

STRUCTURES FOUNDATIONS – COATING OF PILE INDENTATIONS.**(REV 6-02-17)**

ARTICLE 455-7 is expanded by the following:

455-7.10 Coating of Pile Indentations: Unless otherwise authorized by the Engineer, coat the indentations on prestressed concrete piles in accordance with the requirements herein and Developmental Standard Index 20603. Provide a final surface free from any pin holes, cracks or other defects.

455-7.10.1 Materials:

455-7.10.1.1 Material Requirements: All coating materials must be produced by the same manufacturer. Provide coating material meeting the following requirements:

UV resistant
 Polyurea or polyurethane based
 At least 80% solids by weight
 Less than 4% volatile organic compounds by weight
 Buildable to a minimum 20 mil thickness
 Maximum 7 day cure time
 24 hour tack-free time
 100% Elongation
 Workable at temperatures between 40 and 100 degrees Fahrenheit
 Light gray or tan color
 Tensile bond strength 400 psi minimum

455-7.10.1.2 Submittals: At least 30 days before beginning pile installation, submit certification from the coating manufacturer in accordance with Section 6 confirming that the material meets the requirements of this Section.

455-7.10.1.3 Delivery, Handling and Storage: Deliver and store product in the manufacturer's original, unopened containers, with manufacturer's identification, printed instructions, lot numbers and expiration dates. Handle and store the material in accordance with the manufacturer's recommendations.

455-7.10.2 Surface Preparation: After the driven pile has been accepted, clean and de-grease the instrumentation anchor holes and the surfaces within the indentation. Fill the instrumentation anchor holes and irregularities within the surface indentation with a cementitious grout or water proof caulk. Prepare the indentation surfaces in accordance with SSPC-SP 13 such that they are free of contaminants, laitance, loose concrete and dust; and provide a sound and uniform substrate suitable for the application of the coating system. Flame cleaning is not allowed.

455-7.10.3 Coating Application: Apply the coating per the manufacturer's recommendations to a minimum thickness of 20 mils covering the entire area of the pile indentation, sides and base. In sites classified as Extremely Aggressive for the substructure apply a minimum of two layers to a thickness of at least 50 mils. Apply each layer perpendicular to the prior layer. If spray applied, maintain an even distance from the surface providing a uniform application with a minimum 50% overlap from one pass to the next. Ensure proper bond between the primer and the coating.

455-7.10.4 Basis of Payment: Cost of casting pile indentations and applying primer and/or coating shall be included in the cost of the pile.

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