

# CEMFLOW BASE

## Pump applied base screed



TECHNICAL DATA SHEET PUBLISHED SEPT 2015

### PRODUCT FEATURES

**Cemflow Base** is designed as a pump applied levelling base screed for use under **Cemflow Topping** or resin based materials, where thicker applications are required when upgrading and renovating new and existing internal floors.

Cemflow Base is supplied as a pre-blended dry powder designed for application between 5 and 50mm in one application, to provide a sound base.

Cemflow Base is self - smoothing, dimensionally stable and fast drying. It is suitable for use in a wide range of industrial environments such as warehouses, food processing plants etc.

Typically Cemflow Base can be pumped up to 900m<sup>2</sup> per day, alternatively a coverage of 400m<sup>2</sup> can be achieved when hand applied, dependent upon manpower, thickness applied and equipment used.

Cemflow Base is not designed as a wearing surface and should be covered with a minimum 5mm application of Cemflow Topping or a resin based coating or screed, where a wearing surface is required.

### MATERIALS SUPPLIED

25Kg paper sacks.

### STORAGE

Protect from frost and store under dry warehouse conditions at a temperature between 10°C and 30°C.

### SHELF LIFE

6 months in unopened bags and stored under good conditions.

### COVERAGE

A 25Kg bag using 4.25 litres of clean water will yield approx. 13.8 litres.

A 25Kg pack of Cemflow Base will cover approximately 1.4m<sup>2</sup> at 10mm thickness.

### TECHNICAL INFORMATION

EN 13813 Designation	CT-C30-F7
Working Time @ 20°C	20 - 30 minutes
Vicat setting time @ 20°C	3 hours
Foot Traffic Light Traffic	3 hours 24 hours
Compressive Strength (N/mm <sup>2</sup> ) (EN 13892-2)	> 15.0 > 25.0 > 30.0
Flexural Strength (N/mm <sup>2</sup> ) (EN 13892-2)	> 2.0 > 5.0 > 7.0
Flow properties using 30mm ø x 50mm flow ring (EN 12706)	110 – 130mm
Consumption per mm thickness	1.814 kg/ m <sup>2</sup>
Application thickness	5 – 50 mm

### APPLICATION INSTRUCTIONS

#### SURFACE 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/mm<sup>2</sup>.

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 Base.

Prior to application on to impervious surfaces the area should be thoroughly cleaned and lightly scarified. Any existing surfaces should be well bonded (>1.5Nmm<sup>2</sup>).

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

For application on to sand / cement screeds, concrete and other porous substrates, first seal the prepared surface by applying one diluted coat of Neoprene Primer, diluted one part Neoprene Primer with 4 parts potable water by soft broom or brush, and allow to thoroughly 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 2nd coat and whilst still tacky fully blind with DCP Coarse Aggregate at approximately 3kg/m<sup>2</sup> until the surface is covered and no resin spots remain. The rate of application is approximately 3kg/m<sup>2</sup>. Allow to dry fully overnight and remove excess aggregate before applying the Cemflow Topping.

### TO IMPERVIOUS SURFACES

For application on to 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 3kg/m<sup>2</sup>, until the surface is covered and no resin spots remain. Allow to dry fully overnight and remove excess aggregate before applying the Cemflow Topping.

## MIXING

### HAND APPLICATION

Use a power-whisk fitted in a heavy-duty slow speed electric drill. Mix in the proportion of 25Kg 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. 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 120mm using a 35cc flow ring.

To avoid separation, applications greater than 15mm require less water and therefore a reduced flow.

## 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 5mm to 50mm in one pass only. Apply Cemflow Topping over Cemflow Base when it is at least 24 hours old and the surface is primed with Neoprene Primer diluted with 3 parts water. For resin screeds allow at least 72 hours before priming with the appropriate primer.

Where materials are to be applied over the surface of the hardened Cemflow Base, it is good practice to STR the surface prior to carrying out subsequent treatments.

## CLEANING

Wash tools with water immediately after use.

## PRECAUTIONS

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.

## HEALTH AND SAFETY

Refer to the product Material Safety Data Sheets before using Cemflow Base.

## GENERAL GUIDANCE

This data sheet is for general guidance purposes only and may contain information that is inappropriate for certain conditions of use. Accordingly, all recommendations and suggestions are made without guarantee. Further information is available from our Technical Department.

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#### Note:

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