# **CEMFLOW COMMERCIAL**



# Commercial and industrial wearing screed and underlayment

TECHNICAL DATA SHEET PUBLISHED JANUARY 2020

#### **PRODUCT FEATURES**

**Cemflow Commercial** is designed as a medium duty floor topping for upgrading and renovating new and existing commercial and industrial internal floors.

Cemflow Commercial is supplied as a pre-blended dry powder and can be applied between 2mm to 10mm (in one application) to provide an underlayment or wearing floor.

Cemflow Commercial is self-smoothing, dimensionally stable and fast drying. Cemflow Commercial is suitable for application on to a wide range of subfloor types, including; sand and cement screeds, concrete, terazzo, granolithic, epoxy and polyurethane resins and waterproof membranes.

When used as a wearing floor, Cemflow Commercial should be sealed using Cemflow Sealer following the instructions on the sealer technical datasheet. When used as an underlayment Cemflow Commercial can receive floor coverings after 24 hours.

Cemflow Commercial is protein free so may be used in biologically sensitive areas.

# **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 5 litres of clean water will yield approx.  $14.4 \ \text{litres}.$ 

A 25kg pack of Cemflow Commercial will cover approximately 4.8m² at 3mm thickness.

#### **TECHNICAL INFORMATION**

BS EN 13813 Class		CT-C25-F6-AR1
Working Time	@ 20°C	15 – 20 minutes
Setting time	@ 20°C	90 minutes
Foot traffic		3 hours
Compressive strength (BS EN 13892-2)	(N/mm²) 1 day 7 days 28 days	> 6.0 > 15.0 > 30.0
Flexural strength ( N/ (BS EN 13892-2)	mm²) 1 day 7 days 28 days	> 2.0 > 4.0 > 5.0
Consumption per mm thickness		1.75 kg/m²
Application thickness		2mm - 10mm
Slip resistance BS EN 13036-4		Dry 69 Wet 54
Abrasion resistance (BS EN 13892-4)		AR 1
BRE Screed Test		1.00 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/mm². If applying over **Cemflow Base** an STR should be used to remove any laitance followed by vacuuming and priming with **Neoprene Primer**.

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 Commercial.

#### **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  $2^{nd}$  coat and whilst still tacky fully blind with DCP Coarse Aggregate at approximately  $3kg/m^2$  until the surface is covered and no resin spots remain. The rate of application is approximately  $3kg/m^2$ . Allow to dry fully overnight and remove excess aggregate before applying the Cemflow Commercial.

## 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 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  $3kg/m^2$ , until the surface is covered and no resin spots remain. Allow to dry fully overnight and remove excess aggregate before applying the Cemflow Commercial.

#### MIXING

Use a power-whisk fitted in a heavy-duty slow speed electric drill. Mix in the proportion of 25kg of powder to 5.0 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. Mix for a minimum of 2 minutes.

## **APPLICATION**

# HAND APPLICATION

Pour the mixed material onto the prepared surface and allow to attain a smooth finish. The use of a spiked roller will help to eliminate entrapped air and smooth out flow lines. Apply at a thickness between 3-6mm in one application. The product will remain workable for approximately 15-20 minutes at 20°C. Cemflow Commercial will accept foot traffic after approximately 3 hours and light traffic after approximately 24 hours at 20°C.

#### **PUMP APPLICATION**

Cemflow Commercial is suitable for pump application up to 6mm thickness. Please contact our Technical Department for more specific information.

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

#### **CLEANING**

Wash tools with water immediately after use.

#### **PRECAUTIONS**

Do not place when the substrate temperature is below  $10^{\circ}\text{C}$  or when the ambient temperature is  $10^{\circ}\text{C}$  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 ashpalt or bituminous surfaces.

#### **HEALTH AND SAFETY**

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

## **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

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.

