



CONSOL ECOCRETE MF

A Self-Smoothing Polyurethane Topping

DESCRIPTION

A flow applied, self-smoothing 3 component polyurethane topping for thin layer application and repairs in matt finish. As a new topping over old or wore out polyurethane floors.

RECOMMENDED FOR

Hygienic floor for kitchen, wet areas, beverage processing and packaging plants. Chemical resistance floor for chemical process, contaminant area and wash down rooms. Thermal shock resistance floor for freezers, refrigerators, and oven installed spaces. Mechanically durable floor for loading docks and warehouse.

BENEFITS

CONSOL ECOCRETE MF bring some benefits such are:

- Excellent chemical resistance
- Resist bacterial growth, fungi, mould, and mildew
- Easily cleaned and maintained smooth seamless surface
- High-density systems with maximum wear, abrasion and impact resistant
- User-friendly, no-solvent odour during application
- One of the fastest "turn around time" polymer modified product which reduces cost
- High-temperature resistant up to 80°C at 6 mm thickness
- Seamless without joints for optimum sanitation and hygienic finish.

TECHNICAL DATA

Colour

Standard **CONSOL ECOCRETE MF** color floor system is functionally formulated to with stand severe chemical, mechanical, and thermal damages. As a direct result light yellowing of the surface exposed to UV may occur specially in light colors (e.g. light grey) without affecting its functionality.

Finishing

Seamless matt, smooth finish

Chemical Base

Water based PU with selected aggregates

Density

~ 1.9 kg/mm/m²

Layer Thickness

2.5 mm minimum / 6 mm maximum

Compressive Strength

~ 40 N/mm² after 28 days

Flexural Strength

~ 16 N/mm² after 28 days

Bond Strength

~ 1.5 N/mm² (failure in concrete)

Shore D Hardness

> 80

Thermal Resistance

The product is not designed to with stand thermal shock

Service Temperature

The product is suitable for use when exposed to continuous temperature -5°C until +65°C and +80°C

Chemical Resistance

CONSOL ECOCRETE MF will resist spillages of:

- Dilute and concentrated acids: hydrochloric, nitric, phosphoric and sulphuric
- Dilute and concentrated alkalis, including sodium hydroxide to 50% concentration
- Most dilute and concentrated organic acids
- Fats, oil and sugar
- Mineral oils, kerosene, gasoline, and brake fluids
- Most organic solvents.

Resistance is maintained in many cases to 60°C, which should be regarded as the maximum service temperature.

Mixing Ratio

3 : 3 :14 by weight of part A & part B & C

Pot Life

18 min. at 30° C
25 min. at 15° C
35 min. at 8° C

Packaging

20 kg



Storage & Shelf Life

6 months from the date of production, if stored properly in original, unopened and undamaged sealed container in dry condition between 10-32^o C. Protect from direct sunlight.

Estimate Coverage

1.9 kg/m² for 1 mm thickness

INSTRUCTION FOR USE

System 2.5 – 4 mm (with Primer)

Primer : Consol Primer Hybrid Epoxy ±0.15 kg/m²

Top Coat : Consol Ecocrete MF 4.5 – 7.6 kg/m²

System 3 – 4 mm (with Scratch Coat)

Scratch Coat : Consol Ecocrete MF 1.2 – 2 kg/m²

Top Coat : Consol Ecocrete MF 4.5 – 5.6 kg/m²

Surface Requirement and Preparation

Substrate will normally be concrete or polymer modified screeds with minimum compressive strength 25 N/mm² and pull-off strength 1.5 N/mm². If substrate moisture exceeds 6%, use CONSOL PRIMER HYBRID EPOXY as a moisture barrier. Preferably vacuum shot blast the surface with non-impact method. Concrete surface planner, grit blasting and surface grinding or other mechanical means until a profile is evident can be satisfactory. Substrate must be clean, free from dust, oil, water, paint residues, loose constituent or any contaminants. Prepare grooves, 5mm wide x 5mm deep, at all edges, by joints columns, doorways, and drains for anchoring purpose.

Mixing

Add part A, to a clean mixing drum. Add part B to the drum and mix for 10 second until uniform using helical spinner. Add the pigmented part C powder and further mix for 1 minute to achieve a fully homogenous consistent mortar. Scrap out residue of previous mix from the sides of the drum and discard before the next pack, stir mix well both contents with high speed mixer.

Application

Apply **CONSOL ECOCRETE MF** within its pot life. Spread the composite matrix to thickness 3-6 mm and consolidate with pin rake or notched squeegee set to the correct depth. Immediately release air by spike roller.

Temperature

CONSOL ECOCRETE MF should not be applied on material or floor temperatures below 10^o C. Temperatures should not fall below 5^o C in the 24 hours after application. Service temperature is depending on thickness but may be up to 80^o C on intermittent splash. Not for immersion.

Substrate Movement

All moving joints must be carried through the **CONSOL ECOCRETE MF** and properly sealed. Construction joint sand cracks maybe covered but if substrate movement occurs, the **CONSOL ECOCRETE MF** will reflect the crack.

Curing

	25 ^o C	35 ^o C
Foot traffic. hr	10	8
Light traffic. hr	24	18
Full traffic. hr	48	24
Full Cure. days	7	5

CLEANING

Clean all tools with washing thinner or other solvents prior to material taking a hardest. Small unreacted part B in container to be decontaminated with a 5% solution of washing soda (sodium carbonate) prior to disposal. After material has set it is virtually impossible to get off and must wear off over time.

HEALTH & SAFETY

Some of the component of this product may be hazardous during mixing and application. Always use with suitable protective gears. Close container tightly after use. Keep out of reach of children.

For further information, refer to the product Material Safety Data Sheet, available upon request.