

Product

DUROGLASS P5/2

code 4503 M040/RAL
9108 0000

SELF-LEVELLING MORTAR FOR FLOORS BASED ON EPOXY RESIN AND CYCLOALIPHATIC AMINE HARDENERS .

Features

- Easy to clean and decontaminate.
- Fast curing.
- Excellent mechanical properties and wear resistance.
- Good colour stability (except white).
- Good chemical resistance to acid and alkaline solutions, fuels and mineral and oils vegetable.
- Suitable use in food preparation environments.
- Application temperature from +18°C (for substrate temperatures > +10°C, use the fast curing type INDURITORE RAPIDO).
- Operating temperatures from -25°C a +60°C.

Application field

Smooth or anti-slip protective layers on internal concrete floors for the: Generally all Manufacturing industry and more specifically also for:

- Food industry
- Mechanical and precision
- Textiles and paper
- Electrical and electronic
- Chemical and pharmaceutical
- Special Hospital highly decontaminable versions are available.

Application

1)PRODUCT PREPARATION.

- 2 component compound to be mixed prior to use thoroughly with a low speed rpm mechanical mixer carefully in order to avoid air entrainment.
- The mixed compound may be added with quartz M1 (quartz 0,06-0,25 mm or quartz 0,1-0,5 mm) in ratio 1:1 on the mixed compound(A+B).
A final mixing must take place to complete preparation procedure.

2)SUBSTRATE PREPARATION.

- Products must be applied to substrates in good condition. Concrete should be sound, compact, resistant and cleaned and decontaminated from all pollutants. Always roughen the surface, preferably by means of a shot blasting machine, or grinding (rough).
- Water jet cleaning should be avoided except in the case of certain types of contaminating agents. In such a case, the original hygrometric conditions of the support and atmosphere should be restored. After cleaning and preparation, the surfaces should have a surface resistance from pull-off tests, tested by Elcometer Adhesion Tester apparatus in accordance to ASTM D 4541 demonstrating a value > 1.5 MPa.

3)PRIMING, ADHESION ENHANCER

- Always apply an adhesion enhancer which is able to close up and seal the micro-porosity of the support avoiding pin-holes and imperfect covering. The adhesion enhancer should be selected on the basis of the type of covering and the hygrometric conditions of the substrate.

α) Dry substrates

Apply one or two coats of DUROGLASS P 2 PRIMER evenly by roller with a consumption rate of 400-700 g/m² altogether and by sprinkling the wet product with 0.1-0.5 mm (S2) or 0.3-0.9 mm (S3) quartz.

After hardening, by brushing remove the excess quartz. The consumption rate of DUROGLASS P2 PRIMER will depend from the size quartz used. This process normally eliminates the influence of micro-porosity, but if the foundations are rough and very porous it can be recommended first applying a coat of DUROGLASS P2 PRIMER at 400 g/m² consumption rate and then, 4 hours later, smooth trowel a second coat primer with a spatula using again DUROGLASS P2 PRIMER at 1:0.6 in weight with 0.06-0.5 mm (M1) quartz, saturating the wet product as described above.

β) Damp and back pressure subjected substrates.

It is essential in this case to use DUROGLASS FU BIANCO TIX as a primer and adhesion enhancer.

The base process is spatula smooth trowelling with DUROGLASS FU BIANCO TIX at 1:0,5 in weight with 0.06-0.25 mm (S1) quartz, with consumption rate of 1,0 Kg/m² of DUROGLASS FU BIANCO TIX (1.5 Kg/m² of mixture). At least 48 hours later, apply a coat of 500 g/m² of DUROGLASS FU BIANCO TIX diluted with 5-10% of water at using a roller. This type of application saturates the macro-porosity and gives adhesion on damp surfaces. However, prior to application of the final covering, check to ensure complete drying, using a hygrometer.

This preparation can also be applied to dry surfaces in the place of DUROGLASS P2 PRIMER with quartz, especially when a thick film finish is required. In this case, it may be necessary to smooth with sandpaper to remove any burrs. If you have doubts as to the effective hygrometric conditions, a mixed system may be used, with a coat of DUROGLASS FU BIANCO TIX diluted with 5-10% of water at a consumption of 500-800 g/m², followed at least 48 hours later when the surface is dry, with a coat of DUROGLASS P2 PRIMER with quartz sprinkled on the wet product as described above.

