

# ARMOFLOOR CM1

## Epoxy/Cement anti-corrosive coating and bonding agent Slurry.

### Description:

ARMOFLOOR CM1 is a water based three-part epoxy cement anti-corrosive coating and bonding agent. It is suitable for use in tropical and hot climatic conditions and can be applied at high humidity surfaces.

### Uses:

ARMOFLOOR CM1 is designed for:

- Anti-corrosive coating for steel rebars to protect from rusting.
- Bonding agent between new and old concrete
- Can be used extended with silica sand as a patching and repairing mortar.
- As an insulation layer onto the support to improve the adhesion of floor coating resin on humid substrates.

### Advantages:

- High bonding on damp substrate.
- Water based, very low VOC.
- Ease of application.
- Excellent chemical resistance
- Acts as an effective barrier against penetration of water and chlorides
- It adheres perfectly to both compact and porous surfaces including stoneware, concrete, plaster, asbestos cement, etc.
- Accept all types of epoxy, polyurethane or acrylic coating systems.

### Instructions for Use:

#### Surface Preparation:

All surfaces should be sound, clean, and free from loose material, efflorescence, laitance, curing compounds, dirt, oil and grease. Steel reinforcement has to be cleaned mechanically by sandblasting or mechanical brush to reach a clean state.

Perform repairs to cracks, levelling of floor; voids filling by means of a mixture filled with silica sand. For batching purpose, mix graded silica sand to the mixture at a rate of 1:2 by weight and apply the mixture as a batching mortar

Apply HYDROPLUG-cementitious water plug mortar to stop water seepage if exists in the floor prior to the application of ARMOFLOOR CM1. For porous surfaces or old substrates, it is recommended to apply two coats of ARMOFLOOR CM1. Pre-wet substrate to a saturated surface dry condition prior to application, but avoid standing water

#### Mixing:

ARMOFLOOR CM1 is composed of three components. At the time of application, mix the contents of component A (Base) with a low-speed mixer for two minutes to homogenize the contents of the container. Add the contents of part B (Hardener) to Part A container and mix thoroughly the material with low speed mixer (200-300 RPM) then add Part C (Filler) while mixing continuously for an interval of 2-3 minutes confirming a homogenous, color consistent, lump free, mixture is reached. After mixing, allow the product to rest for 3 minutes to release entrapped air.

#### Application:

When used as an anti-corrosion steel bar coating, apply a coating approx. 0.5 - 1 mm thick to the cleaned reinforcement steel, using a stiff paint brush, roller or spray gun. Apply a second coat of similar thickness after the first coat dries. Allow the second coat to dry completely before applying mortar repair.

When used as a bonding agent for repair mortar or concrete, pre-wet the prepared substrate until the concrete is fully saturated with water. Apply a bonding coat not less than 0.5 mm thick, using a stiff paint brush, roller or suitable spray gun. Apply the freshly mixed patching mortar or concrete wet on wet over the bonding slurry.

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Epoxy and Polyurethane floor coating or self levelling can be applied direct on top of ARMOFLOOR CM1 after it is completely dry. It is possible to apply the coating, parquet, any other finishing after 24 hours of applying ARMOFLOOR CM1.

Do not apply ARMOFLOOR CM1 on substrate exposed directly to the sun during peak temperature period of the day or when the ambient temperature is higher than 40°C. In this case, it is strongly recommended to cover working area during application.

## Standards:

- ASTM D4541-02, ASTM C579, ASTM C580

TECHNICAL PROPERTIES	
Color (MIX)	Grey
Density	1.95 Kg. / Lt.
Pot-life time at 25°C	>45 minutes
Bond Strength (ASTM D4541-02)	>2 N/mm <sup>2</sup> (failure within concrete)
Compressive Strength (ASTM C579)	40 N/mm <sup>2</sup>
Flexural Strength (ASTM C580)	11 N/mm <sup>2</sup>
Water Absorption	NIL
Service Temperature	from +5°C to +85°C

\*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

## Coverage:

ARMOFLOOR CM1 achieves coverage of 20.0 square meters per set @ 0.5 mm thickness.

\*Coverage rate is an approximate value, and subject to actual site conditions.

## Packaging:

ARMOFLOOR CM1 is available 20 kg set of three packs.

## Storage:

Store in original packing in dry conditions away from direct sunlight and humidity levels.

## Shelf Life:

ARMOFLOOR CM1 can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

## Cleaning:

Mixing tools should be cleaned with water after use. Hardened materials can only be removed mechanically.

## Remarks:

- Should not be applied on to asphalts, PVC tiles and weak concrete.
- Curing Standard concrete curing practices.
- Do not apply when temperature is less than 5°C or more than 40°C.
- Do not add water to the mix more than what is recommended.

## Health and Safety:

Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

## FIRST AID:

- Eyes: In the event of accidental splashes, flush with warm water and seek medical advice.
- Skin: Wash skin thoroughly with soap and water
- Inhalation: Remove to fresh air, keep patient rested
- Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to ARMOFLOOR CM1 Material Safety Data Sheet.

MATEX Rev.03-0422

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