Strongcoat PU Screed

Aliphatic polyurethane resin bound screed system



DESCRIPTION

Strongcoat PU Screed is a two component, high solids, solvent based polyurethane resin ready for on-site mixing and use.

When mixed with aggregate as a resin bound system, it provides a wide variety of finishes which are dependent on the type, color and size of the used aggregates along with their proportion with the resin. The system can be applied at 5 - 50 mm thickness based on the size of aggregate used.

APPLICATIONS

Strongcoat PU Screed is used to provide a natural looking floors with good chemicals resistance and for a wide range of applications such as:

- » Public footpaths.
- » Driveways and car parks.
- » Pool surrounds.
- » Garden paths.
- » Decorative landscaping.
- » Chemical plants.
- » General industrial and marine applications.

ADVANTAGES

- » High solid content.
- » Gloss topcoat with unlimited recoatability.
- » Clear color, enhances the natural color of aggregate used.
- » Excellent adhesion strength.
- » Natural appearance with excellent color and gloss retention.
- Easy to apply and clean.
- » UV resistant.
- Resistant to a wide range of chemicals, consult with DCP technical department for more details.

METHOD OF USE

SUBSTRATE PREPARATION

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



TECHNICAL PROPERTIES FOR THE NEAT MIXED RESIN (WITHOUT AGGREGATE) @ 25°C:

Appearance:	Clear liquid
Mixed density:	1.1 ± 0.1 g/cm³
Solid content:	75 \pm 5% by weight
Pot life:	1 - 3 hr
Overcoating time	2 - 4 hr
Dry film thickness :	50 - 75 microns per coat
VOC:	≤ 350 g/ltr

Concrete floors should be at least 28 days old and 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.

Unsound layers and contaminated concrete surfaces must be prepared mechanically by (grit blasting, scraping, grinding, milling, etc.). Smooth surfaces should be roughened by light grinding or other mechanical means. In case of areas deeply contaminated by oil or grease, such areas should be treated with hot compressed air.



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PRIMING

Strongcoat Primer is recommended to be applied onto the prepared substrates if required, it should be applied by brush or short hair lambs wool roller.

Spread evenly at the recommended coverage rate, avoiding any primer ponding on the surface. Highly porous surfaces may require two coats of Primer. The primer should be overcoated within 12 - 24 hours with the floor screed.

MIXING

Stir each component thoroughly, transfer the entire contents of the hardener into the base container and mix using a jiffy-type mixer attached to a slow running electric drill, mix for approximately 2 minutes and until uniform colour and consistency are achieved.

When used as a binder with decorative aggregates:

Mixed Strongcoat PU Screed /Aggregate can be applied at (1.0 - 1.2 / 20) ratio by weight when applied onto Strongcoat Primer while still tacky. For not primed surfaces or dried and not tacky primer, (1.5 - 2.0 / 20) ratio by weight is recommended.

Start the mixer and add the suitable amount of the aggregate part. Continue mixing for approximately 3 minutes until a uniform mix is achieved and the aggregates are well-coated with the resin mix.

REMARKS

- » Never mix by hand as this could lead to areas of uncured material.
- Do not mix more material than will be used within its pot life.

APPLICATION

When used as a binder with decorative aggregates: Once mixing is complete, transfer Strongcoat PU Screed and aggregate mix to the primed surface while still tacky and using a straight-edged steel trowel or a screed laying box, apply it evenly.

After application and depending on the aggregate size and shape and the needed surface finish, a hand mechanical trowel can be used to provide a more compacted and levelled surface.

Note: Excess compacting will affect the permeability of the screed.

When used as a sealer:

The first coat should be applied to obtain a continuous uniform coating. Always apply in thin coats and maintain a wet edge.

Two coats are recommended for complete protection for highly porous surfaces, the second coat (if needed) should be applied within the minimum overcoating time to achieve the maximum adhesion between the two coats.

Strongcoat PU Screed can be applied by brush; roller or airless spray machine.

Notes:

- » Do not allow foot traffic for 24 hours after final application.
- The application of a sealer can impair the slip resistance of the floor; based on size and shape of aggregates used, when subject to wet conditions. Sealer will also impair permeable properties of the system.

REMARKS

- Strongcoat PU Screed should not be applied on to surfaces which are known to suffer from damp rising.
- » Strongcoat PU Screed should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 80%.
- When applying by conventional spray, use adequate air pressure and volume to ensure proper atomization.

CLEANING

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

PACKAGING

Strongcoat PU Screed (neat resin) is available in 25 litre packs.

MIXING RATIO

The mixing ratio for the resin mix with the aggregate is highly dependent on the aggregate size and shape, and absorbency, a recommended start-up mix ratio is as follows:

Resin mix "base and hardener" 1.0 – 1.2 kg: Aggregate 20 kg when applied onto Strongcoat Primer.

Resin mix "base and hardener" 1.5 - 2.0 kg: Aggregate 20 kg when applied onto not primed surfaces or dried and not tacky Strongcoat Primer.

THICKNESS RANGE

5 - 50 mm, depending on aggregate size and shape.

COVERAGE

The actual coverage rate of Strongcoat PU Screed depends on the size of the aggregate and the mixing proportion between the resin and aggregate. However, the approximate coverage rate of the mixed product is in range of 5.5 m^2 per 55 kg mixed screed at 5 mm thickness.

STORAGE

Strongcoat PU Screed Clear have a shelf life of 12 months from date of manufacturing if stored in dry conditions at a temperature of 25°C in original unopened packs.

If these conditions are exceeded, DCP Technical Department should be contacted for advise.

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HEALTH AND SAFETY

Strongcoat PU Screed should not come in contact with skin or eyes. Goggles and gloves should be used. In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary.

For further information refer to the Material Safety Data Sheet.

FIRE

Strongcoat PU Screed is flammable.



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- » Concrete admixtures.
- Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.



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Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.