Standard Structural Precast Concrete Repair Procedure #1: Air Hole

Description

This structural precast concrete repair procedure is for patching air holes that exceed acceptable dimensional tolerances. The repair plan is in accordance with subsections 406 and 708 of the 2012 Michigan Department of Transportation Standard Specifications for Construction (MDOT SSC) as applicable.

The Type R-2 mortar used for patching air holes must be selected from the following locations:

- Cement: Approved Manufacturer or Test
- White Cement: Visual inspection
- Fine aggregate (2NS or 2MS): Prequalified Aggregate Source or Test
- Air entrainment: Qualified Products List

Procedure

Below is the standard repair procedure for air holes:

1. Immediately patch all air holes larger than 3/4 inch in any direction and greater than 3/8 inch deep with Type R-2 mortar after removing forms.
2. Perform the following steps prior to patching air holes if they are not filled immediately after forms are removed:
   - Flush the area with minimum 3000 psi pressurized clean water.
   - Remove excess water from patch area by blasting with minimum 90 psi oil-free compressed air to produce a saturated surface dry condition immediately prior to application of mortar.