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5800 LV PU

Description

Polyurethane coating system of 2 components, self-leveling, free of solvents (CE according to EN 13813, category SR-B2,0-AR0,5-IR4). After drying it forms a resilient film with high elasticity, crack bridging, excellent sealing and insulation ability and resistant to temperature variations. The PU 5800 LV, due to its characteristics, can be used in various kinds of substrates such as concrete, cement, metal surfaces, masonry and to existing epoxy coatings. It displays a wide range of applications including industrial flooring, department stores, malls, car parks, industrial warehouses, hotels, hospitals, restaurants, ship decks, waterproofing insulation and protection of terraced buildings, outdoor parking and finally, it is the unique solution for cold rooms and freezers. Suitable for indoors and outdoors. Suitable for medium traffic areas.

Technical Information

Shade White – Any RAL after request

Glossy Glossy

Solids (A+B) 100% (EN ISO 3251, non-volatile)

Temperature resistance -30°C to 100 °C (up to 60 °C when in contact with liquids)

Mixing Ratio A:B – 4:1 by weight

Pot Life 50-60 min (25°C) Increase in temperature reduces pot life

Specific Weight A+B 1,30-1,35 kg/lt

1,55-1,60 kg/lt (5800 LV : QUARTZ SAND (1:0,50)) (EN ISO 2811)

Bond strength 4,8 N/mm² (EN 13892-8)
Tensil strength 16 N/mm² (DIN 53455)
Elongation at break 90% (DIN 53455)

Hardness 60-65 (15 days D/15) (SHORE D, ISO 868)

Abrasion Resistance 10 µm (wear resistance BCA EN13892-4) Impact resistance 19,6 Nm (EN ISO 6272)

VOC Ready for use max: 0 g/lt EU LIMITS (2010): 500 g/lt

SUBCATEGORY j – two pack reactive performance coatings, type

SB

Drying Time (25°C)

Drying 12-16 hr (1mm)

Walkability Minimum 24 hrs (1mm)

Recoating Minimum 16 hrs – maximum 36 hrs (1mm)

Full drying 7 days (1mm)

Min Drying Temperature 8 °C

(The above times are indicative and depend on the thinning percentage, relative humidity and temperature)

Surface

Preparation

The surface must be completely dry and free from materials that prevent bonding such as loose pieces, dust, oil, grease, etc., protected from rear moisture.

Application Uses

The self-leveling PU 5800 LV can be used:

- As a brushable coating on floors requiring high flexibility in mixing ratio A:B-4:1 by weight.
- As a self-leveling coating, with quartz sand (C component) particle size 0,1-0,4 mm at a mixing ratio 5800 LV: quartz from 1:0,5 to 1:0,7.

Priming

Priming of the surface is made with 850 epoxy primer or with 860 solvent free epoxy primer or with W 610 aqua epoxy primer. Applied in one layer by brush or roller without dilution. Painted surfaces should not get wet before drying is achieved. Any imperfections on the surface must be rectified using epoxy putty 800 (A+B). The primed surface is ready for recoating minimum after 12 hours-maximum after 36 hours (hardening 24 hours).

Mixing

Mix thoroughly parts A:B-4:1 by weight. The two components should be mixed for 2-3 minutes using a mechanical stirrer in low speed. It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

During the mixing should be used low speed for a short time in order to avoid the risk of

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developing high temperatures in the mixture, which would lead to reduction of pot life - steep polymerization and destruction of the material. If the PU 5800 LV is to be used as a self-leveling coating, add under constant stirring quartz sand of grain size 0,1-0,4 mm at a mixing ratio 1:0,5 by weight and stir until the mixture obtains homogeneity.

Caution: The mixed material must be used within 50-60 minutes

Application Method

Depending on the desired outcome of the final surface, we distinguish the following cases:

Self-Leveling floor:

The mortar (with or without quartz sand) is applied with a notched trowel to a thickness of 1-2mm.

Consumption without quartz sand: PU 5800 LV (A +B): 1,30 kg/m²/1mm

Consumption with quartz sand: PU 5800 LV (A+B): 1,04kg/m²/1mm, quartz sand 0,51kg/m²/1mm

The consumptions above refer to mixing ratio PU 5800 LV: QUARTZ SAND 1:0,5

To prevent bubble formation, a special spiked roller should be used over the coated surface.

As a final step apply a layer of anti-scratch polyurethane coating PU 5900 (A+B). Consumption: $100-175 g/m^2/layer$.

Polyurethane paint:

Apply PU 5800 LV as brush-able coating with a roller. If a second layer is required, apply within 16 to 36 hours. To prevent bubble formation, a special spiked roller should be used over the coated surface.

Consumption PU 5800 LV (A+B): 260-270g/m²/layer (3,85m²/kg/200μm)

As a final step apply a layer of anti-scratch and UV protection polyurethane coating PU 5900 (A+B). Consumption: $100-175g/m^2/layer$.

Anti-slip surface:

PU 5800 LV is applied as described above. While the surface is still wet, quartz sand with a particle size of 0,1-0,4mm or 0,4-0,8mm, is spread on the still fresh layer, with consumption of 0,5-2 kg/ m^2 , depending on the required anti-slipping effect (R10, R11, according to DIN 51130-R).

After curing remove any loose grains and apply a layer of anti-scratch polyurethane coating PU 5900 (A+B) Consumption: 100-175g/m²/layer.

Notes

Application temperature 10–30°C Suggested thinners 1115-2540

The choice of suitable thinner depends on the application method, the temperature and the humidity conditions. For the suitable choice, please contact with the technical department of our company.

In case of application of the coating in areas with low temperatures (such as cold rooms and freezers) and also when applied to outdoor surfaces you should avoid the use of quartz sand, as this reduces the elasticity of the floor. The polyurethane layer should be protected from moisture for 6-8 hours after application. The moisture can cause whitening and/or sticky surface as well as to affect the drying time. In case of exceeding the recoating times, you need to prepare the surface by roughening of it with sandpaper or other mechanical means.

Storage

Up to 12 months in a dry and cool place in the original containers (5-30 $^{\circ}$ C). After use, close immediately the container tight.

Safety

Please consult the Material Safety Data Sheet. Available upon request.

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For the selection and application of industrial floor systems, our company cooperates with authorized-licensed technical applicators. For more information please, contact us. In the event that material selection and application are not made by these technical applicators, the company assumes no guarantee and responsibility for the final result.

This Technical Data Sheet replaces and cancels every previously issued. The information, instructions, recommendations and specifications mentioned in this data sheet, represent the results and experience obtained from testing under controlled or specially adapted conditions. The accuracy and relevance of these results to the actual conditions, in which you apply the product, must be determined and depend only on the purchaser and/or applicator.

EΠ718/01/08.02.2006 Date: 18/09/2024 Edition: 1.1