



CONSOL ECOCRETE HF (6-9mm)

A heavy duty, slip resistant, polyurethane resin floor screed

DESCRIPTION

CONSOL ECOCRETE HF is a heavy duty, chemical resistance, 4 component polyurethane trowel applied in thickness of 6-9 mm screed.

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 HF bring some benefits such are:

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

TECHNICAL DATA

Colour

Standard **CONSOL ECOCRETE HF** 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

Matt anti-skid

Chemical Base

Polyurethane with selected aggregates

Density

~2.1 kg/mm/m²

Layer Thickness

6 – 9 mm

Compressive Strength

~ 50 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

Service Temperature

From -25°C to 80°C (at 6 mm)

From -40°C to 120°C (at 9 mm)

From -40°C to 130°C (at 12 mm)

Chemical Resistance

CONSOL ECOCRETE HF will resist spillages of:

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

Resistance is maintained in many cases to 130°C, which should be regarded as the maximum service temperature.

Mixing Ratio

Part A : B : C : D = 3 : 3 : 15 : 10 (by weight)

Pot Life

15 min. at 30°C

25 min. at 15°C

35 min. at 8°C

Packaging

31 kg/set

Storage & Shelf Life

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



Estimate Coverage

2.1 kg/m² for 1 mm thickness

INSTRUCTION FOR USE

System 6 mm

Primer : Consol Primer Hybrid Epoxy ± 0.2 kg/m²
 Top Coat : **CONSOL ECOCRETE HF** ± 12.6 kg/m²/6 mm
 or 2.1 kg/m²/1 mm

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, 8 mm wide x 8 mm 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 part D (mixed aggregate) and stir for 2 minutes 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 and mix both content well with high speed mixer of 750 rpm.

Application

Apply **CONSOL ECOCRETE HF** within its pot life. Spread the composite matrix to thickness 6-9 mm and consolidate with steel trowel to the correct depth as desired. Use short nap roller and roll lightly on the surface to bring up the resin.

Temperature

CONSOL ECOCRETE HF should not be applied on material or floor temperatures below 10°C. Temperatures should not fall below 5°C in the 24 hours after application. Service temperature is depending on thickness but may be up to 130°C on intermittent splash. Not for immersion.

Substrate Movement

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

Curing

	25° C	35° C
Foot traffic. (hours)	10	8
Light traffic. (hours)	24	18
Full traffic. (hours)	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.