DUROGLASS CRETE FM ANTISKID

HIGH-STRENGTH POLYURETHANE-CEMENT-BASED MORTAR FOR SELF-LEVELLING COMPOUNDS FROM 6 TO 9 mm AND MULTILAYER APPLICATIONS

CHARACTERISTICS

HACCP certified product, number I-PE-863-ITA-1-RG-01.
Product for **chemical resistance** 6.1 C.
Rapid curing.
Excellent **chemical resistance** to various **aggressive substances**.
Excellent **mechanical properties.**
Resistant to **thermal shocks.**
Steam cleanable.
Non-slip surface.
Resists the proliferation of microorganisms.
Resistant to temperature peaks of up to **150°C**.
Contributes to earning credits for **LEED certification**.
Meets the requirements of **standard 13813** for synthetic resin-based screeds.

APPLICATION TEMPERATURE

Applicable **from +5°C to +30°C** (substrate) with a temperature difference of > 3°C.

OPERATING TEMPERATURE

Operating temperature **from -45°C to +120°C** in air.

FIELD OF APPLICATION

Self-levelling coating from 6 to 9 mm or **multi-layer** concrete flooring, specifically for:

- **Food** industries and where high resistance to continuous washing is required
- **Dairy** industries
- **Wine** industries
- **Beer** and **spirits** industries
- **Seafood** industries
- **Slaughterhouses** and **meat processing plants**
- **Pharmaceutical** and **chemical** industries, and where high resistance to chemicals and solvents is required
- **Mechanical** and **manufacturing** industries, and where high resistance to loads and continuous traffic from wheeled vehicles is required

The presence of a slight surface roughness makes the final floor surface non-slip.

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PREPARATION OF THE SUBSTRATE

- The surfaces to be treated must be **sound, compact, free from dust and contamination** by foreign substances (dirt, oil, grease, release agents, etc.).

- The **concrete substrate**, following appropriate mechanical preparation, must have a surface tear strength greater than 1.5 MPa, measured using suitable equipment.

- In the case of **ceramic substrates or old resinous coatings**, following appropriate mechanical preparation, the correct adhesion of these to the substrate and the absence of traces of contaminants must be verified.

- Deteriorated **joints**, **holes** and other **irregularities** must be properly levelled and repaired using an epoxy filler such as **STARCEMENT 385**, or an epoxy mortar such as **DUROGLASS P1/2**, suitably reinforced with quartz or **ADDENSANTE NT2**.

It is essential to **roughen** the surface prior to application. The choice of mechanical preparation method (shot-blasting or milling) should be based on the condition of the substrate and the type of coating to be used.
In environments subject to heavy stress and thermal shock, it is advisable to carry out mechanical preparation (milling) that leaves rough surfaces to increase the specific surface area for adhesion.

For **DUROGLASS CRETE FM ANTISKID**, the use of a primer is not essential in the case of dry or slightly damp substrates, provided there is no counter-pressure.

If you wish to apply an epoxy skim coat as a primer on standard concrete substrates, use **DUROGLASS P1/2**, **DUROGLASS P2 PRIMER** or a mixture adequately saturated with 0.3–0.9 mm or 0.7–1.2 mm quartz.

For highly damp substrates or those subject to counter-pressure, use **DUROGLASS FU RAPID**, **DUROGLASS FU BIANCO TIX** or **DUROGLASS FU LEVEL** as a primer.
The final application of the product used must be densely dusted whilst still fresh with quartz sand of a suitable grain size.

Near manhole covers, grates, joints, edges, gates, etc., before applying **DUROGLASS CRETE**, **perimeter 'keyway' cuts** must be made in the paving using a floor cutter with a diamond blade, to a depth of at least 2 cm.

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PRODUCT PREPARATION

Three-component product to be mixed thoroughly before use as follows:

• Add and mix component B into component A
• Add component C whilst stirring and mix until completely homogenised, taking care not to overheat it, then apply

Given the specific nature of the product, it is recommended to stir component A and component B separately before mixing them together.

DILUTION

Do not dilute the product under any circumstances.

The product is available in a neutral converter version, which can be coloured with:
• 0.21 kg of **HYDRAGLASS** colour paste.

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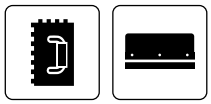

PRODUCT APPLICATION

The product's rapid curing time requires appropriate site organisation.

DUROGLASS CRETE FM can be applied using:
• a notched trowel
• a squeegee

Depending on the desired thickness (from 6 to 9 mm), the **DUROGLASS CRETE FM ANTISKID** product can be applied at an approximate consumption of 12.0 kg/m² to 18.0 kg/m².

