and perform to its required capabilities.

Application: Positive application (3mm applied thickness): Apply Eucocrete NWP by trowel, brush or spray method. When applying by trowel, firmly press Eucocrete NWP onto the concrete surface to push the product into the open pores and to ensure maximum adhesion onto the concrete surface. When applying by spray, ensure to firmly brush or trowel immediately after spraying to remove possible trapped air within the product and to ensure maximum adhesion onto the concrete surface. If other coatings or finishes are to be applied over the Eucocrete NWP and require a roughened surface, it is suggested to lightly brush the surface of Eucocrete NWP whilst still wet. **Negative application (5mm applied thickness):** Apply Eucocrete NWP by trowel, brush or spray method. When applying by trowel, firmly press Eucocrete NWP onto the concrete surface to push the product into the open pores and to ensure maximum adhesion onto the concrete surface. When applying by spray, ensure to firmly brush or trowel immediately after spraying to remove possible trapped air within the product and to ensure maximum adhesion onto the concrete surface. If other coatings or finishes are to be applied over the Eucocrete NWP and require a roughened surface, it is suggested to lightly brush the surface of Eucocrete NWP whilst still wet. Please consult with a Tremco Technical Sales Representative regarding the negative application detail on all joints & floor to wall junctions. **Please note:** application requirements may change depending on environment where Eucocrete NWP is to be applied.

Curing: After application, Eucocrete NWP must be provided suitable protection against weather conditions (sun, wind, rain and frost) for a minimum of 5 days. To greatly assist in the curing process, plastic sheeting or damp hessian is suggested to protect all treated surfaces. Curing times may vary depending on weather and environmental conditions. Finishes containing Portland cement may be applied over Eucocrete NWP following the curing period, however other paint and coating finishes should not be applied before 28 days.

PRECAUTIONS/LIMITATIONS

- In all cases, the safety data sheet (SDS) must be read and understood prior.

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