

Strongcoat MD Method Statement

(Heavy duty solvent free coal tar modified epoxy based flooring system)

Section A : General Comments

Equipment

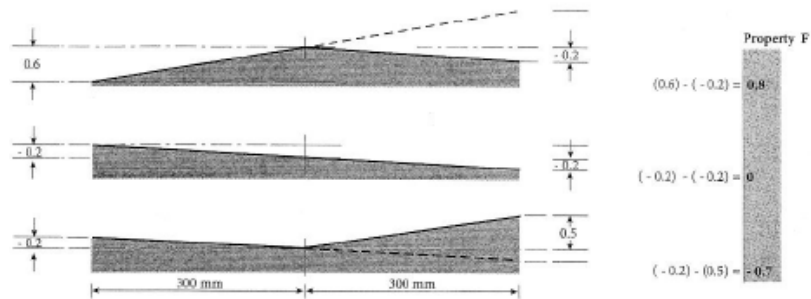
It is suggested that the following list of equipment is adopted as a minimum requirement:

<i>Protective clothing</i>	:	<i>Protective overalls</i>
	:	<i>Good quality gloves, goggles and ace mask</i>
<i>Mixing equipment</i>	:	<i>Force action mixer</i>
	:	<i>Mechanical drill fitted with suitable paddle</i>
<i>Application equipment</i>	:	<i>Rake</i>
	:	<i>Lambs wool roller</i>
	:	<i>Stainless steel trowel</i>

Section B : Application

1.0 Surface Preparation

- 1.1 Concrete floors must have a minimum compressive strength of 25 N/mm².
- 1.2 Concrete relative humidity should be 80% or less. Normally this range can be achieved by concrete age over 28 days. For low w/c ratio concrete floors, 80% hygrometer reading or less can be achieved before 28 days age.
- 1.3 The substrate should be dry, clean, dense and free from oil, grease, dust or any other contaminants.
- 1.4 Surface flatness should be clearly identified prior to the application of Strongcoat MD to ensure the regularity of the substrate as follows:
 - 1.4.1 Typically, the elevation differences at 300-500 mm distances should be measured using specialized digital equipment or manually by using straight edge.
 - 1.4.2 The measured point should be distributed uniformly across the floor or sections of large floors and recorded, below figure shows an example of surface flatness recording.



- 1.4.3 Raised sections should be treated by proper mechanical means like grinding, grit blasting or any other means while all deeper sections should be filled by epoxy mortar like Quickmast 341 to reach a smooth and flat surface as the below figure shows.



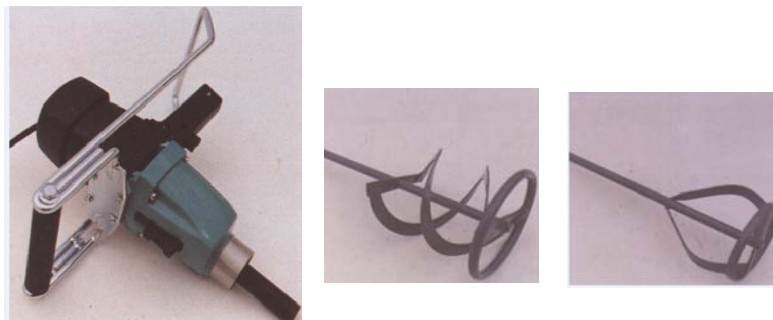
- 1.5 Saw cut joints should be filled with epoxy mortar like Quickmast 341 as a rigid joint filler or with Flexseal PU440 if flexible sealant is required.
- 1.6 Minor surface cracks should be opened to form a V-shape groove and filled with Quickmast 341 as the below figure shows.



Note: If the surface is contaminated by oil or grease, it is recommended to treat such areas with hot compressed air.

2.0 Priming

2.1 Stir the individual components thoroughly before mixing them together.



2.2 Pour the liquid hardener to the base and start mixing using a slow speed drill fitted with suitable mixing paddle as the below figure shows.

2.3 The mixed materials should be used within 1 hour @ 20°C and 40 minutes @ 35°C.

2.4 Use lambs wool roller to apply the mixed Strongcoat Primer onto the prepared surfaces, at coverage rate 5 m²/kg to achieve 200 microns DFT.

2.5 Apply Strongcoat MD while the primer is still tacky.

3.0 Mixing

3.1 Make sure that the materials to be used are stored in shaded area and protected from extremes of temperatures for at least 24 hours prior to application to avoid inconsistent workability and pot life.

3.2 Prior to mixing, stir the liquid components of Strongcoat MD (base & hardener).

3.3 Add the entire contents of the base and hardener to a force action mixer similar to the below figure and mix thoroughly for at least 3 minutes.



3.4 Add the filler and mix until a homogenous mixture is formed, this will take about 4 - 5 minutes.

4.0 Application

4.1 Work in lanes of width not exceeding 3 m.

4.2 Spread the slurry on the prepared surface by rake, at coverage 3.20 kg/m^2 at 2-3 mm thickness as the below figure shows.



4.3 Care should be taken when joining the lanes, to achieve a smooth connection. It is recommended to mask off edges with tape which is then removed while Strongcoat MD is still wet.

4.4 Dressing the silica aggregate should be applied **immediately** after laying of Strongcoat MD slurry.

4.5 Aggregate should be allowed to fall vertically until the surface is saturated and totally covered.

4.6 The following coverage rates should be followed: $5 - 6 \text{ kg/m}^2$ using Antislip Aggregate #2, and $6.5 - 7.5 \text{ kg/m}^2$ using Antislip Aggregate #0.



- 4.7 Remove excess aggregate after initial curing of Strongcoat MD. Excess aggregates can be reused if not contaminated during removal.

Notes:

- *Strongcoat MD should not be applied on to surfaces known to suffer from damp rising.*
- *Ramps should be treated with bigger size silica aggregates.*
- *Strongcoat MD should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 80%.*

5.0 Cleaning

- 5.1 Tools and equipment can be cleaned with DCP solvent prior to setting.

Section C : Approval and variations

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