iKOTE™ CM30

Two-component, Acrylic-modified Cementitious Waterproofing Coating

DESCRIPTION

iKote CM30 is 2-component acrylic co-polymer modified cementitious waterproofing coating. The two-part system comprising of a modified cement-based powder and an acrylic co-polymer-based liquid, when mixed at a particular ratio, produces a smooth creamy slurry which can be easily applied on concrete and masonry. The cured coating forms a tough and flexible barrier against the ingress of water and vapor.

RECOMMENDED APPLICATIONS

- Waterproofing of roofs.
- Waterproofing of swimming pools.
- Vapor barrier on building facades.
- Damp proofing.
- Backing on marbles and granites to prevent ingress of moisture / contaminants.
- As a waterproofing layer under tiles in wet areas.
- As a protective layer for exposed concrete.

FEATURES & BENEFITS

- Excellent adhesion on both porous and no-porous surfaces.
- Good adhesion to existing ceramic tiles.
- Resistant to CO2 and Chloride ion diffusion.
- Non-toxic: Suitable for potable water applications.
- Highly durable: Resistance to UV and deterioration by long term weathering effects.
- Good compatibility with most building substrates. Co-efficient of thermal expansion similar to concrete.
- Good flexibility and crack bridging ability.

TECHNICAL PARAMETERS

Physical Properties	Test Met hod	Value
Color	-	Grey/Off-white
Mixed density, (g/cc)	1.6±0.03	ASTM D 1475
Pot life @25°C, (mins)	45	-
Tensile strength, (N/mm²)	ASTM D 412	>1.0
Elongation, (%)	ASTM D 412	> 45
Crack bridging ability, (mm)	ASTM D 836	≥ 1.5
Adhesion strength (concrete), (N/mm²)	ASTM D 4541	>1.0
Hydrostatic water pressure @5bar	BS EN 12390	Pass
Water potability	BS 6920	Pass
VOC, (g/l)	ASTM D 3960	<10
Initial drying time @25°C, (hrs.)	-	3-4
Full cure @25°C, (days)	-	7
Application temperature, (°C)	-	5 to 45
Service temperature, (°C)	-	-5 to 80

All values given are subject to 5 – 10% tolerance
Other colors are available on request.

APPLICATION INSTRUCTION

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending on site conditions. Recommended guidelines for the application of the coating system is as follows:

	Loose and unsound concrete should be chipped off and repaired with a suitable polymer-modified repair mortar. Sharp edges and protrusions should be leveled off. Use of a suitable industrial grade detergent or degreasing compound is recommended to remove all contaminants like oil, grease, wax etc. from the substrate. The surface to be treated should be pre-saturated with water prior to application. However, any standing water should be removed prior to application.
PRIMING	Apply iKote AC20 Primer diluted with water in the ratio of 1:1 on the concrete substrate at a coverage rate of 5-6 sq.m per litre. On highly porous substrates apply a second coat of the primer. Allow the primer to become tack free before applying the topcoat. A recoat of the primer will be required if the topcoat application gets delayed by more than 24 hours.
MIXING	iKote CM30 is supplied in two pre-measured packs which requires on-site mixing. Pour the Part B liquid into a suitable clean container and add the Part A powder into it. Mix the contents using a slow speed drill (300-400rpm) fitted to a proprietary paddle mixer till a homogenous, lump free and creamy consistency is achieved. DO NOT ADD WATER TO DILUTE THE MATERIAL. Allow the mix to stand for 2-3 minutes followed by further mixing for another 2minutes. Part mixing is not recommended; however, it can be done when the area of application is small. Care should be taken to properly measure the required amount of material of both the components to keep the mixing ratio intact.
PLACING	The mixed iKote CM30 can be applied onto the prepared substrate using a roller or brush. The coating can also be applied with an airless spray of nozzle size of 3-4mm and a pressure of 6-7 bar. The coating should be applied in 2 layers. Whilst the 1st layer is still wet, embed a glass fiber mat on all corners and joints for added reinforcement. The 2nd layer should be applied after the 1st layer dries off and should be applied in perpendicular direction to the 1st layer. For general protection against carbonation and alkali attacks, the coating can be applied at a minimum thickness of 1mm.
CURING	iKote CM30 coating should be cured for a minimum period of 3 days before allowing it to be exposed to foot traffic. Curing can be done by a wet hessian cloth or mist spraying. In areas exposed to rapid drying winds, the coating should be covered with a 1000-gauge polyethylene sheet.
CONSUMPTION	1.8 Kg. /m²/mm
YIELD	11 Ltr / kit
COVERAGE	2.4 Kg. /m²/ mm thickness.
CLEANING	Clean all tools immediately with water after use. Hardened materials can be removed mechanically only.
LIMITATIONS	• iKote CM 30 application should be avoided when the ambient temperature is more than 45°C as this will affect the working time of the coating. • Application on external areas should be avoided during extreme weather conditions like sandstorm or rain. • iKote CM 30 should not be applied over lightweight concrete or foam concrete.
SUPPLY	• 20 kg kit – (Part A-15 kg powder: Part B – 5 kg Polymer).
STORAGE	Store under cover, out of direct sunlight and protect from extreme temperatures. It is recommended to keep the powder bags on pallets to protect these from getting damaged. The shelf life is up to 12 months when stored as per recommendations and in unopened conditions.
HEALTH & SAFETY	Product contains cement, which may cause dermatitis. Wear rubber gloves when handling the product. In case of insufficient ventilation, put on suitable respiratory equipment. Product is classified as non-hazardous. Treat any splashes to the skin or eyes with fresh water immediately. If the product is accidentally swallowed, do not induce vomiting but seek medical assistance immediately. For more details, refer to the product MSDS.

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