

Issue date: 11/07

Reinforced Concrete Facade Refurbishment (BS EN1504)



Outline Remmers System Specification

Overall Cleaning and Preparation

- Clean the surface to remove all loose and friable materials, deteriorated coatings or graffiti, organic growth and any other surface contaminants. This should be undertaken using appropriate water / steam / blastcleaning techniques together with the correct Remmers cleaning materials or equipment as determined in site trials, including Remmers Graffiti Remover, Facade Cleaner Paste, Green Growth Remover and the Rotec System.

Cracks

- Fully expose and bond static cracks with Remmers Injection Resin EP and seal dynamic / moving cracks with Remmers Injection Resin PUR.

Damage Removal

- Break out and remove all damaged concrete and fully expose any actively corroding steel reinforcement.

Exposed Steel Preparation and Priming

- Remove all rust and corrosion products from the steel by blast-cleaning or equivalent means.

Steel Primer

- Prime the clean steel using a slurry coating of Remmers Betofix RM and Rust Inhibitor M.

Concrete Replacement

- Replace the damaged concrete with Remmers Betofix mortars and then level the overall surface and reprofile with Remmers Betofix levelling mortar, filling any surface defects such as blowholes.

Corrosion Inhibitor Application

- Apply Remmers Migrating Corrosion Inhibitor (MCI) to all of the concrete surfaces.

Protective Surface Treatment

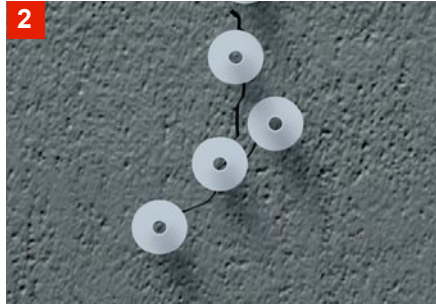
- Apply the selected protective surface treatment to the overall restored facade including Remmers Impregnation Cream, Silicone Paint LA, Remmers Concrete Acrylic or Elastoflex coating as required.
- Alternatively apply Remmers Anti Graffiti System to designated areas to assist with future graffiti removal.

Reinforced Concrete Facade Refurbishment System and Application Overview



Overall Cleaning

Clean and prepare the concrete surfaces to remove all old coatings, organic growth, cement laitance and any other contaminants.



Crack Injection

Static cracks are injected with Remmers Injection Resin EP. On dynamic / moving cracks Remmers Injection Resin PUR should be used.



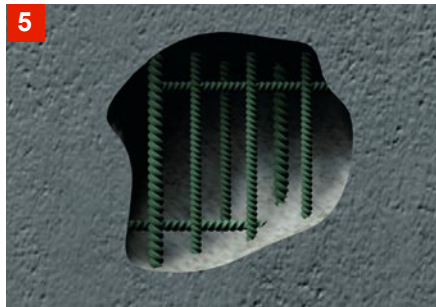
Remove Damaged Concrete

Break out and remove all damaged concrete. Any corroded reinforcement must be completely exposed. Note: With Remmers Betofix it is not necessary to angle cut the edges.



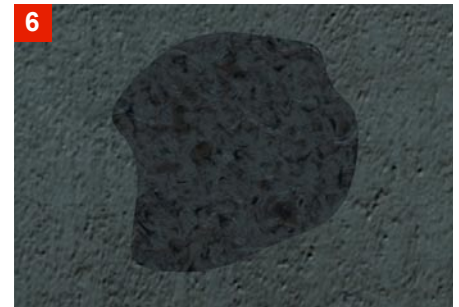
De-rusting / Cleaning the Steel

The exposed steel reinforcement should be mechanically cleaned to a standard equivalent to Sa 2.5 of ISO 8501-1. Note: The bars should be exposed and cleaned all around their circumference.



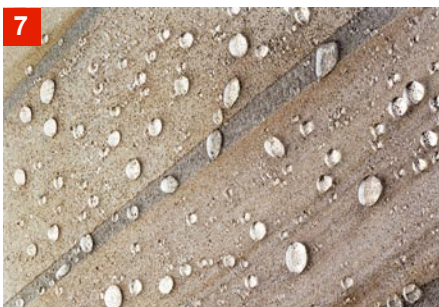
Steel Primer

Remmers Betofix RM with Rust Inhibitor M is used as a slurry coating to protect the cleaned steel. Just 30 minutes after the coating has been applied the repair mortar can be placed.



Concrete Replacement

Remmers Betofix mortar is applied to repair and replace the damaged areas, normally in one working operation. Overall surface levelling can be applied using Remmers Betofix mortar just three hours later. These materials can be feather edged (no angle cutting).



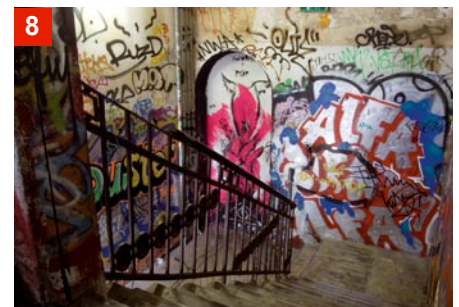
Final Protection: Remmers Hydrophobic Treatment

Remmers Hydrophobic Impregnations prevent water from being absorbed through the surface or penetrating behind coatings through blowholes etc.



Final Protection: Surface Coating System

To prevent future carbonation of the concrete and to repel water, Remmers Concrete Acrylic or Elastoflex crack bridging coatings should be applied.



Final Protection: Anti-Graffiti Protection System

Remmers Anti Graffiti System will facilitate the removal of any graffiti in the future.

Important Note: All materials must be applied fully in accordance with the latest edition of the relevant products technical data sheet, all of which are available at www.remmers.co.uk