

Ultra Heavy duty industrial grade self-smoothing floor topping

DESCRIPTION

Cemflow Extreme is a self-smoothing, cement based, dimensionally stable, and fast drying, industrial wearing screed designed for areas of interse and extremely heavy traffic.

Cemflow Extreme speed of application minimizes project downtime for new and renovation projects where foot traffic is possible after 3 hours.

Cemflow Extreme is supplied as a pre-blended dry powder designed for application between 5 mm to 15 mm (in one application) to provide a finished industrial floor.

Cemflow Extreme exceeds the minimum requirement of the special class abrasion resistance and is able to cope with the high levels of wear and abrasion found in industrial applications.

Cemflow Extreme is recommended to be sealed in areas where water may come into direct contact with the cured material. Cemflow Extreme may be sealed with Strongcoat WD water based epoxy coating, or if a matt finish is required Cemflow Sealer can be used. (Further information is available from our Technical Department or the Product Data Sheets).

APPLICATIONS

Cemflow Extreme provides the strength and durability required a wide range of industrial and commercial environments such as warehouses, food processing plants etc. subjected to heavy traffic.

ADVANTAGES

- » Single component, requires only addition of water.
- » Fast setting.
- Excellent strength and durability.
- » Easy and fast application.
- » Excellent adhesion.
- » Excellent abrasion resistance.

STANDARDS

Cemflow Extreme complies with EN 13813, Class CT-C50-F10-AR0.5.

TECHNICAL PROPERTIES. W/P = 0.17:

Working time: 15 - 20 min @ 20°C

Setting time: 90 - 120 min @ 20°C

Foot traffic: 3 - 4 hr

> 30 N/mm² @ 1 day

Compressive strength:

> 40 N/mm² @ 7 days

BS EN 13892-2

> 50 N/mm² @ 28 days

Flexural strength: BS EN 13892-2

> 6 N/mm² @ 1 day > 10 N/mm² @ 7 days > 12 N/mm² @ 28 days

Abrasion resistance: BS EN 13892-4 AR0.5 (special)

Flow properties using

30 mm Ø x 50 mm flow

Consumption per mm

120 - 140 mm

ring:

BS EN 12706

1.75 kg/m²

thickness:

Application thickness: 5 - 15 mm

METHOD OF USE

SUBSTRATE PREPARATION

Concrete and sand/cement screeds must be sound, dry and fully cured (not subject to shrinkage) and any laitance or surface treatments must be removed by mechanical means such as grit blasting. The surface tensile strength of the substrate should be a minimum 1.5 N/mm².

For uneven surfaces, apply Cemflow Base to a minimum 5mm to provide a smooth level surface, prior to the application of Cemflow Extreme. (Please refer to relevant product Technical Data Sheets).

The concrete substrate should be below 75% RH alternatively Strongcoat DPM should be applied. The temperature of the floor must be maintained above 10°C throughout the application and drying of the Cemflow Extreme.

Prior to application on to impervious surfaces the area should be thorougly cleaned and lightly scarified. Any existing surfaces should be well bonded (> 1.5 N/mm²). The perimeter of the room and any columns should be isolated using a compressible strip.

For application over underfloor heating please contact DCP Technical Department for specific advice.

PRIMING

To concrete and cement screeds:

Application on to sand/cement screeds, concrete, Cemflow Base and other porous substrates, first seal the prepared surface by applying one coat of Neoprene Primer diluted with 4 potable parts water by soft broom or brush, and allow to dry.

Apply a second coat of primer diluted 3:1 by the same method and allow thoroughly to dry. Depending on the porosity of the substrate a further coat may be required.

To confirm if this is necessary a small application area should be undertaken to ascertain the correct priming requirements. As an alternative, Strongcoat Primer may be used.

Priming with Strongcoat Primer:

Apply one coat Strongcoat Primer and allow to cure. Apply 2^{nd} coat and whilst still tacky fully blind with DCP Coarse Aggregate at approximately 3 kg/m² until the surface is covered and no resin spots remain. The rate of application is approximately 3 kg/m². Allow to dry fully overnight and remove excess aggregate before applying the Cemflow Extreme.

To cured Cemflow Base:

For application over Cemflow Base apply Neoprene Primer diluted 3 parts water to 1 part Neoprene Primer by brush or soft broom and allow to dry thoroughly. Apply a further application of Neoprene Primer diluted 3:1 with water and again allow to dry thoroughly.

To impervious surfaces:

For application onto impervious surfaces, such as tiles, coatings or onto Strongcoat DPM (please read relevant product technical data sheet).

Apply Strongcoat Primer and whilst it is still tacky fully blind with DCP Coarse Aggregate 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 the Cemflow Extreme.

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 4.0 - 4.5 litres 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. The material should be mixed for a minimum of 3 minutes. Leave to stand for 2 - 3 minutes and mix briefly for 1 minute before applying.

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 35cc flow ring.

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 mm to 15 mm in one pass only.

For the application of any seal coats, please refer to relevant Technical Data Sheets.

REMARKS

- Do not place when the substrate temperature is below 10°C or when the ambient temperature is 10°C and falling.
- » Protect from frost.
- Do not exceed the maximum recommended water content and only use potable cold water.
- This product is not recommended for external use or situations where water may come into direct contact with the cured material.
- This product should not be applied to asphalt or bituminous surfaces.

CLEANING

Wash tools with water immediately after use.

PACKAGING

Cemflow Extreme is available in 25 kg bags.

STORAGE

Cemflow Extreme has a shelf life of 6 months from date of manufacture if stored at temperatures between 10°C and 30°C in unopened bags and under dry warehouse conditions

Protect from frost.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

CAUTIONS

HEALTH AND SAFETY

For further information refer to the Material Safety Data Sheet.

FIRE

Cemflow Extreme is nonflammable.



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Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

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