# CEMFLOW EXTERIOR TOPPING



### Polymer modified exterior screed

TECHNICAL DATA SHEET PUBLISHED JUNE 2019

#### **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.

#### SHELF LIFE

9 months in unopened bags and stored under good conditions.

#### **COVERAGE**

A 25kg bag using 4.0 litres of clean water will yield approx. 14.25 litres.

A 25kg pack of Cemflow Exterior Topping will cover approximately  $2.0m^2$  at 7mm thickness.

#### **TECHNICAL INFORMATION**

Working Time	@ 20°C	15 minutes
Setting time	@ 20°C	90 minutes
Foot traffic	@ 5°C @ 20°C	24hours 3 hours
Compressive strength (N/mm²) (EN 12190) 1 day 7 days 28 days		> 20.0 > 30.0 > 40.0
Flexural strength (N/r (BN 196-1)	nm²) 1 day 7 days 28 days	> 5.0 > 8.0 > 10.0
Abrasion resistance (unsealed) (BS EN 13892-4)		AR0,5 (Special)
Slip resistance (unsealed) (BS EN 13036-4)	Dry Wet	63 41
Chloride ion content (EN 1015-17)		≤ 0,05%
Thermal compatibility Part 1: Freeze-thaw (EN 13687-1)		≥ 0.8 N/mm²
Adhesive bond (EN 1542)		≥ 0.8 N/mm²
Capillary absorption (EN 13057)		≤ 0,5 kg.m².h <sup>0.5</sup>
Flow properties using 30mm ø x 50mm flow ring (BS EN 12706)		100 – 115mm
Consumption per mm thickness		1.75 kg/m²
Application thickness		5 – 15 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.

#### PRIMING

It is not usually necessary to prime 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

#### 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.

#### **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 105mm 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 5mm to 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 add sufficient water to reach a trowellable consistency.

#### **PATCH REPAIRS**

Isolated areas up to 50mm in depth can be repaired by adding 12.5 kg of clean, dry, 3 – 6mm aggregate to a 25 kg 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 **Setseal 6**.

#### **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 a suitable 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.
- Do not apply in temperatures over 25°C
- Protect from direct sun whilst applying and curing
- Do not apply in excessively windy conditions
- Do not apply in rain or when rain is forecast
- 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**

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

#### **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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