



# CEMFLOW EXTERIOR TOPPING

Polymer modified exterior topping

TECHNICAL DATA SHEET  
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## PRODUCT FEATURES

**Cemflow Exterior Topping** is a polymer modified cementitious topping designed to eliminate surface irregularities and smooth internal and external concrete surfaces exposed to industrial traffic.

Cemflow Exterior Topping is supplied as a pre-blended dry powder designed for application between 5mm and 15mm (in one application) to provide an exterior wearing surface.

Cemflow Exterior Topping is self-smoothing, dimensionally stable and fast drying, allowing vehicles to traffic the surface after only 48 hours at 20°C.

Cemflow Exterior Topping can be pumped up to 1000m<sup>2</sup> per day. When hand applied, coverage of 350m<sup>2</sup> can be achieved dependent upon manpower and equipment used.

## MATERIALS SUPPLIED

25Kg paper sacks.

## STORAGE

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

Dampness will reduce the shelf life of the powder and may cause it to set in the bag.

## SHELF LIFE

6 months in unopened bags stored as described above.

## COVERAGE

A 25Kg bag mixed with 4.0 litres of clean potable water will yield 14.25 litres, giving coverage of 2.0m<sup>2</sup> at 7mm thickness.

## TECHNICAL INFORMATION

Working time @ 20°C	15 minutes
Wet density / Kg / m <sup>3</sup>	2050
Foot traffic @ 5°C	24 hours
@ 20°C	3 hours
Compressive strength / N/mm <sup>2</sup> BS EN 13892-2	
1 day	20.0
7 days	30.0
28 days	40.0
Flexural strength @ 28 days / N/mm <sup>2</sup> BS EN 13892-2	
1 day	5.0
7 days	8.0
28 days	10.0
Flow properties using 50cc flow ring	120 – 140 mm
Consumption per mm thickness	1.75 Kg / m <sup>2</sup>
Minimum / maximum application	5 – 15 mm
Bond strength to concrete / N/mm <sup>2</sup>	>1.0
Slip resistance - typical figures BS 7976:Part 2:2002, 4S slider	Dry 63 Wet 58

\* Flow determined using 50cc cylinder

## APPLICATION INSTRUCTIONS

Do not install if rain is expected within 6 to 8 hours or if freezing temperatures are expected within 24 hours of application. In areas where debris such as dirt, leaves, litter etc. could be blown onto the area to be applied, we recommend that the area is protected to prevent contamination.

## 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>.



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## PRIMING

It is not usually necessary to prime non-absorbent surfaces. However, to ensure satisfactory bonding, the prepared surface should be dampened down to minimise pinholing. Ensure that the surface is in a saturated surface dry condition i.e. no visible surface water, prior to application of Cemflow Exterior Topping.

**In Hot Climates:** To avoid rapid drying of the Cemflow Exterior Topping on the prepared surface, prime by applying a coat of **Neoprene Primer** diluted with 5 parts potable water. The primer must be applied on the same day and allowed to dry before the application of Cemflow Exterior Topping.

## MIXING

### HAND APPLICATION

Mixing should be carried out using a power whisk fitted to a heavy-duty electric drill. Pour 4.0 to 4.5 litres of clean, potable water into a suitably sized container and gradually add the 25Kg of Cemflow Exterior Topping while stirring, until a smooth, lump-free consistency is achieved.

### PUMP APPLICATION

Mix in accordance with the pump manufacturer's recommendations and adjust the rate of water flow until the mix is a smooth, fluid, uniform grey liquid with no surface separation. Flow checks should be carried out at regular intervals during pumping.

### APPLICATION

Once mixing is complete, pour the mix onto the prepared surface and allow the material to attain the required level. The mix has a working time of approximately 15 minutes at 20°C; this time will be extended at lower temperatures and reduced at higher temperatures. The use of a spiked roller will help eliminate entrapped air and smooth out flow lines. Apply at a thickness between 5mm and 15mm in one pass only.

Maintaining a "wet edge" as you work will help to minimise natural colour variations that can occur between sections.

- **Extra water should not be added to the mix. If the material thickens before it is applied it should be discarded.**

For thicker applications it is advisable to use the lowest recommended water addition level, to reduce the potential of surface laitance.

To lay Cemflow Exterior Topping to falls, use the minimum water addition rate of 4.0 litres and mix to a trowellable consistency.

## PATCH REPAIRS

Isolated areas up to 50mm in depth can be repaired by adding 12.5Kg of clean, dry, 3 – 6mm aggregate to a 25Kg bag of Cemflow Exterior Topping.

## SEALING

Cemflow Exterior Topping does not need to be sealed. However if extra protection is required, we recommend the use of **Setcrete 6** against general liquid spills or **Quickmast 173** against aggressive chemical spills.

If a coloured coating is required we recommend applying a minimum of two coats of **Strongcoat WD** after 3 hours at 20°C.

## JOINTS

Ensure that all joints subject to movement, i.e. expansion and isolation joints, are carried up through the Cemflow Exterior Topping and filled with **Quickmast Joint Sealant**.

## CLEANING

Once mixing and laying are complete, tools should be cleaned immediately after use with cold water.

## PRECAUTIONS

- Do not place when the substrate temperature is below 5°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 clean potable water.
- Do not apply to Tarmacadam or asphalt surfaces.
- Avoid cleaning with acidic cleaning solutions.

## HEALTH AND SAFETY

Cemflow Exterior Topping contains cement, which is alkaline and may cause skin irritation. Please refer to the relevant Health and Safety Data Sheet for detailed information

## 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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