DUROGLASS FU LEVEL

HIGH-STRENGTH SELF-LEVELLING MORTAR BASED ON EPOXY RESINS IN AQUEOUS DISPERSION AND HYDRAULIC BINDERS FOR THE PREPARATION OF THE SUBSTRATE, EVEN DAMP ONES

CE EN 13813 | WATER BASED | FIRE CERTIFIED B_{FL}-S1 | MOISTURE RESISTANT

FEATURES

- High **mechanical properties.**
- **Structural adhesion to concrete, even damp and under negative pressure.**
- Resistant to **thermal shock**.
- Resistant to **antifreeze salts**.
- **Fire reaction A2FL-s1.**
- **Easy to install** and excellent levelling properties.
- **Fast** hardening.
- Thicknesses **from 3 to 7 mm**.
- Contributes to obtaining credits for **LEED** certification.
- Meets the requirements of **13813** for synthetic resin-based screeds.

APPLICATION TEMPERATURE

Applicable from **+5°C to +35°C** on the substrate.

OPERATING TEMPERATURE

Operating temperature **from -35°C to +110°C**.

FIELDS OF USE

- **Self-levelling coating** layer on even damp substrates.
- Specific coating for **parking floors**.
- **Surface restoration** layer for repairing concrete flooring.
- **Levelling underlay** before applying resin coatings.
- **Anchoring layer** for wear-resistant aggregates in multi-layer construction.

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PREPARATION OF THE SUBSTRATE

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

- After adequate mechanical preparation, the **cementitious substrate** must have a surface tear strength greater than 1.5 MPa, measured using suitable instruments.

- In the case of **ceramic substrates or old resinous coatings**, after adequate mechanical preparation, the correct adhesion of the same to the substrate and the absence of traces of pollutants must be verified.

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

In the case of very **dry** and **absorbent surfaces**, first apply one application of **STARCEMENT 5/A** diluted 1:3 with water, using 50-100 g/m² of product. The over-application interval will be maintained between approximately 60 minutes and 6 hours depending on environmental conditions.

It is essential to **roughen** the surface before laying. The choice of mechanical preparation method (sanding, shot peening or milling) depends on the conditions of the substrate and the type of coating to be used.

PREPARAZIONE DEL PRODOTTO

This is a **three-component** product that must be mixed thoroughly before use with a low speed helicoidal agitator, following these steps:

• Add and mix component B with component A.
• Add component C while stirring to avoid lumps and mix until completely homogenised.

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APPLICAZIONE DEL PRODOTTO

DUROGLASS FU LEVEL can be applied to:
- Float, carefully going over with a spiked roller

The applicable thickness is from 3 to 7 mm.

If you want to obtain greater thicknesses in localised areas (from 7 mm to 30 mm) add quartz 2-3 mm, increasing the quantity proportionally to the thickness up to a limit ratio of 1:0.5 between the part by weight of product and quartz.

The indicative consumption of **DUROGLASS FU LEVEL** is 2.1 kg/m2/mm.

OVER-APPLICATION

DUROGLASS FU LEVEL should preferably be covered with a resin layer, observing minimum over-application intervals according to the products used and the hygrometric conditions of the substrate, as well as the ambient temperature and humidity.

For **DUROGLASS P**, and water-based epoxies, the minimum over-application interval under normal conditions should be at least 24 hours, while under conditions with temperatures below 15°C and substrate moisture, it should be increased to at least 48 hours.

For all other epoxy or polyurethane resin-based cycles, the minimum interval under normal conditions should be at least 48 hours, while for temperatures below 15°C and substrate humidity it should be increased to at least 96 hours.

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WARNINGS AND PRECAUTIONS

- When applied externally during the first hardening phase of the product, the temperature must not undergo sudden and wide changes.
- **DUROGLASS FU LEVEL** should be applied in straight lines, preferably exactly across the expansion joints in the concrete floor. The adjacent hardened surface should be taped to avoid unsightly overlaps. The lines of the extension should be cut and sealed with **STARMASTIC P 95**.

SAFETY AND CLEANING

When applying these products, we recommend wearing protective glasses, masks, rubber gloves and all PPE required by current regulations.

After use, tools must be thoroughly cleaned with **warm water**.

For more information regarding precautions for use, please refer to the safety data sheet.

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TECHNICAL DATA		
Colour		Grey
Consistency		Slip mortar
Specific weight	UNI EN ISO 2811-1	2,10 ± 0,05 Kg/l
Pot life at 22°C	UNI EN ISO 9514	90 ± 13 minutes
Theoretical consumption		2,1 Kg/m²/mm
Hardening at 22°C, 50% R.H.		- dry to the touch: 6-7 hours - can be walked on with care: 16 hours - can be trafficked with care: 24 hours - fully cured: 28 days - over-application: min. 24 hours
Compression strength	EN 13892-2	24 hours 30 ± 3 MPa 3 days 40 ± 3 MPa 28 days 60 ± 3 MPa
Bending strength	EN 13892-2	24 hours 5 ± 1 MPa 3 days 7 ± 1 MPa 28 days 15 ± 1 MPa
Adhesive strength	EN 13892-8	> 3,0 MPa
Elastic modulus	UNI 9556	25000 ± 2000 MPa
Adhesion to damp concrete	EN 13578	> 3.0 MPa (no colour change, no swelling, no cracking or flaking)
Resistance to thermal shock		> 2.5 MPa (no colour change, no swelling, no cracking or flaking)
Impact resistance	EN 6272-1	20Nm
Wear resistance	EN 13892-3	0µm
Water vapour transmission	EN 12086	µ 14
Reaction to fire	UNI EN 13501-1	A2fl-s1
Adhesion to damp concrete	EN 13578	> 3.0 MPa (no change in colour, no swelling, no cracking or flaking)
Resistance to hydrostatic pressure	UNI 8298 p.8	500 KPa no water passage
Storage		The product can be stored for 12 months in its original sealed packaging, in a dry and protected place at a temperature between +5°C and +35°C. Keep away from frost.