



Method Statement

Ref. #: DCP11/05-0083-A-2022



Cemflow Exterior Topping

(Polymer modified exterior screed)



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Section A : General Comments

General Notes:

The information below is a detailed overview of the application of **Cemflow Exterior Topping** flooring system and should be read in conjunction with the relevant technical data sheet prior to application. All DCP Products should be applied by experienced specialist contractors.

All the points below assume the correct preparation of the relevant surface.

High-Temperature Working:

Application temperature ranges from 10°C to 25°C and the Substrate's relative humidity must not exceed 75% unless a suitable primer is used.

It is suggested that, for temperatures above 35°C, the following guidelines are adopted as good working practice:

- i. Unmixed materials and equipment should be stored in a cool shaded area and away from direct sunlight.
- ii. Avoid application during the peak temperature of the day.
- iii. Plan for enough materials, tools, and labor to ensure a continuous applicant process.
- iv. Cool water is advised for mixing (temperature around 20°C).
- v. Avoid applying the material if the ambient temperature is around 25°C and rising

Low-Temperature Working:

It is suggested that, for temperatures below 10°C, the following guidelines are adopted as good working practice:

- i. Unmixed materials should be stored in a warm.
- ii. Cold temperatures will affect the properties of the material.
- iii. Avoid applying the grout if the temperature is around 10°C and falling.

Tools and Equipment:

It is suggested that the following list of equipment are adopted as a minimum requirement


<i>Personal protection</i>	:	<i>Protective overalls</i>	
	:	<i>Goggles or a face mask</i>	
	:	<i>Good quality gloves</i>	
	:	<i>Safety shoes</i>	
	:	<i>Safety helmet</i>	
<i>Preparation equipment</i>	:	<i>Concrete vacuum (Fig.1)</i>	
	:	<i>Grit blasting machine (Fig.2)</i>	
<i>Application equipment</i>	:	<i>Power-whisk fitted in a heavy-duty slow speed electric drill (Fig.3)</i>	
	:	<i>Empty bucket (Fig.4)</i>	
	:	<i>Pump (if required) (Fig.5)</i>	
	:	<i>Rubber spike shoes (Fig.6)</i>	
	:	<i>Masking tape (Fig.7)</i>	
	:	<i>Spike roller (if required) (Fig.8)</i>	



Fig.1: Concrete vacuum



Fig.2: Grit blasting machine



Fig.3: Power-whisk fitted in a heavy-duty slow speed electric drill



Fig.4: Empty Bucket



Fig.5: Pump



Fig.6: Rubber spike shoes



Fig.7: Masking tape



Fig.8: Spike roller

Section B : Application

1.0 Substrate Preparation

1.1. Concrete substrates should be fully cured and achieve a minimum compressive strength of 25 N/mm² and a minimum pull-off strength of 1.5 N/mm².

1.2. Excess laitance deposits are best removed mechanically by grit blasting, followed by vacuum cleaning to remove dust debris. All preparation equipment should be of a type approved by DCP.



1.3. Apply the product to a small test area before actual application to check for any problems with the surface preparation.

Note: The temperature of the floor must be maintained above 10°C throughout the application and drying of the Cemflow Exterior Topping.

Joints and Moving Cracks

- **Cemflow Exterior Topping** shouldn't be installed over any non-filled/sealed joints or any moving cracks.
- Open up and clean the existing joints in between the concrete slab and vacuum thoroughly.
- All dust, loose and friable material must be removed from all joint voids before application of any joint sealant.
- All existing joints such as (expansion, isolation, construction, and control joints) as well as all moving cracks, must be sealed using a proper sealing compound specifically designed for use in joints.
- It is advisable to reflect any existing joints in the same width, direction, and location on the surface of the finished screed.

2.0 Priming

2.1. It is not usually necessary to prime absorbent surfaces.

2.2. To ensure satisfactory bonding, the prepared surface should be dampened down to minimise pinholing.

2.3. Ensure that the surface is in a saturated surface dry condition i.e. no visible surface water, prior to application of **Cemflow Exterior Topping**.

3.0 Mixing

3.1. For hand application

- 3.1.1 Use power-whisk fitted in a heavy-duty slow-speed electric drill to mix 25 kg of powder to 4.0 – 4.5 litre of potable water.
- 3.1.2 For thicker applications it is advisable to use the lowest recommended water addition level (4 litre), to reduce the potential of surface laitance.
- 3.1.3 Place the mixing water into a clean container. And add the required weight of the dry powder slowly to the water while mixing continuously.

- 3.1.4 Continue mixing until a smooth, lumps-free consistency is achieved. Total mixing time is not to be less than 3 minutes.

