

iKOTE™ CM 40X

TWO-COMPONENT, POLYMER-RICH, FLEXIBLE CEMENTITIOUS WATERPROOFING COATING

DESCRIPTION

iKote CM 40X 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, produces a smooth creamy slurry which can be easily applied on concrete and masonry. iKote CM 40X is formulated to provide extra volume to get additional coverage and improved working time. 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.
- Waterproofing liner for potable water tanks, slumps, lift pits etc.
- 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 to both porous and non-porous surfaces.
- Good adhesion to existing ceramic tiles.
- Greater coverage rate.
- Extended working time.
- Resistant to CO2 and Chloride ion diffusion.
- Non-toxic: Suitable for potable water applications.
- Highly durable: Resistance to UV and deterioration to 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 METHOD | VALUE |
|----------------------------------------------------|-------------|----------------|
| Color | - | Grey/Off-white |
| Pot life @25°C, [mins] | - | 3-4 |
| Tensile strength, [N/mm ²] | ASTM D 412 | ≥1.2 |
| Elongation, [%] | ASTM D 412 | ≥300 |
| Crack bridging ability, [mm] | ASTM D 836 | ≥2 |
| Adhesion strength (concrete), [N/mm ²] | ASTM D 4541 | >0.5 |
| 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 | Application procedures may vary slightly depending on site conditions. Recommended guidelines for the application of the coating system is as follows: |
| SUBSTRATE PREPARATION | 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 must be removed prior to application. |
| PRIMING | Apply iKote SBR Primer (if required) diluted with water in the ratio of 1:1 on the concrete substrate at a coverage rate of 5-6 sq.mtr 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 | <p>iKote CM 40X is supplied in two pre-measured parts which requires on-site mixing. Pour 75% of the Part B liquid polymer into a suitable clean container and slowly add the Part A powder to the liquid. Mix the contents using a slow speed drill (300-400rpm) fitted to a proprietary paddle mixer until a homogenous, lump free and creamy consistency is achieved. Add the balance 25% liquid and mix for another one minute. DO NOT ADD WATER TO DILUTE THE MATERIAL. Allow the mix to stand for 2-3 minutes followed by further mixing for another 2 minutes.</p> <p>Part mixing is not recommended; however, it can be done when the area of application is small. Care should be taken to measure the required amount of material of both the components to keep the mixing ratio intact.</p> |
| PLACING | The mixed iKote CM 40X 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 3-4mm and a pressure of 6-7 bar. The coating should be applied in two layers. Whilst the first layer is still wet, embed a glass fiber mat on all corners and joints for added reinforcement. The second layer should be applied after the first layer dries off and should be applied in perpendicular direction to the first layer. For general protection against carbonation and alkali attacks, the coating can be applied at a minimum thickness of 1mm. |
| CURING | iKote CM 40X 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 shall be covered with a 1000-gauge polyethylene sheet. |
| COVERAGE | <p>1.2 kg/m²/mm</p> <p>13kg + 13L kit (Boosted Volume Formula)</p> <p>21 to 22m² per kit</p> <p>The consumption and coverage will vary depending on application area, substrate type, substrate roughness, surface profile, absorption of the surface and thickness required</p> |
| CLEANING | <p>Clean all tools immediately with water after use. Hardened materials can be removed mechanically only.</p> <p>iKote CM 40X application should be avoided when the ambient temperature is more than 45 °C as this will affect the working time of the coating.</p> <p>Application on external areas should be avoided during extreme weather conditions like sandstorms or rain. iKote CM 40X should not be applied over lightweight concrete or foam concrete.</p> |
| PACKAGING | 20 Lt. Kit/Box (Mixed volume) (Part A 13 kg Powder: Part B 13 Lt. Polymer). |
| STORAGE | <p>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.</p> <p>The shelf life is up to 12 months when stored as per recommendations and in unopened conditions.</p> |
| 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. Refer to safety data sheet for more details. |