4) TYPE OF COVERINGS

a) Film 400-550 microns thick: apply 650-800 g/m² of pure DUROGLASS P5/2 by trowel, and repeat the spiked roller action to break up any bubbles.

b) Self-levelling, 1000 microns: prepare to evenly trowel 1,6 Kg/m² of DUROGLASS P5/2 at 1:0.6 in weight with 0.06-0.25 (S1) added quartz. Apply by spatula, followed by the spiked roller to break up any bubbles, at a consumption rate of 1000 g/m² of DUROGLASS P5/2.

c) Self-levelling, 2000 microns: apply 4,0 Kg/m² of DUROGLASS P5/2 added 1:1 in weight with quartz 0.06-0.5 (M1) by trowel followed by repeated spiked roller applications to break up any bubbles: Consumption rate of DUROGLASS P5/2 shall be of 2,0 Kg/m² of pure product (A+B).

d) Self-levelling, 3000 microns: apply 6,0 Kg/m² of DUROGLASS P5/2 added 1:1,5 in weight with quartz 0.06-0.5 (M1) by trowel followed by repeated spiked roller applications to break up any bubbles: Consumption rate of DUROGLASS P5/2 shall be of 2,4 Kg/m² of pure product (A+B).

e) Multi-layer anti-slip surface, 2000-2500 microns: apply 500-800 g/m² of DUROGLASS P5/2 (base + hardener) by roller or trowel/spatula.

After having obtained a perfect levelling, saturate on the wet product completely and evenly with 0.1-0.5 mm (S2), 0.3-0.9 mm (S3) or 0.7-1.2 mm (S5) quartz, depending on the level of anti-slip effect required.

After at least 24 hours, remove the excess quartz by brushing. Eventually carefully sand paper.

Finish by applying 700-800 g/m² of DUROGLASS P5/2 with a roller or spatula, and repeat the spiked roller action to break up any bubbles.

NOTES:

- For smooth, lightly anti-slip surfaces, sprinkle a light dusting of corundum B60 over the final coat of self-levelling layer.
- DUROGLASS P5/2 should be applied to substrates with temperatures >+18C° to avoid white stains due to contact with water or aqueous solutions.
If you have to work at lower temperature, but not below +10°C, use only DUROGLASS P5/2 RAPIDO.
- DUROGLASS P5/2 comes in brilliant glossy or satin-effect, matt opaque and fast drying versions.
- Only when the hardener INDURITORE DUROGLASS P 5/2 OPACO is used, after application: 48 hrs. at temperatures > 20°C; and 72 hrs. at temperatures > 15°C, the surface of the hardened product should be thoroughly washed with a rotating machine having abrasive brushes. This washing procedure will determine the best final result by using a dry powder soap sprinkled dry after having wet the floor with water and liquid soap and then thorough rinsing .
- Different quantities or quartz mixing ratios in the same application can lead to colour differences.
- 0.06-0.5 mm (M1) quartz is a mixture of 1:1 in weight of 0.06-0.2 mm and 0.1-0.5 mm quartz.
- For faster hardening, add 0.5% in weight of rapid ACCELERANTE hardening agent to the product.
- For smoothing imperfections thicken the product with 1-2% in weight of ADDENSANTE 2 and agitate for 5 minutes.
- After use equipment can be washed with DILUENTE 21 thinner.

Technical data

Color	RAL colors
Specific weight	1.4 ± 0.04 Kg/l
Mixing ratio	100 parts in base weight 22 parts in weight of hardener
Viscosity at 20°C	1,700 ± 600 mPa.s
Pot life at 22°C	75 ± 10 minutes (all types except RAPIDO) 50 ± 10 minutes (type RAPIDO)
Hardening at 22°C, 50% RH	- dry to the touch 10 hours - can be walked on with caution 4 days - completely hardened 10 days

Mechanical properties after 30 days at 22°C, 50% RH, mixture 1:1 with M1 quartz

UNI EN 13892-8 adhesion to concrete	> 3 MPa
Shore D ASTM D 2240 hardness	> 82
UNI EN ISO 5470-1 abrasion resistance	Taber grinder H22, 1000 g 1000 rpm < 200 mg
BCA UNI EN 13892-4 usury resistance	0 µm
UNI EN 13064-4 Slip resistance	Dry: 83 Wet: 18
UNI EN ISO 6272 fall- ing weight	Falling height 2 m: passes
Storage	If kept in the original sealed packs in a dry, protected place at temperatures of +5°C to +35°C, the product will keep for 12 months.

All data and prescription reported on the present data sheet are based on the best lab and practical experience and should anyhow be considered as indicative. Considering all different uses and the occurring of situations and conditions independent from MPM (substrate, climate conditions, technical management etc. Those who intend to use the product should verify whether it is suitable for the specific conditions in which it will be applied before starting. MPM's responsibility covers the quality and productions standards referring to the above listed data only. Data should also be verified for latest available version of data sheets which could be surpassed by a new version. Data may change any time without notice from MPM.