METHOD STATEMENT

SPALLING REPAIR/ HONEYCOMBING WITH MOISTURE PRESENT

To be read in conjunction with Xypex Product Data Sheets.

GENERAL:

This method statement details the products and procedures to reinstate defective or honeycombed concrete. This application is to provide protection for the reinforcement and to instigate crystalline growth into the concrete structure and enhance durability.

PREPARATION:

Concrete substrate should be clean and sound. All loose material and surface laitance must be removed; preferably by grit or water blasting. All corroded steel must be exposed; therefore the concrete must be scabbled to a depth of 20mm beyond the corroded reinforcement to totally expose the corroded steel bar.
Remove all scale and rust. Have the Superintendent inspect the reinforcement to determine if replacement of the corroded bar is required. If replacement is required; this shall be carried out in accordance with the project specification and requirements**.** All edges should be square cut to a minimum depth of 10mm.

Products

Xypex Patch 'n Plug
Xypex Concentrate
Xypex Megamix II
Xypex Gamma cure

APPLICATION:

1. After all preparation is completed, reinforcement treated and/or replaced, high pressure water blasting is recommended to remove all loose material and surface laitance. It is **important** the substrate is clean and in a saturated damp condition prior to any application.
2. It is extremely important to seal any moisture egress within the defective concrete. Xypex Patch 'n Plug mixed at 3.5 parts powder to 1 part water should be applied to the affected area and hand held into place until seepage is eliminated, alternatively in extreme hydrostatic circumstances, drill a 22mm hole at the point of ingress and install formed Xypex Patch 'n Plug plugs (refer to the product data sheet).
3. Mix Xypex Concentrate, five (5) parts powder to two (2) parts clean water into slurry, apply by brush to the base of the spalled area only and any reinforcement steel. This is to reinstate the passive alkaline barrier around the reinforcement steel and introduce crystalline technology to the adjacent area. Refer to Product Data Sheet for further information on mixing ratios and procedures.
4. Mix Megamix II repair mortar; mixture requires maximum 2.8 liters of clean potable water. For improved bond apply a scrub coat of Megamix II onto the prepared surface; re-instate patching via either spray or trowel until repair is back to contour. Refer to the product data sheets for mixing and application procedures. Megamix II can be applied in layers from 10mm up to 50mm in a single application, the surface should be "scratched" the allow for increased bonding of subsequent layers if required.
5. After initial set of Megamix II , pre wet the the repair and substrate with Xypex Gamma cure, mix and apply Xypex Concentrate, five (5) parts powder to two (2) parts clean water, into a slurry and apply by brush over the repaired area and surrounding concrete. This application provides a protective coating and instigates crystalline activity adjacent to the repair.
6. Curing: The repaired areas should be protected from rapid dry out by using moist curing; by mist spray three times a day for two days. If site conditions do not allow this type of curing Xypex Gamma Cure may be used in accordance with manufactures recommendations.