

MONO DECKCEM SL

Cement based self leveling industrial surface system

Description

MONO DECKCEM SL is designed as an industrial grade floor topping for upgrading and renovating new and existing internal floors.

Applications

MONO DECKCEM SL is supplied as a pre-blended dry powder designed for application between 5 mm to 50 mm (in one application) to provide a finished sound floor.

Advantages

- Self-smoothing.
- Dimensionally stable.
- Fast drying.
- Can be applied by pump.
- **MONO DECKCEM SL** Base S can be pumped to cover an area of 2000 m² per day. Alternatively a coverage of 600m² per day can be achieved when hand applied, depending on manpower, thickness applied and equipment used.

Method of Use

Concrete substrates should be fully cured and achieve a minimum compressive strength of 25 N/mm² and a minimum pull-off strength of 1.5 N/mm².

The concrete substrate should be below 75% RH and have less than 4% moisture content. Alternatively, Strongcoat DPM should be applied according to the priming section.

SURFACE PREPARATION

Concrete surfaces must be degreased using degreasing products, torching or any other suitable method which assures the surface is free from any oil traces. Surfaces should be sound and with no irregularities as they can affect the finish of the applied product.

Concrete surfaces are to be mechanically prepared to remove laitance and achieve a flat surface, grit blasting or surface profiling equipment are preferred.

Technical Properties

Fresh wet density: 2.10 ± 0.05 g/cm³

Flow properties using Initial ≥ 130 mm

35 cc flow ring:ISO 554 After 15 min ≥ 120 mm

Workability: 15 - 20 min

Vicat setting time: 2 hr

Foot traffic: Light traffic: 24 hr

***Compressive strength:** 48 hr

Flexural strength: > 2.5 MPa @ 1 day > 12 MPa

Maximum application: @ 7days > 40MPa @28 days

surrounding temperature: > 3 MPa @ 7 days > 7

Maximum mixed MPa @ 28 days

material temperature: 35°C

Application thickness: 32°C

Bond strength to concrete: 5 – 50 mm

ASTM C1583 > 1.5 MPa @ 28 days

VOC: < 10 g/ltr

***Note: dry cure for compressive and flexural strengths.**

Acid etching can be used after consulting with STARKE's Technical Department.

Surface defects such as voids and blowholes should be repaired before application. Consult STARKE's Technical Department for the best repair material.

Surfaces must be free of any dust or loose particles before product application. Use suitable methods like vacuuming or sweeping.

If possible, apply the product on a small test area before actual application to check for any problems with the surface preparation.

PRIMING

Priming is done to seal the substrate in order to prevent pin holing caused by the release of air from the substrate. The following priming options are available:

MONO DECKCEM SL

For application onto sand/cement screeds, concrete and other porous substrates, first seal the prepared surface by applying one coat of **MONO DECKCEM SL** diluted with 3 parts potable water and allow to dry.

Prime the sealed surface by applying a second coat of **MONO DECKCEM SL** diluted with 3 parts potable water and brush well into the surface. The primer must be allowed to dry before the application of

MONO DECKCEM SL

Strongcoat Primer

For impervious surfaces, apply one coat of Strongcoat Primer and whilst still tacky fully blind with Antislip Aggregate #2 at approximately 3 kg/m² until the surface is covered and no resin spots remain. Allow to dry fully overnight and remove excess aggregate before applying **MONO DECKCEM SL**.

For porous substrates, apply one coat of Strongcoat Primer and allow to cure. Apply second coat and whilst still tacky fully blind with Antislip Aggregate #2 at approximately 3 kg/ m² until the surface is covered and no resin spots remain. Allow to dry fully overnight and remove excess aggregate before applying **MONO DECKCEM SL**.

Strongcoat DPM

For surfaces with RH between 75 and 85%, prime with 1 coat of Strongcoat DPM and allow to dry prior to application of Strongcoat Primer.

For surfaces with RH greater than 86%, prime with 2 coats of Strongcoat DPM and allow the second coat to dry before priming with Strongcoat Primer.

After Strongcoat DPM has been applied and left to cure, apply Strongcoat Primer and whilst it is still tacky fully blind with Antislip Aggregate #2 at approximately 3 kg/m², until the surface is covered and no resin spots remain. Allow to dry fully over-

night and remove excess aggregate before applying **MONO DECKCEM SL**.

MIXING

Hand Application:

Use a power-whisk fitted in a heavy-duty slow speed electric drill. Mix in the proportion of 25 kg of powder to 4.00 – 4.25 litre of potable water.

Pour the water into a suitably sized bucket and gradually add the powder while stirring, until a smooth, lump free consistency is achieved.

Pump Application:

Mix the powder and water according to the method recommended by the pump manufacturers. In the case of pumps having a continuous water feed adjust the rate of water flow until the mix is a smooth fluid, uniform grey liquid with no surface separation, producing a flow of approximately 130 mm using a 50 cc flow ring.

To avoid separation, applications greater than 15 mm require less water and therefore a reduced flow.

APPLICATION

Pour or pump the mixed material onto the prepared surface and allow to attain a smooth finish. The use of a spiked roller will help eliminate entrapped air and smooth out flow lines. Apply at a thickness between of 5 - 50 mm in one pass.

It is always better to work in manageable sections of approximately 20 m². It is recommended to seal Cemflow Base S with suitable epoxy resin or solvent based resin sealer, especially if water may come into direct contact with the cured **MONO DECKCEM SL**.

Where materials are to be applied over the surface of the hardened **MONO DECKCEM SL**, it is good practice to SHOT BLASTING the surface prior to carrying out subsequent treatments.

CURING

Curing is not required in normal conditions, but in harsh climatic conditions like direct sunlight, flow of wind, elevated temperatures, etc; freshly hardened concrete surfaces should be covered with polyethylene sheets.

PRECAUTIONS

Don't place when the substrate temperature is below 10°C or when the ambient temperature is 10°C and falling.

- Protect from frost.
- Don't exceed the recommended water content and only use potable cool water. Better to have the mixed fresh material temperature < 30°C.
- This product is not recommended for external use or situations where water may come into direct contact with the cured material.
- Not recommended to work with the product when surrounding temperature > 35°C.
- The material should not be used on floors where rising damp is valid, unless a suitable primer is used.

Cleaning: All tools should be cleaned with water immediately after use.

Packaging: **MONO DECKCEM SL** is available in 25 kg bags.

MONO DECKCEM SL is available in 5 and 20 litre pails.

COVERAGE

MONO DECKCEM SL: 1.4 m² @ 10 mm thickness for 25 kg bag mixed with 4 litre of clean water.

MONO DECKCEM SL Primer when diluted 3 parts potable water to one part primer: 30 m²/5 litre. 120 m²/20 litre

Storage: Store in a dry area out of frost at temperatures between 10°C and 30°C.

SHELF LIFE

MONO DECKCEM SL has a shelf life of 9 months from date of manufacture if stored in proper conditions.

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

More from starke construction chemicals A wide range of construction chemical products are manufactured by STARKE which include:

Concrete admixtures.

Surface treatments

Grouts and anchors.

Concrete repair.

Flooring Coating

Sealants.

Waterproofing.

Adhesives.



Starke Polymer Ltd
Plot 158, kampala uganda

Tel + 256 787 288 087
Tel + 256 708 693 991

Email: info@starkepolymers.com
www.Starkepolymers.com