REAL 420 – EPOXY RESIN BASED TERRAZZO FLOORING

PRODUCT DESCRIPTION
REAL 420 Epoxy Terrazzo is a **resin-based flooring system** developed by combining **epoxy resin with glass and sand aggregates** to create a durable and decorative terrazzo surface.

TECHNICAL FEATURES

Appearance	: Semi-Gloss
Color	: Available in Catalogue Colors
Density (g/ml at 20°C)	:1,58 ± 0,05
Mixing Ratio (by Weight)	: A Komp. 34,40 Unit
	: B Komp. 5,60 Unit
	: C Komp. 60,00 Unit
Solid Content by Weight (w/w)	: % 98 ± 2
Application Method	: Steel Trowel
Recoat Time	: Max. 5 Days
Pot Life (20°C)	: 35-40 Minute
Abrasion Resistance	: 80.5 – 85.1 mg (CS 10 / 1000 cycles)
Shore D Hardness	
Flexural Strength (7 days)	: 94 ± (DIN 53505)
Compressive Strength (days)	: >45 N/nm² (TS EN 196-1)
Pull-Off Strength on Concrete	: > 68 N/mm² (TS EN 196-1)
Full Cure (days / 22°C)	: >4 N/mm² TS EN 4624)
	: 7 days

NOTE: As the application thickness increases, the **curing time accelerates.**

CONSUMPTION AND THICKNESS INFORMATION

CONSUMPTION Wet Film Thickness (mm)	**Dry Film Thickness** (mm)	**Theoretical Consumption** ±%10 (kg./m²)
12	**10,8**	**21,50**

SURFACE PREPARATION

The surface to be treated must be completely free from dirt, oil, and grease, and must be clean, sound, and structurally stable.

On previously coated surfaces, all loose, blistered, and poorly adhered old paint layers must be completely removed.

Rust, burrs, and weak layers present on the surface must be cleaned using diamond-tipped mechanical equipment in accordance with **SA 2½ standards**. After this process, the surface must be thoroughly cleaned from dust using an industrial vacuum cleaner.

Existing cracks, holes, and surface defects must be repaired prior to application using **REAL GR 900 Mortar repair material**, and the surface must be brought into a condition suitable for application.

PRODUCT APPLICATION INSTRUCTIONS

1st Layer – Epoxy Resin + Sand Broadcasting (Bonding Layer)

- **Resin Consumption:** 0.600 kg/m²
- **Glass Fiber:** 0.300 kg/m²
- **Silica Sand (0.8–1.2 mm):** 2.00 kg/m²
- **Application Equipment:** Steel trowel / squeegee

Application,Description:

Epoxy resin (Real Resin 360) is applied evenly onto the surface using a steel trowel or squeegee. While the resin is still wet, 0.300 kg/m² glass fiber is laid in roll form and fully impregnated into the resin using a laminating roller. Subsequently, silica sand with a particle size of 0.8–1.2 mm is broadcast evenly onto the surface to ensure full and uniform coverage.

2nd Layer – Main Layer (Epoxy Terrazzo)

Product: REAL 420 Epoxy Terrazzo

Before application, components A and B of REAL 420 Epoxy Terrazzo must be mixed separately in clean containers using a low-speed mechanical mixer (300–400 rpm) until homogeneous. Then, component C (aggregate) is slowly added to the mixture and mixed until a lump-free and completely homogeneous blend is obtained.

0–12 mm Terrazzo Flooring System Analysis Table

No.	Application Layer	Product Name	Application Quantity (kg/m²)	Density (kg/L)	Estimated Thickness (mm)
1	1st Layer – Resin Primer	REAL Resin 360 – Epoxy Resin Primer	0,6	1,1	0,55
		Silica Sand (500–600 µm, within the resin)	0,05	2,3	0,02
2	Glass Fiber	Glass Fiber Lamination (300 g/m²)	0,3	1,8	0,17
3	Broadcast Sand (Blind Layer)	Silica Sand (0.8–1.3 mm)	2	2,3	0,87
4	Main Material	REAL SLF 420 – Colored Terrazzo Resin	5,5	1,4	3,93
5	Terrazzo Aggregate Granular Filler	Glass Granules (1.3 mm – available in selected colors)	7	2,3	3,04
		Stone Granules (1.3 mm – available in selected colors)	6	2,3	2,61
6	Protective Layer	REAL PU 125 – Aliphatic Polyurethane UV Topcoat	0,2	1,2	0,17
		TOTALS	21,65		11,35

Note: After application and diamond grinding, the system reaches an approximate total thickness of 9–10 mm.

