

### MONNELI EPOFLOOR ECT

*Heavy Duty, Anti-Skid Surface Dressing*

#### Product Description

A three component, solvent-free liquid protective coating system based on coal tar modified epoxy resins, amine curing agents and chemically inert, graded silica fillers which when mixed forms a fluid, homogeneous slurry.

#### Uses

EPOFLOOR ECT provides a lightweight yet exudes an extremely heavy-duty anti-skid surface to concrete.

EPOFLOOR ECT could be used as durable protective coating on areas like:

- Ferry port link spans and ship ramps
- Rail platforms and footbridges
- Bridge deck and roads
- Helipads and offshore walkways
- Industrial flooring
- Car park ramps

#### Advantages

- Excellent resistance to wide range of chemicals
- Superior resistance to abrasion and impact
- Hard wearing, lightweight with very good anti-corrosive properties
- Excellent adhesion to concrete substrates
- Flexible with superior skid resistance even when wet
- Spark resistant
- Impervious seamless finish

#### Instructions for Use

##### Surface Preparation

The surface of the concrete to be repaired shall be sound, clean and uncontaminated.

This preparation shall be such as to leave a sound exposed concrete surface free from dust, loose particles and any deleterious matter. If the concrete surface is defective or has laitance, it must be cut back to a sound base. Excess laitance deposits are best removed by light mechanical scrubbing, grinding or grit/captive blasting followed by vacuum cleaning to remove dust debris.

Any blowholes, chipping or similar surface imperfections shall be repaired using EPOFINISH C, a solvent free epoxy resin repair mortar. Expansion joints shall be repaired using EPOMORT HS a high strength solvent free epoxy mortar.

New concrete or cementitious surfaces should be allowed to cure and have moisture content not exceeding 5%. Old or existing floor should be refurbished mechanically to ensure clear sound substrate.

##### Priming

The highly porous concrete must be treated with PRIMER POXY FF, a Solvent-free high performance Epoxy primer.

In that case the primer should be applied by brush or roller on to the cleaned surface area (particularly hidden surfaces) at a rate of 5-6 m<sup>2</sup>/Liter.

The primer should be left to achieve a tack-free condition before applying the top coat. A second coat of primer may be required if the substrate is excessively porous.

##### Mixing

EPOFLOOR ECT is composed of three components that must be mixed at the moment of use and applied at the specified pot life. Stir the base (Component A) and pour onto the empty 20 Liter pail. Add the curing agent (Component B) and mix both liquids thoroughly. Sand (Component C) should then be added to the mixture while stirring continuously.

## **Application**

Pour the mixture onto the prepared substrate at a consumption rate of 0.33 m<sup>2</sup>/Liter at a thickness of 3.0 mm. spread the product evenly using steel trowel or squeegee. Divide the deck into approximately 2 meter wide strips masked with 2 inches tape or timber battens. This enables to achieve clear edge whenever masking tape or timber battens are removed while the coating is still soft. The next strip could be applied alongside.

The use of wet film gauge is recommended to make sure the correct thickness and material usage. The surface dressing aggregate, QUARTZO must be applied immediately after laying EPOFLOOR ECT. The slurry coating is blinded to saturation by allowing QUARTZO aggregate to fall vertically until no slurry is visible.

Masking tape must be removed before the coating has cured.

Allow EPOFLOOR ECT to cure for the period of 24 hours at +25°C before opening to foot traffic.

## **Cleaning**

Tools and equipment should be cleaned with SOLVENTE 10 immediately after use.

Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations.

## **Recommendations**

- Do not throw aggregate across the slurry as this may cause ridges.
- EPOFLOOR ECT should not be applied when the relative humidity is greater than 80% or the ambient temperature is expected to fall below +5°C.
- EPOFLOOR ECT slurry should not be applied on ramps with a slope greater than 5%.

## **Technical Data**

| Properties                            | Results   |
|---------------------------------------|---|
| Color                                 | Black   |
| Density at 25°C                       | 1.8 kg/L  |
| Pot-life time at 25°C                 | 60 minutes  |
| VOC                                   | 18 g/L  |
| Compressive strength (ASTM C 579)     | >50 N/mm <sup>2</sup>                               |
| Flexural strength (ASTM C 580)        | >4 N/mm <sup>2</sup>                                |
| Bond strength (ASTM D 4541)           | >3 N/mm <sup>2</sup>                                |
| Water absorption (BS EN 12390)        | <0.5%   |
| Cure time (Foot traffic)              | 24 hours  |
| Cure time (Vehicular traffic) at 25°C | 48 hours  |
| Chemical resistance                   | Resistant to petrol, oil, acids, alkalis, sea water |
| Service temperature                   | +5°C - +80°C  |

All values are subject to 5-10 % tolerance

## **Chemical Resistance**

Fully cured ECT samples have been tested in a wide range of aggressive chemicals commonly found in industrial environments. Tests were performed in accordance to ASTM D543 standards over 7 days at +25°C.

## **Consumption**

|                |   |
|----------------|---|
| PRIMER POXY FF | 5-6m <sup>2</sup> /Liter to the porosity of the support |
| EPOFLOOR ECT   | 0.33 m <sup>2</sup> /Liter at 3.0 mm thick              |

## Quartzo

| Aggregate  | Gross (kg/m <sup>2</sup> ) | Net (kg/m <sup>2</sup> ) |
|------------|----------------------------|--------------------------|
| 20 mesh    | 5.5                        | 3.7                      |
| 1.0 to 3.0 | 7.0                        | 5.2                      |

## Packaging

|                |   |                  |
|----------------|---|------------------|
| EPOFLOOR ECT   | : | 20 liter kit     |
| PRIMER POXY FF | : | 4 & 15 liter kit |
| QUARTZO        | : | 25 kg bag        |

## Storage

Keep in tightly closed containers and in sheltered and dry place with a temperature between 5°C and 35°C. Shelf life is 12 months from date of production if stored properly.

## Health & Safety

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

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**EPOFLOOR ECT**  
Technical Data Sheet  
Edition: January 2020  
Revision: 02

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