

MonniTop ECT

Heavy Duty, Anti-Skid Surface Dressing

Product Description

MonniTop ECT is 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

MonniTop ECT provides a lightweight yet exudes an extremely heavy-duty anti-skid surface to various types of substrates such as concrete and steel.

MonniTop 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 anticorrosive properties
- ▶ Excellent adhesion to steel and concrete substrates
- ▶ Flexible with superior skid resistance even when wet
- ▶ Spark resistant
- ▶ Impervious seamless finish

Usage Instructions

Surface Preparation

Concrete Substrates

The surface of the concrete to be prepared 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 MonniFinish EC, a solvent free epoxy resin repair mortar. Expansion joints shall be repaired using MonniMort 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.

Metal Substrates

All metal substrates should be blast cleaned to achieve a minimum of Sa2 ½ standard of cleanliness, an angular amplitude of at least 75 microns for pedestrian traffic and 100 microns for vehicular traffic. The protective coating must be applied over the blasted steel surface immediately. If the standard of the surface falls below Sa2 ½ then the steel must be reblasted.

Priming

Highly porous concrete must be treated with MonniPrime EF, 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 m²/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.

In case of metal substrates, the surface shall be treated with one coat of PRIMER POXY before the oxidation process occurs.

Mixing

MonniTop 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 m²/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, **ALUGRIT** must be applied immediately after laying MonniTop ECT. The slurry coating is blinded to saturation by allowing **ALUGRIT** aggregate to fall vertically until no slurry is visible.

Masking tape must be removed before the coating has cured.

Allow MonniTop 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 Monneli Solvent 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
- ▶ MonniTop ECT should not be applied when the relative humidity is greater than 80% or the ambient temperature is expected to fall below +5°C
- ▶ MonniTop ECT slurry should not be applied on ramps with a slope greater than 5%

Technical Data

Category	Typical Values
Appearance	Liquid Coating
Color	Refer Monneli Color Chart
Viscosity	1500 MPa's at 25°C
Density	1.42 kg /L at 25°C
VOC	20.0 g/L
Solid Content	100 %
Pot-life time	60 minutes at 25°C
Bond strength (ASTM D 4541)	2.0 N/mm ² Concrete Failure
Compressive strength (ASTM C 579)	72 N / mm ²
Flexural strength (ASTM C 580)	36 N / mm ²
Tensile strength (ASTM C 307)	20 N / mm ²
Abrasion Resistance (ASTM D 4060)	68 mg, 1000 cycles
Water Absorption (BS EN 12390)	0.05%
Open to vehicular traffic	48 hours at 25°C
Service Temperature	-5°C to +80°C
Open to foot traffic	24 hours at 25°C

All values are subject to 5-10 % tolerance

Packaging & Coverage

MonniTop E250 is supplied 4- and 15-Liter Kits
 Coverage: 5-6 m² / liter according to the porosity of support

Chemical resistance

Fully cured MonniTop 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.

Material	Resistance
Hydrochloric Acid (20%)	Resistant
Sulphuric Acid (20%)	Resistant
Sodium Hydroxide (50%)	Resistant
Ammonia (10%)	Resistant
Petrol	Resistant
Oil	Resistant
Kerosene	Resistant
Butanol	Resistant
Skydrol	Resistant
Industrial Methylated spirits	Resistant
Saturated Sugar Solution	Resistant
Urea (saturated)	Resistant
Bleach (5%)	Resistant

Shelf Life & 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.

Legal disclaimer

Monneli endeavors to ensure that any advice, recommendations, information it may give, is accurate and correct. It cannot accept any liability either directly or indirectly arising from the use of its products, because it has no direct or continuous control over where or how its products are applied, whether or not in accordance with any advice, specification, recommendation or information given by us. Monneli has the right to change any of the specifications mentioned in the Technical data sheets upon its discretion without prior notification. Hard copies of TDSs are printed once or twice a year, while our technical data sheets are continuously being updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.