Application must be carried out on surfaces that have been properly prepared and are sound, clean, dry, and load-bearing.

- Total consumption is approximately **21.50 kg/m²**, and the materials must be applied in the sequence specified in the table.
- Application equipment: **8–10 mm notched steel trowel**.

Application Description:

After the first layer (sand-broadcast bonding layer) has fully cured, the prepared mixture is applied evenly onto the floor using an **8–10 mm flat steel trowel**. After application, the surface is screeded to achieve a smooth and even finish and then left to cure.
Once curing is complete, the surface is progressively ground using **diamond floor grinding machines** in successive steps (**30–60–90–120 grit**, from coarse to fine) to reveal the terrazzo texture and make the surface ready for use.

Protective Layer Application:

After the surface has been completely cleaned and freed from dust and all contaminants, **Real PU 100 Aliphatic Polyurethane Sealer** is applied in a thin coat with an average consumption of **0.150 kg/m²**. After the sealer has fully cured, the surface is lightly and controllably diamond-ground using **150-grit diamond tools**. This application:

- Reduces surface absorbency,
- Increases stain resistance,
- Provides a more homogeneous appearance during the final polishing stage,
- Improves UV resistance and color stability.

After the recommended curing time following the sealer application, final diamond grinding and polishing processes should be carried out.

Curing Times:

- Opening to foot traffic: **48 hours**
- Opening to heavy traffic: **72 hours**

The stated curing times are valid at an ambient temperature of **20°C**. At lower temperatures, curing times may be extended.

AREAS OF USE

- Shopping Malls
- Airports
- Hotels
- Hospitals
- Universities
- Office Buildings

AMBIENT CONDITIONS

During application, the ambient temperature must be between **+15°C and +35°C**.
Application must not be carried out when the **relative humidity exceeds 80%**.
To prevent condensation on the surface, the surface temperature must be at least **3°C above the dew point**.
Concrete substrates to be coated must be **at least 28 days old**.
The concrete class must be **minimum C25**, and the pull-off strength must be **at least 2.0 N/mm²**.
The water and moisture content at **2 cm concrete depth must be below 4%**.
At low temperatures, the product viscosity increases; consequently, material consumption may increase and curing time may be prolonged.

PACKAGING

- REAL 420 Epoxy Terrazzo – Resin-Based Polymer Component A: Net 17.20 kg
- REAL 420 Epoxy Terrazzo – Hardener/Catalyst Component B: Net 2.80 kg
- REAL 420 Epoxy Terrazzo – Formulated Powder Chemicals Component C: Net 30.00 kg

Total A–B–C Components: 50 kg

SHELF LIFE

The material must be stored in its original packaging in a **cool and dry place**.
In unopened packaging, the **shelf life is 12 months for Components A and B**.

HEALTH AND SAFETY INFORMATION

- For necessary safety rules and warnings, please read the **MSDS (Material Safety Data Sheet)**. The minimum safety precautions to be observed are as follows.
- Skin and eye contact with the product must be prevented by using **protective gloves, safety goggles, a face mask, and industrial barrier cream**.
- Adequate **ventilation must be ensured during application and until the coating has fully dried**.
- In case of skin contact, wash immediately with **warm water and soap or an industrial cleaner**. If the product splashes into the eyes, rinse with **clean water for at least 10 minutes** and seek **medical attention**.
- All warning labels on the containers must be carefully read and the **recommended working practices must be followed**.

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