

Strongcoat Terrazzo Resin

Solvent-free pigmented epoxy resin for decorative terrazzo flooring systems



DESCRIPTION

Strongcoat Terrazzo Resin is a two-component, solvent-free seamless decorative flooring system consists of a highly durable and pigmented epoxy resin which can be mixed with a wide variety of synthetic or natural aggregates such as silica sand, marble chips, coloured and clear glass chips and many others to produce a durable and decorative epoxy terrazzo flooring system.

APPLICATIONS

Strongcoat Terrazzo Resin is used to provide a seamless and decorative flooring system in several areas such as:

- » Heavy traffic commercial centers.
- » Hospitals.
- » Soft drink and beverage production areas.
- » Pharmaceutical labs.
- » Airport terminals.
- » Schools.
- » Public buildings and offices.
- » Food processing plants.

ADVANTAGES

- » Seamless finish.
- » Hard-wearing system.
- » Provides an aesthetic natural appearance.
- » Low maintenance.
- » Solvent-free; environmentally friendly system.
- » Resistant to a wide range of chemicals.

METHOD OF USE

SUBSTRATE PREPARATION

The substrate must be clean, dry, even, dense and free from oil, grease, dust and other contaminants. A clean surface will ensure maximum adhesion between the substrate and the system.

Concrete floors must have a minimum compressive strength of 25 N/mm² and a maximum concrete relative humidity of 75% (max. moisture content of 4%). Relative humidity can be measured by using hygrometers.

TECHNICAL PROPERTIES FOR MIXED RESIN @ 25°C, WITHOUT AGGREGATE:

Colour:	Available in different colours
Mixed density:	1.45 ± 0.10 g/cm ³
Solid contents:	100%
Pot life:	50 - 100 min
Compressive strength: BS 6319-2	≥ 40 N/mm ² @ 7 days
Flexural strength: EN 13892-2	≥ 15 N/mm ² @ 7 days
Tensile strength: BS 6319-7	≥ 10 N/mm ² @ 7 days
Bond strength on C25/30 concrete: EN 1542	≥ 2 N/mm ² @ 7 days (concrete failure)
Shore D hardness: ASTM D2240	≥ 60
Water absorption: ASTM D570	≤ 0.2%
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss, CS17 wheel	≤ 90 milligram

PRIMING

Concrete substrates should be primed with Strongcoat Primer. Use lambwool roller to apply the primer. More than one coat may be required for highly porous or textured surfaces.

Work the primer well into the surface of the concrete and while the primer is wet, dress the surface with Antislip Aggregates #2/#3 at the rate of 0.5 kg/m² and allow to touch dry.

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MIXING

Pre-stir each component to ensure that all solids and pigments are evenly distributed and eliminate any settlement in the materials.

Transfer the entire contents of the hardener pack into the base container and mix using a jiffy-type mixer attached to a slow running electric drill, mix for approximately 2 minutes.

Transfer the entire contents of the mixed resin container into a Casco or Creteangle-type mixer, ensuring that the bottom and sides are thoroughly scraped. Start the mixer and add the entire contents of the aggregate part. Continue mixing for approximately 2 minutes until a uniform mix is achieved and the aggregates are well coated with the resin mix.

Notes:

- » *Never mix by hand as this could lead to areas of uncured material.*
- » *It is recommended to pre-condition the unmixed material to least 24 hours at temperatures between 20 and 25°C to maintain the best results.*

PLACING AND FINISHING

Place metal divider strips (i.e. aluminium, stainless steel or brass strips) on the treated substrate as per the required design. Once mixing is complete, transfer the Strongcoat Terrazzo to the primed surface and start spreading and compacting the mortar to the desired thickness using a steel trowel so that the top of mortar is approximately levelled with the top of the divider strips.

After 24 hours (at 23°C ambient temperature), a mechanical grinding machine should be used to smooth the surface of Strongcoat Terrazzo Resin so that the layer is levelled and the aggregate becomes apparent.

This step is repeated 3 - 4 times in slow circular motion until a smooth surface is achieved. Once dry grinding is finished, a vacuum cleaner should be used to remove all loose and dust particles.

After dry grinding, any pinholes should be prepared by filling them using a small quantity of Strongcoat Terrazzo neat resin. Afterwards, the polishing step should be done by wet grinding the layer; this will enhance the finishing of the epoxy terrazzo and transfer the layer from a matt finish into a shiny one.

As a final step, the surface is cleaned by removing the slurry caused by wet grinding, clean water can be used to rinse the surface, and all slurry should be removed before sealing the layer.

Please contact DCP Technical Department for further information about the application of Strongcoat Terrazzo Resin.

SEALING

For optimal performance and lasting visual appeal, Strongcoat Terrazzo Resin should be sealed with Cemflow Sealer, which enhances both the aesthetics and the chemical and physical durability of the surface.

REMARKS

- » Strongcoat Terrazzo Resin should not be applied on surfaces known to suffer from damp rising.
- » Strongcoat Terrazzo Resin should not be applied at temperatures below 10°C or where concrete relative humidity exceeds 75%.

CLEANING

All tools should be cleaned immediately after application using DCP Solvent. Hardened materials must be cleaned mechanically.

PACKAGING

Strongcoat Terrazzo Resin is available in 18 kg coloured resin packs.

MIXING RATIO

The recommended mixing ratio for Strongcoat Terrazzo Resin with aggregate is as follows:

3.25 - 4 kg of aggregates to 1 kg of mixed resin.

In special cases and based on the requirements of the client, Strongcoat Terrazzo Resin can be supplied as base and hardener packs only to be mixed with selected aggregate to achieve special finishing patterns.

Given the wide variety of aggregates that can be used and the differences in their shape, size, dust content and absorbency, it is improbable to produce a single specific mix design that can cover all the variables as mentioned above.

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THICKNESS RANGE

Between 6 - 10 mm, depending on aggregate size and shape.

COVERAGE

To achieve a total thickness of 10.0 mm (8 mm after grinding), mix 3.25 - 4 kg/m² Strongcoat Terrazzo Resin with 13 - 16 kg/m² aggregates of choice (at a mixing ratio of 1 kg resin to 3.25 - 4 kg aggregates).

Actual coverage and consumption will depend on the mixing proportions, aggregate size and shape, as well as the substrate regularity.

STORAGE

Strongcoat Terrazzo Resin has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 35°C.

If these conditions are exceeded, contact DCP Technical Department for advice.

CAUTIONS

HEALTH AND SAFETY

Strongcoat Terrazzo Resin should not come into contact with skin and eyes.

In case of contact with eyes, immediately flush with plenty of water and seek medical attention.

For further information, refer to the Material Safety Data Sheet.

FIRE

Strongcoat Terrazzo Resin is nonflammable.



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Note:

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