

# **CIKOproof 2K**

# Flexible cementitious waterproof coating

# **Description**

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

CIKOproof 2K 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 penetrates into the pores of the substrate and seals it to provide a flexible and elastomeric waterproof membrane upon curing.

# **Advantages & Benefits**

- Two component system.
- Easy to mix and use.
- Allow the substrate to breath
- 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

#### **Application area**

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

- Masonry wall, concrete and plaster surface.
- Water retaining structure such as tank retaining wall and water barriers.
- · Basements and pits.
- Wet area waterproofing.
- Roof and terrace waterproofing.

# **Physical Properties**

Form	Two component system Part-A : Powder Part-B : Liquid
Colour	Grey or white
Pot life @ 25° C	45 – 60 minutes
Mixed Density	1.75-1.9 Kg/L
Tensile Strength ASTM D412 @ 7 days	Approx. 1.0 N/mm <sup>2</sup>
VOC (EPA 24)	<5g/l
Pull off Strength ASTM D 4541-9 @ 7 & 28 days	) ≥ 1.5 N/mm <sup>2</sup>
Pull off Strength BS EN 1542(Freeze-Thaw cycles) @ 28 days	
Puncture Resistance ASTM E154 @ 7 days	<sup>9</sup> 45 N
Abrasion resistance ASTM D4060-14 (CS-10)	1 <0.12 mg
Water penetration BS EN 12390 part 8 (Hydrostatic pressure: 5 bars)	Nil
Reduction in Chloride ion Penetration	>90%
Water Vapor Transmission	Approx. 0.02 g/m2/hr
Crack bridging ability (Reinforced)	≥2 mm

#### Coverage

30kg Kit of CIKOproof 2K yields to 16-17 litres and provide coverage of 16-17  $\text{m}^2$  at 1 mm thickness.

25kg Kit of CIKOproof 2K yields 13 to 14 to litres and provide coverage of 13 to 14 m<sup>2</sup> at 1 mm thickness.

20kg Kit of CIKOproof 2K yields to 10.5 to 11.5 litres and provide coverage of 10.5-11.5 m<sup>2</sup> at 1 mm 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 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 CIKOproof 2K.

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. Note: at right angles, pipe penetrations, drainages, it is recommended to embed a fibre mesh sandwich between the coatings.

#### Mixing

Liquid component of CIKOproof 2K [Part-B] should be mixed with powder component [Part-A] using heavy duty high speed drill-paddle assembly. The properly mixed material should be lump free and paint consistency.

# **Application method**

The mixed material should apply on the cleaned and damped surface using brush, roller or steel trowel at the rate of 1.7 kg to 1.9 kg per coat. Care should be taken to coat the surface without leaving any gap. CIKOproof 2K can be applied by spray using suitable spray equipment. The second coat must be applied in cross direction to the first coat.

### **Recommendations & 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 apply CIKObond PVA as a sealer on lightweight blocks,

- gypsum and dry substrates having high porosity.
- Allow the material to cure for at least 4 days prior to conduct the water leakage test for duration of 24 hours up to 48 hours.

# **Packaging**

CIKOproof 2K is available in below listed kits consisting of Part A powder and Part B Liquid:

- 20 kg Kit
- 25 kg Kit
- 30 kg Kit

#### **Shelf Life**

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

#### Storage

CIKOproof 2K should be stored under enclosed shaded area at temperature between 5°C and 40°C.

# **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.

#### **More from CIKO Middle East**

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

TDS/WP21 Rev.:7 Issue:C

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

