Talrakflortop® SL-C

Cementitious self levelling floor top



The Construction Alchemists

Description

Talrakflortop® SL-C is a rapid hardening, heavy duty polymer modified single component self-levelling cementitious industrial floor overlay. Talrakflortop® SL-C is a non - shrink free flowing cementitious overlay which results in smooth and flat surface.

Features & Benefits

- > Accepts foot traffic in 2 hours.
- > Reinstating large areas in relatively short time periods.
- Dimensionally stable.
- > Single component product, just addition of water is required at site.
- > Installation can be carried out in a single application.
- > Rapid curing.
- > Can be applied directly onto prepared concrete surfaces.

Primary Application

Reinstatement of new or existing concrete floors subject to foot traffic, industrial equipment, forklift traffic or trolleys. Use this product as a final wearing coarse overlay. This may be coated with an appropriate Talrakflorkote* range of resin floor coating. Talrakflortop* SL-C is a hard wearing, long lasting durable overlay. Its rapid cure minimizes factory downtime. This product can be used for industrial and commercial applications. Its suitable for application thickness from 4 mm to 20 mm in a single application.

Technical Properties

Water powder ratio: 0.18 @ 27 °C Fresh wet density: 1900 - 2100 kg/m³

Compressive Strength

Age	24 Hrs	3 days	7 days	28 days
Compressive Strength (MPa)	15	23	30	40

Flexural Strength @ 28 days	9 MPa	
Tensile Strength @28 days	3-4 MPa	
Pull out bond strength @28 days (ASTM C 1583-04)	>1.5MPa Concrete Substrate Failure	
Co-efficient of Thermal Expansion	7-11 x 10 ⁻⁶ mm/ ⁰ C	
Shore D Hardness (ASTM D 2240 - 15 (2021))	85	
Moh's Scale No	Scratch @ 6 Impression @ 7	
Average Wear off	2.19 mm	

Flowability by BS cone

Initial Flow	200 - 250mm
Flow after 10 minutes	190 - 210mm

Setting Time

Initial set	@20°C, 40 - 50 minutes @30°C, 30 - 40 minutes
Final set	@20°C, 50 - 60 minutes @30°C, 40 - 50 minutes

Pot Life

Temperature	Time (minutes)
20°C	40 - 50 minutes
25°C	30 - 40 minutes
30°C	25 - 30 minutes

Application Thickness

Minimum	4mm
Maximum	20mm

Trafficable Time

Foot Traffic	After 2 hrs	
Vehicle Traffic	After 12 hrs	
Over Laying Time at 25°C	3hrs for <10mm thick 24 hrs for >10mm thick	

Drying Shrinkage

Time (in days)	7 days	28 days	56 days
Shrinkage (Microstrains)	<150	<400	<600

Specification Clause

The underlaying layer for the application of the floor topping shall be a cement based self levelling underlayment mortar Talrakflortop® SL C , a flow applied system, that shall be applied on the saturated concrete floor surface as per manufacturers specification.

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Application Instruction

Surface Preparation

Ensure the concrete substrate is clean and free from oil, grease, sealers, curing compounds, paints, polymer coatings, dust or other foreign (bond breaking) matter. Excess bitumen, adhesive or laitance should be removed by light scabbling or mechanical captive shot blasting or grinding followed by vacuumed dusting.

New concrete floors: Should be atleast 14 days old prior to application of Talrakflortop* SL-C.

Prior to carrying out application, the substrate must be primed with Talrakpolybond® SB. It is recommended that a second coat of primer is required, if the concrete substrate is porous.

Mixing

Talrakflortop® SL-C requires 3.6 to 4.25 liters of clean water per 20 kg bag and is best mixed with a forced action, high shear stirrer, powered by a heavy duty electric mixing drill at approx 600 r.p.m. Add pre-measured water to a clean mixing bucket. Gradually add Talrakflortop® SL-C into the water whilst continuously mixing the contents of the bucket. When the entire contents of the bag have been added to the water, mix for further two minutes to produce a smooth homogenous consistency.

Hand mixing is not recommended.

Do not add excess water.

Discard any Talrakflortop® SL-C that has hardened or stiffened in the mixing bucket. Further addition of water will NOT reconstitute a useable mixture.

Placing

Pour the fully mixed Talrakflortop® SL-C onto the primed substrate and allow material to seek its own level. Talrakflortop® SL-C may be spread with a steel notch trowel, spreader or squeegee. Keep the trowel slightly inclined to obtain desired thickness of cover. To ensure uniform consistency and continuous flow of the fluid Talrakflortop® SL-C, it is advised that subsequent mixes are ready to enable continuous pouring until the entire area to be leveled is complete.

Talrakflortop® SL-C has good resistance to water when cured However, if areas are subject to continuous water immersion or chemical attack from solvents or organic acids etc. Talrakflortop® SL-C must be protected using Talrakflorkote® range of products, pigmented or clear, depending on aesthetic and performance requirements. This coating will act as sealer and seamless protective coating which can be easily cleaned and is resistant to oil and chemical spills.

To ensure a long lasting, highly protective coating, two coats of Talrakflorkote® range of products are recommended. The first coat should be applied as soon as Talrakflortop® SL-C has dried for 2-24 hours after the application depending on the thickness. The second coat is applied after the first coat has dried. After that the coating should be regularly inspected for damage or wear and re-coated when required.

Cleaning

Talrakflortop® SL-C should be removed from tools and equipment with clean water immediately after use. Talrakflorkote® should be cleaned with safe and suitable solvent.

Estimating Packaging

Talrakflortop® SL-C is supplied in a 20kg bag

Coverage

Thickness	Coverage (sqm per bag)
4mm	2.50
6mm	1.67
8mm	1.25
10mm	1.00
13mm	0.77
20mm	0.50

The actual coverage may vary depending on varying substrate

Coverage - Talrakpolybond® SB

Talrakpolybond $^{\circ}$ SB has a coverage of ≈ 6 to $7\text{m}^2/\text{ltr}$ depending on surface texture and substrate porosity. For further details please refer TDS of Talrakpolybond $^{\circ}$ SB.

Storage

Talrakflortop[®] SL-C has a shelf life of at least 12 months. Store all materials in a cool dry place, in an elevated condition.

Precautions

Health and safety Instruction

Talrakflortop® SL-C contains cement powders which, when mixed or become damp, release alkalis which can be harmful to the skin. During use, avoid inhalation of dust and contact with skin and eyes. Wear suitable protective clothing, gloves, eye protection and respiratory protective equipment.



Talrak Construction Chemicals Pvt. Ltd.

An ISO 9001:2015 Certified Company

Works

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Important note:

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Ref: TCC/TDS/IF07 - R3