Standard Structural Precast Concrete Repair Procedure #6: Epoxy Repair

Description

The following plan is for the repair of epoxy coated reinforcing steel and is in accordance with subsection 706.03.E.8 of the 2012 Michigan Department of Transportation Standard Specifications for Construction (MDOT SSC) and AASHTO M 284.

Procedure

Below is the standard repair procedure for epoxy coating. The fabricator must select a patching or repair material selected from the MDOT Qualified Products List (QPL) and follow the following procedures:

1. Prepare the damaged areas by cleaning to remove surface contaminants in accordance with manufacturer's instructions or as stated herein, whichever is stricter.
2. Roughen the area requiring patching before applying patching material.
3. Remove rust by dry blast cleaning or power tool cleaning immediately before applying patching material.
4. Immediately treat bars in accordance with the manufacturer's recommendations and before oxidation occurs.
5. Overlap pathing material onto the original coating by 2 inches, or as recommended by the manufacturer.
6. Provide at least 8 mils of dry film thickness on the patched areas.
7. Bars with 5 percent or more damaged in a 12 inch bar length is considered to be severely damaged and will be rejected.