Cemtop OUL40



constructive solutions

Heavy Duty High Abrasion Resistant Floor Screed for Overlays & Underlays at 15 to 40mm

Description

Cemtop OUL40 is a single component pre-blended dry mortar comprising of Cement, Graded high strength aggregates and performance polymers. Needs only water addition.

Cemtop OUL40 is applied at 15 to 40mm thick onto new or existing base concrete surface.

It is available in two types:

- 1. Internal use for any type of Industry. For thickness requirement exceeding 18mm, 8mm down good quality aggregates can be mixed
- 2. External use subject to UV radiation and areas which are continuously wet. For thickness requirement exceeding 18mm, 8mm down good quality aggregates can be mixed

Cemtop OUL40 is floor refurbishment system wherein the finished surface is similar to power troweled concrete surface but with higher wear resistance. It can be laid in proper levels even if the base is uneven.

Advantages

- Engineered to suit varied site conditions
- Usable for Internal and external working conditions.
- Large areas can be installed in single day.
- Easy to install, requires minimum tools and machines any flooring contractor can be guided to install the floor.
- It requires only 48 hours for curing and hardening. The floor is ready to accept full traffic after 48 hours.
- It can be used as final finished surface or can be over coated.

Technical properties

Compressive Strength	
7 days	>30 N/mm ²
28 days	>35 N/mm ²
Flexural Strength	
28 days	> 7 N/mm ²
Adhesion Strength	
2 days	1.5 - 2 N/mm ²
28 days	2.5 - 2.8 N/mm ²
Density	2350 Kgs/m ³
Water : Powder	0.13 - 0.14
Abrasion class	AR 2(as per BS 8204)

Note: 1. The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing field-applied samples may vary, depending on actual site conditions.

It is advised to carry out a trial on site for atleast 2 sqm. to assess site conditions before proceeding with the complete project.

Mixing Instructions

- Cemtop OUL40 should be mixed in forced action pan or drum mixer. For smaller batches paddle mixer or mixing station with maximum rpm of 600 to be used.
- Always add powder in water. Take 3.5 Iit. of water in an empty container and gradually add 25 kgs of Cemtop OUL40 powder and stir to get mix of desired consistency. Mix will have slump equivalent to concrete slump range of 60 to 80. Additional water upto 0.5 lit can be added to get desired trowel able consistency.

Installation Guide

Surface preparation

New concrete floors:

Concrete floors to receive the treatment should be at least 21 days old. Floors should be sound and free from contamination such as soil and grease, mortar and paint splashes or curing compound residues. Surface should have surface profile CSP of 7-9 which can be achieved with pneumatic scabbling, scarifying, milling, grinding followed by thorough washing with clean water, wet vacuum cleaning and allowing the surface to dry. Light oil and grease staining can be removed with degreasers followed by washing with clean water.

Old concrete floors:

Where deep seated contamination has occurred, mechanical methods such as blasting, grinding or scabbling should be used to provide a suitable clean surface. Any necessary repairs , sharp highs and lows should be carried out using Renderoc HS Xtra.

Priming

The substrate should be thoroughly prepared as detailed above.

The substrate should be presoaked with clean water for 4 minimum of 4 hours immediately prior to application of Nitoflor Cemprime1 as primer*. Before proceeding with the application of primer, the surface should be in a saturated surface dry condition, with no free standing water. Use of wet vacuum cleaner is recommended.

The objective of priming the substrate is to 'seal' it, and thereby prevent release of air, rising from the substrate, and thus forming bubbles or pinholes in the surface of the Cemtop OUL40. Additionally it aids adhesion between the two surfaces.

The substrate must be primed using combination of Nitoflor Cemprime1 in the below proportion (6 Kg Cement + 1 Kg Bonding Additive + 3 Kg Water (approx. consumption of mix = 0.12 kg/Sqm) and allowed to reach tacky state. The primer should be brushed into the floor by broom. Spray or roller

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application is not recommended as insufficient material will be applied. When the first coat of the primer is touch dry, a second coat of Nitoflor Cemprime1 should be applied to the substrate in the similar manner. Ponding of primer must be avoided as this can lead to failure at the bond line.

- Concrete floor base should be sound without any structural defects. Prep the surface to CSP profile of 7-9. Surface should be free of loose particles dust etc. Grout all the cracks. Pretreat all the joints of base concrete floor. Surface should be in SSD condition. Surface should be free from oil, paint etc.
- Prime the damp surface with no standing water. Mix 1 lit Nitoflor Cemprime1 in 3 lit of water and add 6-7 kgs cement. Mix with paddle mixer to get uniform mixing and brush apply on prepared surface.
- Use guides/ side forms of height to match desired FFL (finished floor level) Pour mixed material in between forms, spread and level with single beam vibrator/ vibratory bull float. Floating with bull float, leveling with floats, bump cutters, etc., Ensure proper edge troweling, floating with power trowel to achieve desired finish.
- Moist curing by sprinkling water for 1-2 days.

Yield

Cemtop OUL40 is supplied in 25kgs bag. 25 kg yields 0.011 cum of volume or 2.2 kgs per m² per 1mm thickness. Example-10mm thick floor will require 22.00 kgs per m².

For thickness exceeding 15mm add 8mm down clean, dry aggregates in 2:1 proportion by weight. 2 parts Cemtop OUL40 & 1 part aggregates. Higher abrasion resistant aggregates will give better results.

Limitations

- Concrete slabs onto which Cemtop OUL40 is to be applied must have a surface temperature of at least 5°C, with the air temperature maintained at 10°C, or more, during application.
- For temperatures above 35°C refer to "Hot Weather working".
- Prevent freezing of Cemtop OUL40 for 48 hours from placement.
- Cemtop UL40 should not be applied to asphalt substrates.
- If the substrate onto which Cemtop OUL40 is applied moves or cracks, reflective cracking may occur.
- Only suitable for use out of direct sunlight and/or drying winds during application and initial curing period

Joints

Forming grooves to match joints of base or forming panels of maximum 25 m². Aspect ratio of panels not to exceed 1.2.

Storage

Shelf life

Cemtop OUL40 has a shelf life of 6 months and Cemprime 1 has a shelf life of 12 months, when stored in warehouse conditions below 20°C in the original, unopened packs

Health & Safety

Full health and safety information can be supplied on request. The unmixed powder is irritant as is any cement product and direct skin contact should be avoided

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Important note:

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.



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