

REC CRETE C-113

Epoxy moisture vapor barrier for cementitious substrates

PRODUCT

Rec Crete C-113 is a two-component high performance epoxy primer used as a vapor barrier for Weber floor thin leveling, fine smoothing, prior to floor coverings application (vinyl, pvc parquet and carpet), thick leveling compounds. This product is specially designed for substrates having a moisture content up to maximum 5 % CM (measured with Carbide method). Due to its very low VOC content, **Rec Crete C-113** can be used for health care buildings, hospitality, residential apartments, commercial areas and for sensitive indoor areas, such as education and recreation rooms.

SCOPE OF USE

Rec Crete C-113 is a universal system component, mainly used as primer for weber floor smoothing mortars, self-leveling compound and for thick leveling compound.

Rec Crete C-113 range of application is very wide:

- As vapor-barrier under smoothing, thin and thick mortars.
- For priming, strengthening and sealing concrete and screed surfaces.
- For concrete and cement screeds residual moisture content up to max. 5% by weight.
- For filling fine cracks in screed and concrete.
- As bonding layer for screed repair works on screeds and solid-bonded screeds.
- As binder in combination with oven-dried silica sands for thin scratch layers, patching epoxy Resin repair mortars and epoxy resin screed mortars.
- For priming dense concrete substrates and tiles.

ADVANTAGES

- High barrier against moisture.
- Very low volatile organic content (VOC).
- Good penetration into absorbent substrates.
- Very good chemical resistance.
- Suitable for floor heating system as an intermediate coat between the Screed and self-leveling.
- Very good workability.
- High resistance to alkalinity.
- High adhesion strength
- consolidates absorbent mineral substrates

CHARACTERISTICS

Colour	Transparent
Density (g/cm ³) (A/B)	1.1
Dry residue	solid content: 100%
Pot life	3 h @ 23 °C (higher temperatures shorten the pot life)
Consistency of mix	Liquid
Viscosity	part A: 22 s on ford Cup 8-at 23 °C
	part B: 15s on ford cup 4 at 23 °C
	part A+B: 100 sec on ford cup 4 @ 23°C
Maximum permissible humidity to use as moisture barrier	up to 5 % CM and up to 95% Relative humidity
Water vapor transmission rate BS EN ISO 7783	16 g/m ² per day
Reduction in water vapor transmission ASTM E96-05	>96 % @ 250 micron DFT
Resistance to high alkalinity ASTM D1308 KOH, NaOH	No changes have been observed
Application temperature range	10°C to 40°C
Resistance to moisture	Excellent
Adhesion to substrate BS EN ISO 4624: 2003	Failure in the substrate >3 Mpa
Set to light foot traffic	After 24 h depending on the Temperature



REC CRETE C-113

APPLICABLE STANDARDS

ASTM D1308
ASTM E96-05
BS EN ISO 7783
US EPA method 24

INSTRUCTIONS FOR USE

SUBSTRATE PREPARATION

Concrete substrate should be at least 3 months old and structurally stable (Residual moisture up to 5% (using carbide method). Concrete must be crack free. Thus, any crack must be repaired prior to application.

All surfaces should be clean, dry, and free from grease, laitance, oil, dust, paint and any other substance that may prevent or reduce adhesion.

Remove all weak, loose, smooth or broken pieces of concrete, until reaching a sound rough concrete. This can be achieved primarily by shot-blasting otherwise by medium scarifying or grinding.

The prepared surface must have an average "surface tensile adhesion strength" greater than 1 MPa in residential and commercial constructions, in industrial constructions: > 1.5 N/mm². Moreover, it should have CSP (concrete surface profile) of 3-5 for self-leveling product, 6-8 for cement screed products.

Soft strips should be fixed as a separation between the walls/columns and the screed (for thickness above 10mm) before the vapor barrier application.

The substrate must be vacuumed then primed with

Rec Crete C-113.

Note: Reckon does not warranty any defect due to concrete substrate movement.

PRODUCT PREPARATION

Rec Crete C-113 is supplied in 2 pre-mix cans (component A = resin base and component - B= hardener) with the factory-made mixing ratio for use.

First mix the component A with a low-speed electric drill (max. 400 rpm) and empty it totally into the component B. Afterwards mix both components with an electric drill and the pre-said stirrer for approx. 2 minutes, at least until a homogenous mixture of uniform color is achieved.

Care must be taken to ensure that the product is thoroughly mixed also in the corners and the bottom of the mixing container. Apply immediately the material after mixing and Avoid mixing of partial quantities.

PRODUCT APPLICATION

Pour **Rec Crete C-113** on the prepared floor surface and distribute it in a first operation at a rate of 200 to 400g/m² using a rubber squeegee **Rec Crete C-113** consumption depends on the porosity and evenness of the substrate)

avoid the accumulation of the material.

Do not scatter silica sand on top of the first coat. As soon as the first coat can be walked on, apply a second coat at a rate of approx. 100 to 200g/m², then Scatter silica sand (0.3 – 0.8 mm) without delay, on the whole surface up to saturation at a rate of 3 kg/m².

After at least 24 hrs, remove the excess sand by sweeping and vacuuming off the excess then apply the self-leveling products according to the manufacturer recommendations.

CLEANING

Do not allow the epoxy primer to harden on equipment. Clean tools and equipment with solvents such as Xylene.

CONSUMPTION

0.2 to 0.4kg/m² per coat (The consumption may vary depending on the substrate).

STORAGE

24 months after manufacturing date in original and non-open packaging, under cover, in dry condition, away from humidity, protected from extreme temperatures and direct sunlight.

SAFETY PRECAUTIONS

Application should be done in a ventilated area away from any heat source. Wear protective gear for hands and eyes and avoid breathing of vapor. If mixed resin comes into contact with the skin, it should be promptly removed before hardening, followed by thoroughly washing the skin with soap and water. In case of heavy vapor inhalation, place affected person in an open-air area. In case of contact with eyes, wash thoroughly with clean water. If swallowed, do not induce vomiting. In all cases, seek medical attention. In case of fire, use CO2 foam to extinguish. Tightly seal containers when not in use, store them away from heat and carefully dispose empty ones.

DISCLAIMER

While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest one. The company may modify it without prior notice. Technical characteristics are listed for guidance only. For more information, please contact the company's office in your location.

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