The thickness-to-consumption ratio is approximately 2.0 kg/m² per 1.0 mm.

It is essential, following the application of **DUROGLASS CRETE FM ANTISKID**, to pass over the surface with a **bubble-breaking roller**.

Self-levelling system: apply **DUROGLASS CRETE FM ANTISKID** by pouring the freshly mixed product onto the surface to be treated, then spread it using a notched trowel or squeegee and immediately afterwards use the bubble-breaking roller.

Multi-layer system: for the multi-layer application of **DUROGLASS CRETE FM ANTISKID**, proceed by dusting the surface to saturation with quartz of a grain size suitable for the desired degree of roughness (e.g. 0.1–0.5 or 0.3–0.8 or 0.7–1.2 mm).
Once cured, **sand** and **vacuum** the surface to remove any excess, then apply by roller, one or two applications, at 0.3–0.4 kg/m² (depending on the colour's opacity) of DUROGLASS CRETE TOP.

Extra antiskid finish: to achieve a particularly rough surface, add 1.2 kg of flint (1–3 mm) after thoroughly mixing A+B+C.

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WARNINGS AND PRECAUTIONS

- Do not apply **DUROGLASS CRETE FM ANTISKID** to substrates with a surface film of water or to concrete castings less than 10 days old.
- Do not apply **DUROGLASS CRETE FM ANTISKID** to dusty or crumbly substrates, or substrates contaminated with oils, greases or general dirt.
- Do not mix partial quantities of the components to avoid errors in the mixing ratios, which would result in the product not curing correctly.
- Do not expose the mixed product to sources of heat.
- **DUROGLASS CRETE FM ANTISKID** coatings exposed to sunlight undergo noticeable colour changes; this phenomenon does not in any way affect the performance of the coating.
- The colour of the coating may also change following contact with aggressive chemicals; colour change alone is not an indication of chemical attack on the coating.
- Remove, as soon as possible and where practicable, any aggressive chemicals that come into contact with the **DUROGLASS CRETE FM ANTISKID** coating.
- Protect the product from water for at least 24 hours after application.
- We recommend using **SCOTCH BRITE** after application, once hardened, to remove any surface film and dust.
- When applying in operational food premises, shield the areas or remove food and food-contact equipment in the vicinity to prevent product dust and solvents from settling on food or food-contact equipment during mixing and application processes.

SAFETY AND CLEANING

When applying these products, it is recommended to wear goggles, face masks and rubber gloves, as well as all PPE required by current regulations.

Work tools must be cleaned with **DILUENTE 6** after use.

For further information regarding safety precautions, please refer to the safety data sheet.

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TECHNICAL DATA		
Colour		Converter Ivory type RAL 1014 Yellow ochre type RAL 1024 Oxide red type RAL 3009 Blue type RAL 5010 Green type RAL 6010
Specific weight	ISO 2811-1	± 0.05 kg/l
Pot life at 20°C	UNI EN ISO 9514	15 minutes
Mixing ratios		Parts by weight of comp. A (colour): 100 Parts by weight of Comp. A (conv): 92 Parts by weight of Comp. B: 85 Parts by weight of Comp. C: 629
Non-volatile substances	UNI EN ISO 3251	> 99,9 %
Curing at 22°C, 50% R.H.		- Light traffic: 6–8 hours - Overcoating: 24 hours min–72 hours max - Touch dry: 120 min - Load bearing: 24 hours - Load bearing with medium traffic: 48 hours - Fully cured: 7 days
Adhesion to concrete	UNI EN 13892-8	> 3.0 MPa
Slip resistance	UNI EN 13036-4	Class I: wet test for internal surfaces: unit ≥40 Class I (40) Class II: dry test for internal surfaces: unit ≥40 Class II (40)
Abrasion resistance	UNI EN 13892-4	< 30 µm
Modulus of elasticity	EN 13412	1530 MPa
Shore D hardness	EN ISO 868	80
Resistance to severe chemical attack	UNI EN 13529	Sulphuric acid 20%: Class II Sodium hydroxide 20%: Class II Sodium chloride 20%: Class II Lactic acid 10%: Class II
Impact resistance	UNI EN ISO 6272-1	10 N·m
BCA wear resistance	UNI EN 13892-4	< 30 µm
Compressive strength	UNI EN 13892-2	> 50 MPa
Flexural strength	UNI EN 13892-2	> 15 MPa
Thermal shock resistance	UNI EN 13687-5	> 3,5 MPa

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DATI TECNICI		
Liquid water permeability	UNI EN 1062-3	W= 0,01 kg/m^2 x h$^{0.5}$
Storage		The product, in its original sealed packaging, stored in a dry and protected place at temperatures between +5°C and +35°C, has a shelf life of 6 months.