

Talrak® Fibcrete

Fiber reinforced, high performance overlay concrete pre mix



The Construction Alchemists

Description

Talrak® Fibcrete is a fiber reinforced concrete pre mix which needs just addition of mixing water and 12.5mm graded coarse aggregates at site to produce high performance concrete specially designed for industrial flooring, rigid pavements and bridge overlay.

Features & Benefits

- **User friendly** - needs just mixing water and graded coarse aggregates like conventional concrete.
- High strength, abrasion, impact and shrinkage resistant avoiding formation and propagation of cracks.
- Can be applied on the wet mineral substrate.
- **Fiber reinforced**- Hence resistant to potential damages due to traffic movement.
- Suitable for new and refurbishment of existing industrial floors and pavements.
- Can be laid at any thickness of 40mm without a need for steel reinforcement.

Primary Application

- Reinstatement of new/existing concrete floors subject to typical industrial/commercial traffic such as forklift, trolleys, foot traffic, material movement directly over the floor etc.
- Can also be laid as high performance wearing course in bridges, and parking lots subject to traffic.

Technical properties

Compressive Strength

Age (in days)	24 Hrs	3 days	7 days	28 days
Compressive Strength (Mpa)	20	28	35	45

Flexural Strength

Age (in days)	7 days	28 days
Flexural Strength (Mpa)	3.6	4.2

Rheological Property

Flow : ~200mm on truncated cone flow, depending on ambient temperature.

Compaction : By vibration and tamping

Application thickness : Not less than 40mm

Curing Time : Curing shall start as early as practicable and shall continue at least for 21 days before the concrete is loaded.

Talrakcure® WB curing compound is recommended for effective curing, however water curing is also preferable.

Specification Clause

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Application Instructions

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.

Priming

Prior to carrying out application of Talrak® Fibcrete the substrate must be wet and primed with Talrakpolybond® SB.

Mixing

6.25 ltrs of water is measured and placed in the mixer drum. While rotating the drum the contents of Talrak® Fibcrete bag shall be added slowly. The mixing shall be continued for 10 minutes to get a uniform consistency of the mix. Clean graded coarse aggregate of 12.5mm (SSD condition) shall be added to the wet mix and mixing continued for a further period of 6-8 mins. until an uniform mix is obtained.

Laying

The mixed material shall be spread on the primed concrete surface uniformly to the recommended thickness. For large floors/pavements long strip method of laying concrete is recommended. Talrak® Fibcrete shall be compacted by tapping or by use of vibrator as suitable.

Finishing

The top surface of the laid floor shall be finished like conventional concrete either by a metal float/trowel or a power trowel for large areas, before Talrak® Fibcrete is fully set.

Curing

The curing shall be started as early as practicable, essentially immediately after the completion of finishing. Ponding of water or spray application of Talrakcure® WB can be adopted for curing.

Estimating Packaging

Talrak® Fibcrete is supplied in a 25kg bag.

Yield

A 25 kg bag yields about 11.9 liters of mixed material. About 40 bags of Talrak® Fibcrete is required for producing 1m³ of mixed material using the following mix proportion-

Mix Proportion/m ³ of Talrak® Fibcrete	
Talrak® Fibcrete Dry powder	1000kg
12.5mm graded coarse aggregates in SSD condition conforming to IS :383	1000kg
Water	130ltrs

Coverage

Thickness	Area m ² / 25 Kg bag
40mm	0.62
50mm	0.50
60mm	0.41
75mm	0.33
100mm	0.25

Coverage - Talrakpolybond® SB

Talrakpolybond® SB has a coverage of ≈ 6 to 7m²/ltr depending on surface texture and substrate porosity. For further details please refer TDS of Talrakpolybond® SB

Storage

Talrak® Fibcrete has a shelf life of 12 months if kept in dry store in original, unopened containers. If stored at high temperature and/or high humidity conditions the shelf life may be reduced.

Precautions

Health and safety Instruction

Talrak® Fibcrete 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/IF05 - R3