Cemflow Base S Method Statement
(Cement based self-leveling industrial surface system)

Section A : General Comments

Equipment

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

Protective clothing	:	*Gloves, goggles, face mask and protective overalls*
Mixing equipment	:	*Power-whisk fitted in a heavy-duty slow speed electric drill*
Application equipment	:	*Spiked 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/mm^2 and a minimum pull-off strength of 1.5 N/mm^2. The concrete substrate should be below 75% RH and have less than 4% moisture content.

1.2 Alternatively, Strongcoat DPM should be applied according to the priming section.

2.0 Surface Preparation

2.1 Concrete surfaces must be degreased using degreasing products, torching or any other suitable method which assures the surface is free from any oil traces.

2.2 Surfaces should be sound and with no irregularities as they can affect the finish of the applied product.

2.3 Concrete surfaces are to be mechanically prepared to remove laitance and achieve a flat surface, grit blasting or surface profiling equipment are preferred. Acid etching can be used after consulting with DCP's Technical Department. Surface defects such as voids and blowholes should be repaired before application. Consult DCP's Technical Department for the best repair material.

2.4 Surfaces must be free of any dust or loose particles before product application. Use suitable methods like vacuuming or sweeping. If possible, apply the product on a small test area before actual application to check for any problems with the surface preparation.

2.5 The temperature of the floor must be maintained above 10°C throughout the application and drying of the Cemflow Base S.

3.0 Priming

Priming is done to seal the substrate in order to prevent pin holing caused by the release of air from the substrate. The following priming options are available:

3.1 Cemflow Primer

3.1.1 For application onto sand/cement screeds, concrete and other porous substrates, first seal the prepared surface by applying one coat of Cemflow Primer diluted with 3 parts potable water and allow to dry.

3.1.2 Prime the sealed surface by applying a second coat of Cemflow Primer diluted with 3 parts potable water and brush well into the surface. The primer must be allowed to dry before the application of Cemflow Base S.

3.2 Strongcoat Primer

3.2.1 For impervious surfaces, apply one coat of Strongcoat Primer and whilst still tacky fully blind with Antislip Aggregate #2 at approximately 3 kg/m^2 until the surface is covered and no resin spots remain. Allow to dry fully overnight and remove excess aggregate before applying Cemflow Base S.

3.2.2 For porous substrates, apply one coat of Strongcoat Primer and allow to cure. Apply second coat and whilst still tacky fully blind with Antislip Aggregate #2 in the manner mentioned above.

3.2.3 Allow to dry fully overnight and remove excess aggregate before applying Cemflow Base S.

3.3 Strongcoat DPM

3.3.1 For surfaces with RH between 75 and 85%, prime with 1 coat of Strongcoat DPM and allow to dry prior to application of Strongcoat Primer.

3.3.2 For surfaces with RH greater than 86%, prime with 2 coats of Strongcoat DPM and allow the second coat to dry before priming with Strongcoat Primer.

3.3.3 After Strongcoat DPM has been applied and left to cure, apply Strongcoat Primer and whilst it is still tacky fully blind with Antislip Aggregate #2 at approximately 3 kg/m^2, until the surface is covered and no resin spots remain. Allow to dry fully overnight and remove excess aggregate before applying Cemflow Base S.

4.0 Mixing

4.1 Hand Application

4.1.1 Use power-whisk fitted in a heavy-duty slow speed electric drill to mix 25 kg of powder to 4.5 - 4.8 litre of potable water.

4.1.2 Pour the water into a suitably sized bucket and gradually add the powder while mixing until a smooth, lump free consistency is achieved.

4.2 Pump Application

4.2.1 Mix the powder and water according to the method recommended by the pump manufacturers.

4.2.2 If 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, and producing a flow of approximately 130 mm using a 50 cc flow ring.

4.2.3 Applications greater than 15 mm require less water and therefore a reduced flow.

Note: Cool water is advised for mixing (temperature around 30°C or low).

5.0 Application

5.1 Each independent area of application should have sufficient materials, equipment and labours, it is always better to work in manageable sections of approximately 20 m^2.

5.2 Be sure that primer is dry prior to applying Cemflow Base S.

5.3 Pour or pump the mixed material within the working time of the mixture (15 - 20 minutes) onto the prepared surfaces and allow attaining a smooth finish.

5.4 Apply at a thickness between 5 - 50 mm in one pass only.

5.5 Use spiked roller to eliminate entrapped air and smooth out flow lines.

5.6 Seal Cemflow Base S with suitable epoxy resin or solvent based resin sealer, especially if water may come into direct contact with the cured Cemflow Base S.

5.7 In case of other materials are to be applied over the surface of the hardened Cemflow Base S, it is recommended to shot blasting the surface prior to carrying out subsequent treatments.

Notes:

- Do not exceed the recommended water content and only use cool potable water.
- If the ambient and the substrate temperature is expected to be less than 10°C or above 35°C within application, don't apply the material.
- Cemflow Base S is not recommended for external use or situations where water may come into contact with the cured material.
- Cemflow Base S 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.

6.0 Cleaning

6.1 Tools and equipment must be cleaned with water **immediately**.

Section C : Approval and variations

This method statement is offered by DCP as a 'standard proposal' for the application of **Cemflow Base S**. 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.