

Maleki-Terrazzo Binder

Terrazzo Binder

Item-No.: 1448

White binder for self-compacting Terrazzo floors. Hardens tension-relieved with a layer thickness of up to 60 mm.



Technical data

Product type	CT-C35-F5 – CT-C40-F7* according to DIN EN 13813	Water demand	For 25 kg of ready-to-use mix (Sand – Binder – Filler): Approx. 3.25 – 3.75 L
Mixing ratio	50 % Sand 25 % Terrazzo Binder 25 % Limestone**	Layer thickness	Bonded application Micro Terrazzo 6 – 60 mm Terrazzo 12 – 60 mm
Grain sizes / fineness	Limestone** 0 – 0.1 mm Decorative sand 0 – 4 mm (Micro Terrazzo) 0 – 8 mm (Terrazzo)	Processing temperature	Min. +2 °C, max. +35 °C
		Processing time at 20°C	approx. 30 min
Loadability	Curing at 20°C Walkable after 4 hours Grindable 1 day Fully loadable 4 days	Density	Bulk density approx. 1.3 kg/dm ³ Fresh mortar density approx. 2.0 kg/dm ³ **
Consumption Terrazzo:***	Ready-to-use mix 2 kg/m ² /mm	Consumption Terrazzo Binder***	0.5 kg/m ² /mm

* Depending on the used grain size of all aggregates. Mixed as a self-compacting screed.

** D₅₀ = 15 µm; D₉₈ = 70 µm

*** All data is based on average water addition and a grain size of 0 – 4 mm (Micro Terrazzo). Depending on the water addition and the grain size of the used aggregates, the fresh mortar density and all consumption quantities which are derived from that may differ slightly.

Properties

- Eco-Binder technology
- environmentally friendly
- mineral
- very low emission EMICODE EC 1^{PLUS}
- fast curing
- tension-relieved
- easy application
- also processible by machine

Range of usage

- for indoor use
- decorative coating of concrete and screed
- cement and calcium sulfate-based screed, heated and non-heated
- adhering ceramic coverings

Produktsysteme

- Lithokor Terrazzo

Preparation of substrate

Prior to coating, ensure that the surface is stable and has sufficient surface tensile strength. The surface should also be ready for coating, dry or matt damp, clean and free from all kinds of debris. Mechanical surface preparation e.g. shot-blasting is recommended. Due to roughening the surface, the adhesion for the subsequent layer can be improved.

Already existing cracks must be repaired professionally. Cracks with a crack depth and crack width up to 5 mm can be filled with Maleki-FS 440. Cracks which are over 5 mm wide / deep and deeper ruptures must be filled with Maleki-VM 530. In general, only crack patterns that are no longer subject to movement can be repaired force-locked with the products mentioned.

The surface should be permanently vibration-free and crack-free. New concrete or screed should have a minimum age of 28 days. Expansion joints must be adopted. The adhesive strength of the substrate must be at least 1.5 N/mm².

The substrate has to be dried for 2 hours after priming with Maleki-TG 110. By priming the surface, the absorbency of the substrate is adjusted. This avoids rising of air bubbles during the subsequent coating. In order to guarantee this on critical undergrounds, a test area of 1m² should be created. Apply a further layer of primer if necessary. The coating work on the primer has to be finished within 6 hours. Please refer to the technical data sheet of Maleki-TG 110 for more information.

Technical data sheet

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The edge joint must be prepared with a suitable expansion strip. Thereby attention must be paid to a clean adhesion to avoid material flowing below or behind the expansion strip. Expansion joints must be adopted. After finishing all coating works, all joints have to be filled with a permanently elastic compound. Transitions and closing edges should be protected against over-flow by installing end rails.

Product versions

Maleki-Terrazzo Binder can be applied in different versions. Depending on the specific purpose and product version it is possible to vary the grain size of the decorative sand to be used. For application of a terrazzo floor mix 50 parts (parts by weight) of decorative sand with 25 parts of Maleki-Terrazzo Binder and 25 parts of a bright limestone powder.

Please refer to the table above for the permitted grain sizes. The used decorative sand must be suitable for application according to DIN EN 13139. The suitability of other aggregates like nacre or various glass granulates have to be clarified with the customer service in each case. The required amount of water for the fresh mortar varies depending on the specific product version and the desired consistency. Use 3.25 – 3.75 L of water as an indication for 25 kg of ready-to-use mix.

Mixing and application

Mix the material by using a commercial compulsory mixer. It is recommended to use the mixer WM Jetmix 125/180 by Werner Mader GmbH. The required amount of water for the used grain size has to be pretested on a small test area.

First, add the respective amount of water and decorative sand into the mixing container. Mix briefly for about 1 minute. Then, add Maleki-Terrazzo Binder and limestone while mixing. Add powders stepwise to avoid formation of lumps. After adding all components, the fresh mortar is mixed intensively for at least 3 minutes until the material has reached the desired consistency. At the beginning of the mixing process the mortar is creamier than at the end of the recommended mixing time. To avoid overdosing of mixing water, additional amounts of water should only be added at the end of the mixing process. Should it be necessary to add water, the fresh mortar must be mixed for a further minute.

