Strongcoat UN101 Method Statement
(Epoxy primer, levelling mortar, intermediate layer, repair mortar, and floor screed)

Section A : General Comments

High temperature working

The following measures should be adopted if the ambient temperatures exceeding 30°C:

(i) Unmixed materials and the equipment should be stored in a cool place and out of direct sunlight.

(ii) Plan for enough material, tools and labours to avoid any stoppage during the application process.

(iii) Avoid application through peak temperatures of the day.

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	:	*Stirring stick, slow speed mixing drill and mixing paddle, mixing bucket (25 litre), and Casco or Creteangle-type mixer*
Application equipment	:	*Brush, roller, or squeegee, rake, trowel, and spiked roller (depending on the system required)*

Section B : Application

1.0 Surface Preparation

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

1.2 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 Technical Department.

1.3 Surface defects such as voids and blowholes should be repaired before application. Consult DCP Technical Department for the best repair material.

1.4 Surfaces must be free of any dust or loose particles before product application. Use suitable methods like vacuuming or sweeping.

1.5 If possible, apply the product on a small test area before actual application to check for any problems with the surface preparation.

2.0 Mixing

Base : hardener mixing ratio = 86 : 14 (by weight)

2.1 Prior to mixing, stir individual components of **Strongcoat UN101**.

2.2 Add the **Strongcoat UN101** hardener to the base and using a jiffy-type mixer attached to a slow running electric drill, mix for approximately 2 minutes.

2.3 In case the addition of quartz sand is required, once the **Strongcoat UN101** hardener and base have been mixed, transfer the entire contents into a Casco or Creteangle-type mixer, taking care to ensure that the bottom and sides are thoroughly scraped.

2.4 Start the mixer and transfer to it the entire contents of the **Strongcoat UN101** quartz sand, taking care to ensure that these are completely dry and lump-free. Continue mixing for approximately 2 minutes.

*Note: Never mix **Strongcoat UN101** by hand as this could lead to areas of uncured material.*

3.0 Priming

3.1 For surfaces with RH between 75 and 85%, prime with one coat of **Strongcoat DPM** and allow to dry prior to application of **Strongcoat UN101**.

3.2 For surfaces with RH equal to or greater than 86%, prime with two coats of **Strongcoat DPM** and allow the second coat to dry before priming with **Strongcoat UN101**.

3.3 **Strongcoat UN101** can be applied using a brush, roller or squeegee to obtain a continuous primer coat. If needed, apply an additional coat of **Strongcoat UN101**, and allow to dry before the primer is covered with other flooring systems.

4.0 Application

4.1 Leveling mortar

4.1.1 Apply **Strongcoat UN101** onto the primed surface as a levelling mortar using a squeegee or a trowel to the required thicknesses.

4.1.2 For surface roughness of less than 1 mm, 0.1 - 0.3 mm quartz sand should be used, and the resin : sand mixing ratio should be 1 : 0.5, to yield a coverage rate of 1.80 kg/m^2/mm.

4.1.3 Whereas for surface roughness of up to 2 mm, 0.1 - 0.3 mm quartz sand should be used, and the resin : sand mixing ratio should be 1 : 1, to yield a coverage rate of 1.95 kg/m^2/mm.

4.2 Self-leveling mortar

4.2.1 0.1 - 0.3 mm quartz sand shall be used at a resin : sand mixing ratio of 1:1, to yield a coverage of 1.95 kg/m^2/mm.

4.2.2 Pour the mixed material onto the primed surface and spread using a trowel or rake at the required thickness and allow to attain a smooth finish.

4.2.3 While still wet, thoroughly spike roll **Strongcoat UN101** to help eliminate the entrapped air.

4.2.4 If an anti-slip finish is required, while the self-levelling mortar is still wet, broadcast with Antislip Aggregate #2 or #3 to excess at 4 kg/m^2, and wait until it gets dry, then remove excess aggregate.

4.2.5 Seal the system with **Strongcoat UN201** smooth roller coating. The coating can be applied using a roller or brush at the required thickness.

4.3 Floor screed/ repair mortar

4.3.1 Apply **Strongcoat UN101** bonding key onto the primed surface using a brush, roller or squeegee.

4.3.2 While the bonding key is still tacky, apply **Strongcoat UN101** evenly using a trowel at the required thicknesses. The material should be tamped well in place and finished with a steel trowel to achieve the required smoothness.

4.3.3 The following is a recommended quartz sand gradation for layer thickness of 15 - 20 mm:

20 pbw quartz sand 0.1 - 0.3 mm

30 pbw quartz sand 0.1 - 0.7 mm

50 pbw quartz sand 0.5 - 1.0 mm

4.3.4 Resin : sand mixing ratio shall be 1:8 to yield a coverage of 2 kg/m^2/mm.

4.3.5 The screed system can be overcoated with **Strongcoat UN201** smooth roller coating at 0.3 - 0.35 kg/m^2/coat.

5.0 Cleaning

5.1 Tools and equipment can be cleaned with DCP Solvent when it is wet. Dried **Strongcoat UN101** may be removed mechanically.

Section C : Approval and variations

This method statement is offered by DCP as a 'standard proposal' for the application of **Strongcoat UN101**. 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.