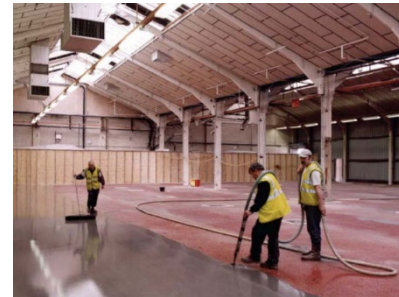


Notes:

- *Cool water is advised for mixing (temperature around 20°C or low).*
- *Measure the necessary amount of clean water per bag.*
- *Never add the water to the powder or add it in stages, as this alters the properties of the product.*
- Ensure that sufficient labor is available to enable continuous mixing and pouring.
- After mixing ensure that the mix is free from segregation and lumps.

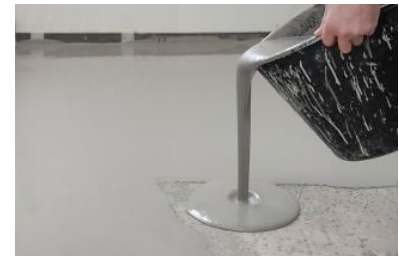
3.2 For Pump application

- 3.2.1 Mix the powder and water according to the method recommended by the pump manufacturers.
- 3.2.2 For 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 105 mm using a 35 cc flow ring.



4.0 Application

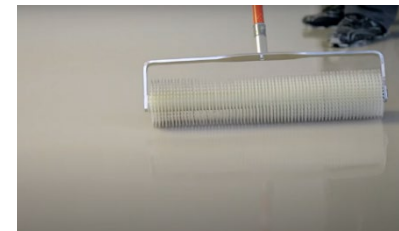
- 4.1 Each independent area of application should have sufficient materials, equipment and labour, it is always better to work in manageable sections of approximately 20 m².
- 4.2 Starting in one corner, pour or pump the mixed material onto the prepared surfaces in a continuous stream along one edge of the area to the required thickness and allow to attain a smooth finish.



Note: The product can be pumped using an appropriately sized pump.

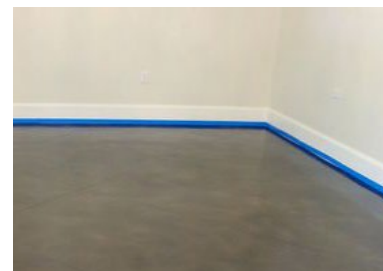
- 4.3 Apply at a thickness between 5 - 15 mm in one pass only.
- 4.4 The use of a spiked roller, while the applied layer is still wet, will help eliminate entrapped air and smooth out flow lines.

Note: Do not over the roll as this may cause an unsightly appearance.



- 4.5 Keep a continuous supply of mixed material flowing and place efficiently to maintain a “wet edge” which will reduce the differences between mixes where the material has already started to dry and set.

- 4.6 Avoid contact to vertical structures by putting in an edge strip such as foam tape.
- 4.7 For best results, pouring and leveling should be done in a continuous process.



Patch Repairs:

- 4.8 Isolated areas up to 50 mm 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**.

Notes:

- *If the mixing batch stiffens, it should be discarded, do not remix it with water.*
- *After application, **Cemflow Exterior Topping** (at 20°C) can be opened to:*
 - **Foot traffic:** after 3 hours.
 - **Vehicles traffic:** after 48 hours.
- *To lay **Cemflow Exterior Topping** to falls, add sufficient water to reach a trowellable consistency.*
- ***Cemflow Exterior Topping** does not need to be sealed. However, if extra protection is required, we recommend the use of **Setseal 6**.*
- *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.*
- *For hot climate conditions (temperature > 35°C), special procedures should be conducted.*
- *Freshly laid **Cemflow Exterior Topping** should be protected from direct sunlight or sources of heat and strong drying winds.*
- ***Cemflow Exterior Topping** should not be used on new concrete less than 14 days old or floors where rising damp is valid unless a suitable primer is used.*
- *Protect from frost.*
- ***Cemflow Exterior Topping** should not be applied to Tarmacadam or asphalt surfaces.*
- *Avoid cleaning with acidic cleaning solutions.*

5.0 Curing

- 5.1 Curing is not required in normal conditions.
- 5.2 In harsh climatic conditions like direct sunlight, the flow of wind, elevated temperatures, etc.; freshly hardened concrete surfaces should be cured with damp Hessian or to be covered with polyethylene sheets to minimize rapid evaporation and plastic shrinkage.

6.0 Cleaning

- 6.1 All tools used with **Cemflow Exterior Topping** should be cleaned with water immediately after finishing.



Section C : Cautions

Health and safety

Cemflow Exterior Topping may cause irritation on to skin or eyes. In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary. Apply in well ventilated areas.

Fire:

Cemflow Exterior Topping is nonflammable.

For further information on refer to the **Material Safety Data Sheet**.

Section D : Approval and Variations

This method statement is offered by DCP as a 'standard proposal' for the application of **Cemflow Exterior Topping**. It remains the responsibility of the Engineer to determine the correct method for any given application. Where alternative methods are to be used, these must be submitted to DCP for approval, in writing, prior to commencement of any work. DCP will not accept responsibility or liability for variations to the above method statement under any other condition.