

CIKOproof 2K-25

Flexible Cementitious waterproof Slurry.

Description

CIKOproof 2K-25, acrylic modified cement based waterproof coating recommended for horizontal and vertical applications on concrete, mortar and clay / cement block masonry surface.

CIKOproof 2K-25 is a two component waterproofing system consisting of Part-A which is a blend of select cement type, graded fine aggregates, dispersing agent etc. and Part-B which is an aqueous dispersion of adhesion enhancing polymer in the form of liquid component. CIKOproof 2K-25 penetrates into the pores of the substrate and seals it to provide a flexible and elastomeric waterproof membrane upon curing.

Properties

- Two components system.
- Easy to mix and use.
- Exhibits a good water vapour transmission- Breathable substrate.
- Non-flammable and Nontoxic.
- Negligible volatile organic compounds
- Flexible and elastomeric waterproof membrane.
- Excellent bond strength.
- Crack bridging ability.
- Resistance to fungal growth.
- Capable to withstand positive and negative hypostatic pressure.
- Resistant to roots penetration

Application area

CIKOproof 2K-25 is a high quality cementitious waterproof membrane coating that can be used for interior or exterior applications.

- Masonry wall, concrete and plaster surface.
- Damp proofing in sub and super structures.
- Basements and pits.
- Wet areas waterproofing.

- Roof and terraces waterproofing under tiles or insulation systems.
- Waterproofing of Planter Boxes.

Physical Properties

Form	Two component system Part-A : Powder Part-B : Liquid
Colour	Grey or white
Pot life @ 25 ⁰ C	45-60 minutes
Mixed Density	2.0 ± 0.05 g/cm ³
Tensile Strength ASTM D412 @ 14 days	≥5 N/mm ²
Elongation ASTM D412 @ 14 days	≥15 %
Compressive Strength ASTM C109	≥30 N/mm ² @ 3 days ≥35 N/mm ² @ 28 days
Flexural Strength BS EN196-1	≥3.5 N/mm ² @ 3 days ≥5 N/mm ² @ 28 days
Linear Coefficient of thermal expansion ASTM C531	Approx. 9.65*10 ⁻⁶ /°C
Pull off bond Strength ASTM D7234 @ 14 days	≥1 Mpa
VOC (EPA 24)	< 10 g/L
Water Vapour Transmission ASTM E96 (2mm DFT)	Approx. 32.6 g/m ² .24h
Water penetration BS EN 12390-8(5 bar; 2 mm DFT)	Nil

Coverage

25kg kit of CIKOproof 2K-25 yield to 11.5-12 L and provide coverage 11.5 to 12 m² @1mm Thickness.

Note: Coverage rate may vary depending on substrate condition and type.

Required total dry film thickness applied in two coats ranges from minimum 1.5 mm up to 3mm depending on intended to use location and service life. Consult CIKO technical service department for further support.

Application instructions

Surface preparation

The concrete or cement substrate shall be free from all loosely adhered particles, efflorescence, dust, oil, grease or any other contamination. In case of oil spillage, proper treatment should be carried out on the surface. After ensuring sound substrate, dampen the surface with water just before the application of CIKOprouf 2K-25. Wherever cracks, voids, honeycombs, etc. are presents, the surface must be repaired using CIKO wide variety of repairs materials. (Refer to CIKO technical team for more details).

Mixing

Liquid component of CIKOprouf 2K-25 [Part-B] should be mixed with powder component [Part-A] using heavy duty slow speed drill-paddle assembly. The properly mixed material should be lump free. It is recommended to pour the powder part partially while mixing to achieve proper consistency free of lump. It is applicable to use 80 to 90 % of the liquid quantity [Part-B] used in mixing to achieve a trowable consistency if required.

Application method

The mixed material should apply on the cleaned and damped surface using brush, or steel trowel at the rate of 1.5 kg up to 3 kg per coat. Do not apply the material on standing water. Sponge can be used to get rid of standing water or re damp the dried areas. Care should be taken to coat the surface without leaving any gap. The second coat must be applied in cross direction to the first coat at the same rate of consumption and depending on the required total DFT. Time gap in over-coating depends on ambient temperature, which ranges between 2 and 6 hours. The first coat must be dry and not affected by feet traffic. Protect the applied area from direct sun light, wind rain and frost.

At right angles, static repaired cracks, patched areas and wall to floor transitions, pipe penetrations and floor drains; it is recommended to embed a fibre mesh sandwich between the coatings. To do so, immediately after the application of the first coat, embed the fibre mesh by exerting force using a steel trowel, brush or any suitable tool. The required total dry film thickness of CIKOprouf 2k-25 depends on the application area; intended to use location and required service life.

Packaging

CIKOprouf 2K-25 is available in 25kg kit consisting of [Part-A] 20kg powder and [Part-B] 5 kg liquid.

Shelf Life

CIKOprouf 2K-25 has a shelf life of 12 months in un-opened bags and if stored in accordance with CIKO instructions.

Storage

CIKOprouf 2K-25 should be stored under enclosed shaded area at an ambient temperature between 5 °C to 40 °C.

Precautions

- Do not apply over standing water.
- Do not proceed with application if the ambient temperature is below 8 °C and above 40 °C.
- Do not re-temper the mixed material after initial mixing.
- Re-Mixing every 15-20 minutes within the 60 minutes pot life is advisable.
- It is recommended to use CIKObond PVA as a sealer on lightweight blocks, gypsum and dry substrates having high porosity.
- Allow to cure for at least 3 days prior to service.

Health & safety

Use standard dust mask to avoid inhalation of dust. Powder when wet or moist can cause burns to skin and eyes which should be protected during use. If comes in contact with eyes, flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

Technical Support

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

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A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries

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Note: The information presented herein based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control

