

Commercial and industrial wearing screed and underlayment

#### **DESCRIPTION**

Cemflow Commercial is designed as a medium duty floor topping for upgrading and renovating new and existing commercial and industrial internal floors. It is selfsmoothing, dimensionally stable and fast drying.

Cemflow Commercial is supplied as a pre-blended dry powder and can be applied between 0.5 mm to 20 mm (in one application) to provide an underlayment or wearing floor.

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 also protein free so it may be used in biologically sensitive areas.

#### **APPLICATIONS**

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.

## **ADVANTAGES**

- » Single component, requires only addition of water.
- » Fast setting.
- » Dimensionally stable
- » Easy and fast application.
- » Excellent adhesion.
- » Excellent abrasion resistance.

### **STANDARDS**

Cemflow Commercial complies with EN 13813, Class CT-C30-F6-AR1.

#### **METHOD OF USE**

### SUBSTRATE 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.

# **TECHNICAL PROPERTIES. W/P = 0.18:**

Working time: 15 - 20 min @ 20°C

Setting time: 90 min @ 20°C

Foot trafic: 3 hr

Compressive strength:

EN 13892-2

@ 1 day ≥ 6 MPa@ 7 days ≥ 15 MPa@ 28 days ≥ 30 MPa

Flexural strength:

EN 13892-2

@ 1 day ≥ 2 MPa@ 7 days ≥ 4 MPa@ 28 days ≥ 6 MPa

Flow properties using

30 mm ø x 50 mm flow

120 - 140 mm

ring: EN 12706

Consumption: 1.75 kg/ m<sup>2</sup>

Thickness: 0.5 to 20 mm

Slip resistance:

EN 13036-4

Dry 69 Wet 54

Abrasion resistance:

EN 13892-4

AR1

BR screed test: 1 mm

Note: Cemflow Commercial when installed at 15 - 20 mm thickness should have the water powder ratio reduced to give a better slump combined with slower flow. 35cc flow ring check 120 mm.

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 3 kg/m² until the surface is covered and no resin spots remain.

The rate of application is approximately 3 kg/m². Allow to dry fully overnight and remove excess aggregate before applying the Cemflow Commercial.

## TO CURED CEMFLOW BASE/RENOVATION

For curing Cemflow Base/Renovation 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 SURFACE S

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 3 kg/m², 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**

Us e a power-whisk fitted in a heavy-duty slow speed electric drill. Mix in the proportion of 25 kg of powder to 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. 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 0.5 mm - 20 mm 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 20 mm thickness. Please contact our Technical Department for more specific information.

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

#### **REMARKS**

- 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.

#### **CLEANING**

Wash tools with water immediately after use.

## **PACKAGING**

Cemflow Commercial is available n 25 kg paper sacks.

## **COVERAGE**

A 25 kg bag using 4.5 litres of clean water will yield approximately 13.7 litres.

A 25 kg pack of Cemflow Commercial will cover approximately 4.5 m² at 3 mm thickness.

#### **STORAGE**

Cemflow Commercial has a shelf life of 6 months from date of manufacture if stored at tempertatures between 10°C and 30°C in unopened bags and under dry warehouse conditions Protect from frost.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

## **CAUTIONS**

# **HEALTH AND SAFETY**

For further information, refer to the Material Safety Data Sheet.

## **FIRE**

Cemflow Commercial is nonflammable.



### MORE FROM DON CONSTRUCTION PRODUCTS

A wide range of construction chemical products are manufactured by DCP which include:

- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.

## **Don Construction Products Ltd.**

Helions Bumpstead Road, Haverhill CB9 United Kingdom info.uk@dcp-int.com; info@dcp-int.co.uk www.dcp-int.com

#### 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.

www.dcp-int.com