

DUROGLASS PW

**BREATHABLE SELF-LEVELLING
WATER-BASED EPOXY COATING FOR CONCRETE SURFACES
INCLUDING GREEN**



CHARACTERISTICS

Ecological product that does not emit irritating odours or vapours.

Breathable.

Matt finish.

Good **mechanical** and **wear** resistance.

Good **resistance** to diluted **acid** and **alkaline solutions**.

Suitable for food environments.

Contributes to obtaining credits for **LEED** certification.

Meets the requirements of the **13813** standard for synthetic resin-based screeds.

APPLICATION TEMPERATURE

Applicable **from +8°C to +35°C** on the substrate with relative air humidity < 70%.

OPERATING TEMPERATURE

Operating temperature from **-20°C to +90°C**.

FIELD OF APPLICATION

Self-levelling or multilayer coating of concrete floors, specific for:

- Garages, lots, underground car **parks**.
- **Food** industries.
- **Chemical** and **pharmaceutical** industries.
- **Mechanical** industries.
- **Labs**.
- Mechanized **warehouses**.
- Shopping centres.
- Showrooms and apartments.
- Floors without a vapour barrier and in the presence of humidity.

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LAYING SURFACE PREPARATION

- The surfaces to be treated must be **sound, compact, free from dust and pollution** from foreign substances (dirt, oil, grease, release agents, etc.).
- The cement substrate, after adequate mechanical preparation, must have a **surface resistance** to top tearing greater than **1.5 MPA**, measured using suitable instruments.
- In the case of **ceramic substrates** or **old resinous coatings**, after adequate mechanical preparation, their correct adhesion to the substrate and the absence of traces of pollutants must be checked.
- Damaged **joints, holes** and other **irregularities** must be adequately levelled and repaired with **STARCEMENT 385** type epoxy grout, or **DUROGLASS P1/2** type epoxy mortar suitably loaded with quartz or **ADDENSANTE NT2**.

Roughen the surface before laying. The choice of the mechanical preparation method (sandblasting, smoothing and shot peening or milling) is to be chosen on the basis of the conditions of the substrate and the type of coating to be used.

On the **prepared substrate**, use **STARCEMENT 5/A** diluted 1:1 with water or **DUROGLASS PW** or **DUROGLASS PW TOP** as primer.

All preparations require adequate dedusting by means of aspiration. In the case of sanding and smoothing, washing with a washer-dryer is strongly recommended to eliminate residual dust and/or thin filler.

PRODUCT PREPARATION

Two-component product to be mixed thoroughly before use with a low-speed helical mechanical stirrer, operating as follows:

- Add and mix component B with component A and mix until completely even for **3** minutes.

DILUTION AND COLOUR

Do not dilute the product for any reason.

The product is available in the neutral converter version, which can be coloured with:

- 0.5 Kg of **HYDRAGLASS** colour paste.

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PRODUCT APPLICATION

DUROGLASS PW can be applied in one or more coats by:

- Smooth trowel
- Notched trowel

a) **Multilayer system:** apply 1-1.5 kg/m² of **DUROGLASS PW** with a smooth trowel on the preparation substrate, mixed up to 25% with quartz, calculated on component A. On the still fresh resin, sprinkle quartz to saturation with a consumption of 2 to 4 kg/m².

The following day, remove the excess quartz, sand lightly and apply pure **DUROGLASS PW** shaved off with a smooth trowel.

The following day, a finish such as **DUROGLASS PW TOP** can be applied by roller.

Depending on the desired thickness, use quartz of different grain sizes: 0.1-0.5 quartz to obtain a thickness of 1.5 mm, 0.3-0.8 quartz to maintain a thickness of 2-2.5 mm.

b) **Self-levelling system:** apply a coat of pure **DUROGLASS PW** with a notched trowel with a consumption of at least 3.0 kg/m², going over with a bubble-breaker roller.

The following day, a finish such as **DUROGLASS PW TOP** can be applied by roller.

The over applications must coincide with the distribution joints of the flooring to avoid any blemishes that could occur by combining fresh product with product in the drying phase. The applicable thickness of the self-levelling system ranges from 2 to 3 mm.

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WARNINGS AND PRECAUTIONS

- When working at temperatures higher than +22°C on the substrate, spreading and finishing operations must be sped up with a bubble-breaking roller.
- Working at temperatures lower than +15°C on the substrate lengthens the time required to reach maximum hardness, in this case an acceleration can be obtained by adequately ventilating the environment at the end of the work.
- Ventilation must never be active during the application of the product.
- The fall of acidic substances can cause surface bleaching.
- Since it is a matt breathable coating, the **DUROGLASS PW TOP** finish is always advisable to reduce dirt pick-up.

SAFETY AND CLEANLINESS

When applying these products, it is recommended to use goggles, masks and rubber gloves and all the PPE required by current regulations.

Work tools must be cleaned with the **warm water** after use.

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



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TECHNICAL DATA		
Colour		RAL palette
Specific weight	UNI EN ISO 2811-1	,05 ± 0,05 Kg/l
Mix ratios		100 parts by weight basis 14.3 parts by weight of hardener
Viscosity at 20°C	UNI EN ISO 2555	15000 ± 3000 mPa.s
Pot life 22°C	UNI EN ISO 9514	25 minutes
Curing at 22°C, 50% R.H.		- dry to the touch: 5 hours - walkable with caution: 48 hours - light traffic: 6 days - fully cured: 10 days
Adhesion strength	UNI EN 13892-8	> 2,5 MPa
Wear-resistance*	UNI EN 13892-4	Class AR 0.5
Transmission of water vapour *	UNI EN 12086	$\mu < 2800$ 3.0 mm
Fire resistance	UNI EN 13501	Bfl-s1
Degree of liquid water transmission (permeability) *	UNI EN 1062-3	$w < 0.1 \text{ Kg/m}^2 \times h^{0.5}$
Shore D hardness	UNI EN ISO 868	> 80
Resistance to severe chemical attack *	UNI EN ISO 868	Sulphuric acid 20%: Class I Sodium Hydroxide 20%: Class I and II
Storage		The product in its original sealed packaging kept in a dry and protected place, at temperatures between +5°C and +35°C it is conserved for 12 months. Keep away from frost.

* Data collected with the complete system: DUROGLASS PW plus DUROGLASS PW TOP

CR10: 20% sulphuric acid:

CR11: Sodium hydroxide 20%

The data and instructions given in this sheet, based on the best practical and laboratory experiences, are to be considered in any case indicative. Considering the different conditions of use, and the intervention of factors independent of MPM (support, environmental conditions, technical laying direction, etc.) whoever intends to use it is required to establish whether or not the product is suitable for use. Our warranty obligation is limited to the quality and constancy of the finished product for the above data, only for technical sheets accompanied by stamp and countersignature by our delegated personnel. site. Furthermore, the customer is required to verify that these values are valid for their relevant batch of product and are not superseded and/replaced by subsequent editions and/or new formulations. The data contained may vary at any time without prior notice by MPM.