

COSTARFLO 400

Fast Setting Heavy Duty Cementitious Overlayment



PRODUCT DESCRIPTION

Costarflo 400 is fast setting, heavy duty cementitious self-leveling overlayment for concrete floors. It creates an abrasion resistant smooth surface which can be used as a high strength underlayment for coatings and floor coverings; it can also be used as a decorative finish in show rooms, offices and malls when polished.

BENEFITS

- Fast setting and heavy duty overlayment
- Smooth surface profile
- Ensures safe use in places with poor ventilation
- Excellent flow
- Excellent flexural and tensile strength
- Dense corrosion resistance surface
- Great resistance to chemicals, acid and solvents
- Great anti-static properties
- Can be mixed at a wide range of consistencies.
- Dynamic load stability.

USES

COSTARFLO 400 is used to provide a heavy duty leveled surface for:

- Storage and assembly halls,
- Maintenance workshops, & garages,
- Loading ramps
- Factories
- Ware houses & shopping centers,
- Laboratories,
- Plant / Storage room for pharmaceutical and health care product manufacturing units etc.
- It can also be used for repair of surface defects on concrete floors.

APPLICATION

Surface Preparation

- Clean surface of oil, grease, dirt, laitance and loose material, down to sound concrete.
- New concrete surfaces should be allowed to cure 4 – 6 weeks.
- All cracks and damaged areas should be repaired. Smooth troweled concrete must be acid etched to ensure proper adhesion.

Priming

Concrete substrates should be primed with Costar Primer 10 before application of Costarflo 400.

Mixing

- Add Costarflo 400 into 5 – 6 liters of water and mix with a slow speed drill (300-600 rpm) until a lump-free mix is achieved.
- Ensure that adequate water is added to the product. 3% organic pigment can be added to the mixing water until a streak-free mix is achieved.
- Pour the mixed material onto the primed surface and allow to flow and attain a smooth finish. Minimal work with a smoothing trowel is required.
- The use of a spiked roller will help eliminate entrapped air and smooth out flow lines to give a more uniform surface appearance.
- Surfaces with Costarflo 400 is ready for foot and covering with ceramic tiles after 3-4 hours while for heavy traffic, the time is 16 hours after application.

CONSUMPTION:

Theoretical consumption of (1.3kg/m²) can be adopted for use.

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TECHNICAL PROPERTIES

| | |
|-----------------------|---|
| Packaging | 20kg bag |
| Appearance | Grey/white powder |
| Shelf life | 12 months from date of production |
| Storage conditions | Product must be stored in original, unopened, and undamaged sealed packaging in dry condition and temperature between +5 °C and +35 °C. |
| Water ratio | 5 to 6litres of water per 20kg bag of product |
| Setting time, | Initial: Approx. 20 minutes Final: 20 to 40 minutes ASTM C191 |
| Compressive strength, | 24 h ours: (22.5 MPa) 7 days: (31.4 MPa) 28 days: (36.9 MPa) ASTM C109 |
| Length change, | 28 days, air: $\geq -0.05\%$ 28 days, water: $\leq 0.05\%$ ASTM C157 |
| Density | 2.0kg/l |
| Open time | Approximately 100 minute@20 °C and 45minute@35°C |
| Substrate temp | +5 °C min. / +35 °C max |

NOTE: Actual consumption of product is dependent on the porosity of substrate and the existing profile of the substrate

PRECAUTIONS: _____

- Do not exceed the recommended water dosage

- Do not add cement or any other alien substance to the product while mixing
- A spike roller can be used as additional support to achieve desired level where necessary.



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SHELF LIFE

Protect from freezing and contamination. Shelf life in unopened, original containers is 12 months, when stored at 68°F (20°C)

STANDARD COMPLIANCE

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars
- ASTM C157 Standard Test Method for Length Change of Hardened Hydraulic-Cement, Mortar, and Concrete
- ASTM C191 Standard Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle.

HEALTH & SAFETY

- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Wear suitable protective clothing, gloves and eye/face protection.
- If swallowed, seek medical advice immediately and show this container or label.
- Keep the coating materials above 10°C.
- Do not apply when surface temperature is below 10°C or over 35°C.
- Do not apply in environments of high humidity/moisture, or if pending rain is a possibility.
- Once mixed, it must be used within its pot life as specified in earlier section

ADDITIONAL INFORMATION

Costarchem manufactures a complete range of construction chemical products which include:

- Concrete admixtures
- Waterproofing system
- Flooring system
- Cementitious and epoxy precision grouts
- Damp-proofing products
- Sealants and adhesives
- Repair and refurbishment systems

For more information on any of our products, please contact Costarchem global or regional office.

LEGAL NOTE

The information and recommendations relating to the application of Costarchem products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with the stated recommendations in the product datasheets. Whilst Costarchem endeavors to ensure that any advice, recommendation, specification of 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 of information given by it. The user of the product must test the product's suitability for the intended application and purpose. Costarchem reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.