After mixing the mortar has to be poured out seamlessly. Distribute the material with a suitable trowel or pin leveler to the intended thickness. It is recommended to use the mortar pump WM Variojet FU by Werner Mader GmbH for larger areas. In the standard version (screw KP 20) mortars with a maximum grain size of 4 mm can be pumped. By using higher grain sizes, the screw KP 45 is needed. Here the maximum grain size is about 8 mm.

The selection and preparation of all necessary accessories should be coordinated with the manufacturer. The suitability of other mortar pumps and the adjustment in accordance with the used mixing system must be checked prior to application.

Do not use special screed additives or other binders for mixing. For more information on the application of Maleki-Terrazzo Binder, please refer to the current „Lithokor Installation Manual for Terrazzo“.

Pigmentation

Maleki-Terrazzo Binder can be pigmented as needed.

The respective pigment is added to the mixing water in the desired dosage (see table below). The pigment has to be mixed intensively for 1 minute.

The consistency of the fresh mortar can be influenced by using liquid pigment preparations.

Prior to application of the mortar the coloring and the desired visual appearance should be checked on a separate test area. It is recommended to use Maleki-Pigments. For other pigments and preparations no certain appearance or quality can be guaranteed. The usability of each pigment and the suitability for the desired finish have to be clarified with the customer service in advance.

For more information on the approximate appearance of the mortar with selected Maleki pigments, please refer to the „Lithokor Color Chart“.

Pigment	Max. dosage per 25 kg ready-to-use mix
Maleki liquid pigments (black)	80 g
Maleki liquid pigments (other colors)	500 g
Maleki powder pigments (black)	150 g
Other pigments (Oxide basis)	500 g

Grinding and post-processing

Post-processing can be started 24 hours after application of the Terrazzo floor. Please refer to the „Lithokor grinding manual Terrazzo“ for more information about the complete grinding process and for more care instructions. The grinding manual can be requested from the customer service.

Heated floor constructions

For applications on heated floor constructions the underfloor heating system must be downregulated to approx. 20°C at least 3 days before application. 48 hours after application the flow temperature can be increased stepwise to the desired value (increase of 5°C per day).

Tools and cleaning

Compulsory mixer or comparable mixing device, trowel, pin leveler, rubber squeegee and grinding/polishing devices.

All equipment should be washed clean and dried before and after application.

Packaging and shelf-life

25 kg paper bag

Original packing is storable for 12 months in dry and controlled temperate areas (not below 0 °C, recommended 10 – 25 °C). Reseal opened containers immediately and use within a very short time.

Associated products

Maleki-VM 530	Item-No. 1442
Maleki-FS 440	Item-No. 1413

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Maleki-TG 110	Item-No. 1110
Maleki-Terrazzo Binder	Item-No. 1448
Maleki-DW 100	Item-No. 1815
Maleki-SM 735	Item-No. 1515
Maleki-VS 910	Item-No. 1811

Safety notes

There is no mandatory hazard labeling for Maleki-Terrazzo Binder. Avoid inhaling dust when opening packaging. Protect skin and eyes during the mixing process. Please refer to the Material Safety Data Sheet which can be requested on www.malekigmbh.com for further information on safety during transportation, storage, handling and disposal. Follow instructions on the packaging.

Relevant regulations and fact sheets

When applying Maleki-Terrazzo Binder the following regulations and fact sheets must generally be observed, unless otherwise specified in this technical data sheet:

General

DIN 18202:2019-07

Tolerances in building construction – Buildings

DIN EN 13139

Aggregates for mortar

DIN EN 13318:2000-12

Screed material and floor screeds – Definitions

DIN EN 13813: 2003-01

Screed material and floor screed – Screed materials – Properties and requirements

BEB-Work and information sheet 8.8

“Design screeds” – Notes on planning, execution and properties of designed mineral floors.

BEB-Work and information sheet 8.9

Notes on describing the surface quality and assessing the execution of designed mineral floors.

BEB-Work and information sheet 8.10

Instructions for the protection of the surface and for cleaning and care of designed mineral surfaces.

Maleki data sheets

Lithokor Color Chart

Lithokor Installation Manual for Terrazzo

Lithokor Grinding Manual for Terrazzo

Notes

Some minor color differences are inevitable due to different production batches. This should be taken into account while performing work. It is necessary to work on designated sections with the same batch (see label) if a uniform color is desired. Due to different water addition during application or changing working techniques light color shades in the coating surface can occur. Please take note that this coating is a mineral product.

Product colors are not fully conformed to the RAL-Map and therefore they should only be seen as estimated classifications.

The content of this technical data sheet corresponds to the latest development and our applications experience. All information is based on ideal conditions and therefore does not apply for every application purpose. Due to different materials, substrates and different actual site conditions no warranty is given for the customer's application. In particular, we assume no liability based on this information or any verbal statements. The only exception is when we can be blamed for the case of intent or gross negligence. In that case the customer has to prove that he has transmitted all required information completely and in a timely manner for a proper and promising evaluation by Maleki GmbH. Any further details regarding the application of our products have to be confirmed in writing by Maleki GmbH. The customer must test the product's suitability for the intended application and purpose. We reserve the right to change the product specifications due to the ongoing development. Apart from that our general terms and conditions are valid. This data sheet supersedes all earlier technical data on this product. The technical data sheet can be requested on www.malekigmbh.com.

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Maleki-Terrazzo Binder Screed Binder for production of self-compacting screeds according to DIN EN 13813 (Strength class CT-C35-F5 to CT-C40-F7).