TL-Stone2800

Two-component aliphatic polyurethane resin for resin-bound stone

Description

Two-component system based on 100% aliphatic polyurethane resins, modified with polyaspartic technology, 100% solids, highly UV-resistant. Designed to bind decorative aggregates into seamless, permeable resin-bound stone surfaces.

The polyaspartic modification increases surface hardness, dimensional stability and durability under heavy foot traffic and light vehicle traffic, depending on thickness and substrate.

Applications

- Pool surrounds
- Footpaths and walkways
- Driveway entrances and gardens
- Decorative outdoor areas
- Squares and public spaces
- Light-vehicle access, depending on thickness

Benefits

- 100% aliphatic: highly UV-resistant, non-yellowing
- Greater surface hardness and dimensional stability thanks to the polyaspartic modification
- 100% solids
- Seamless, hard-wearing, weather-stable finish
- Manual or machine application over large areas

Physical properties

PROPERTY	COMPONENT A	COMPONENT B
Appearance	clear, slightly yellowish	clear
Density at 25 °C	1.060 g/cm³	1.145 g/cm³
Viscosity at 25 °C	1,650 ± 200 cP	5,000 ± 200 cP
Mixing ratio by weight	100	82
Solids content		> 99.8%
Touch-dry		3 – 4 h
Full cure		6 – 8 h

Source — cure measured on a 76 µm film at 25 °C and 48% relative humidity.

Properties of the cured system

- Adhesion to concrete: 3.2 MPa
- High mechanical and abrasion resistance
- Excellent UV stability, non-yellowing
- Resistant to water and freeze–thaw cycles
- Thermal stability from −20 °C to +70 °C
- Permeable surface
- Suitable for light traffic depending on thickness

Substrate preparation

- Firm, clean, dry substrate, free from dust, grease, oil and loose particles
- Mechanical grinding to open the surface
- Removal of contaminants and efflorescence
- Repair of cracks and honeycombing
- Primer on repaired areas
- Recommended primer: TL-Primer 280, aliphatic polyurethane primer (see FT-TLP280)

Legal notice — values from standard tests and technical experience; they vary with site conditions. Liability limited to manufacturing defects in the product supplied. The user must check that the system suits the intended use.

Installation

TL-Stone2800 — application, resin ratios, thicknesses, packaging

Installation

1. Stir components A and B separately at low speed.
2. Pour B into A and mix for at least 3 minutes.
3. Add to dry, dust-free aggregate and mix until evenly coated.
4. Spread and compact to the specified thickness.
5. No catalyst needed in normal conditions. In low temperatures, high humidity or to speed up curing, add it and mix for 2 more minutes.

Working time: 15 to 25 minutes at 20 °C.

Clean tools immediately with a compatible solvent.

Application conditions

- Temperature: +5 °C to +30 °C
- At least 3 °C above dew point
- Substrate moisture below 4%
- No rising damp
- Do not apply on concrete less than 30 days old or on actively damp substrates
- Restrain edges with rigid elements: concrete, stone, brick

Packaging and storage

Kit	20 kg: component A 10.99 kg + component B 9.01 kg
Option	Catalyst 0.5 kg
Packaging	Metal and plastic, ADR-approved
Storage	Between +8 °C and +30 °C, packaging closed, away from moisture and direct sunlight
Shelf life	9 months

Resin ratios and consumption

AGGREGATE	RESIN RATIO
Smooth natural	5 to 6%
Porous or irregular	6 to 7%
Resin consumption	0.8 to 1.5 kg/m² per cm of thickness

A trial is always recommended.

Recommended aggregate blend

AGGREGATE	QUANTITY
2 – 5 mm	3 × 25 kg bags
1 – 3 mm	1 × 25 kg bag
Quartz sand 0.4 – 0.8 mm	1 × 5 kg bag

Density, internal cohesion, mechanical strength and load-bearing capacity. Slightly reduces drainage compared with open gradings. Adjust the proportion to the use, thickness and drainage required.

Thickness by use

USE AND SUBSTRATE	THICKNESS
Pedestrian and decorative, on concrete, mortar or a stable substrate	15 – 20 mm
Heavy pedestrian use, on concrete or a stable substrate	20 – 25 mm
General outdoor areas	20 – 30 mm
Light-vehicle access and areas, on a stable, correctly designed structural base	25 – 30 mm
On stable, load-bearing asphalt	project-specific

Indicative thicknesses, not a structural specification. Permeability depends on aggregate grading, compaction and substrate.

Health and safety

Safety data sheet available from Terraludis on request.

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