

Profiber CW System Method Statement

Heavy duty carbon fibre reinforced polymer wrap structural strengthening system

Section A : General Comments

General

The recommended temperature of application is 10 - 35°C for substrate and ambient temperatures. The relative humidity and dew point of the substrate should be taken into consideration.

Pot life monitoring of Quickmast ER350 is mandatory, when working in hot weather, Quickmast ER350 should be cooled down prior to mixing.

Equipment

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

Protective clothing	:	Protective overalls
	:	Good quality gloves, goggles and face mask
Mixing equipment	:	Mechanical mixer or drill fitted with a suitable paddle
	:	Clean container (20 litres)
Preparation equipment	:	Broom
	:	Vacuum cleaner
	:	Concrete angle grinder
Application equipment	:	Roller
	:	Brush
	:	Plastic laminating roller

Section B : Application

1.0 Surface Preparation

- 1.1 All substrates shall be clean and free from oil, grease or any contaminants. Vacuum blast cleaning is recommended to remove all debris and dust.
- 1.2 Substrate should be dry with a maximum moisture content of 4% and should be a minimum of 28 days old.
- 1.3 All corners receiving the fabric shall be rounded to a minimum radius of 10 - 20 mm depending on fabric type, this can be done using handheld grinder machine or by building up using Quickmast 201EJ.
- 1.4 The bond surface shall be even and free from irregularities, pinholes or formwork marks. Fill all pinholes and smooth irregularities using multi-component epoxy putty like Quickmast 341.



2.0 Primer

- 2.1 Prepared surfaces should be primed using Quickmast CW Primer.
- 2.2 The primer should be applied by rollers at the rate of 0.25 - 0.30 kg/m² and allowed to cure for 24 hours.

3.0 Mixing of Quickmast ER350

- 3.1 To ensure proper mixing, a mechanically powered mixer or drill fitted with a suitable paddle should be used.
- 3.2 The content of the base and hardener should be poured into a suitable size container and mixed for 3 minutes.

4.0 Application of Profiber CW

- 4.1 Apply the mixed Quickmast ER350 to the prepared substrate using a brush or roller at a rate of 0.275 kg/m².
- 4.2 Within the open time of the adhesive resin, place the Profiber CW fabric onto the resin in the required direction and carefully pressed the fabric using a plastic laminating roller until the resin is squeezed out through the fabric.
- 4.3 Another coat of Quickmast ER350 is applied over the impregnated fabric at the rate of 0.275 kg/m² so as to ensure a complete tight and dense system.
- 4.4 When applying additional fabric layers; apply impregnation resin Quickmast ER350 at a rate of 0.25 kg/m² on the first layer following wet on wet application as per the above mentioned procedure.

Note: If the application of the resin was not possible within the open time of the first application, a waiting period of 12 hours shall be observed prior to application of the second layer, Quickmast CW Primer should be applied again in this case.

- 4.5 When overlapping is necessary, always overlap in the fibre direction with a minimum overlapping distance of 100 mm.
- 4.6 Further renders can be achieved by adding a covering layer of Quickmast ER350 at a rate of 0.25 kg/m² with quartz sand broadcast to work as the bonding medium for cementitious coatings.

Important: Always protect reinforcement from direct exposure to UV rays.

5.0 Cleaning

Quickmast CW Primer, Quickmast ER350 and equipment can be cleaned by an industrial grade solvent.



Section C : Approval and variations

This method statement is offered by DCP as a 'standard proposal' for the application of **Profiber CW System**. 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.