

# New Jersey Turnpike Authority

P.O. Box 5042, Woodbridge, NJ 07095



August 27, 2024

## Document Change Announcement

### *2016 Standard Supplementary Specifications*

### *QPL Qualification Criteria Updates*

### *DCA2024SS-06*

#### **Subject: Revisions to**

Section 101 General Information, Subsection 101.02 Definitions

Section 905 Concrete, Mortar and Grout, Subsection 905.15 Non-Shrink, High Early Strength Mortar

Subsection 905.18 Epoxy Bonding Coat, Subsection 905.25 Non-shrink, High Early Strength Mortar

Suitable for Vertical and Overhead Repairs

Section 923 Miscellaneous, Subsection 923.08 Epoxy Bonding Compound,

Subsection 923.22 Epoxy Resin System, Subsection 923.23 Epoxy Crack Sealant

#### **Description of Change:**

This DCA incorporates Qualified Products List (QPL) qualification criteria updates for product types related to epoxy resin bonding and rapid hardening concrete patching. In addition, certain product types, as indicated in the DCA, must be tested through AASHTO's Product Evaluation and Audit Solutions program (formerly known as NTPEP) in order to be approved on the Authority's Qualified Products List (QPL). Products already approved on the QPL will have one (1) year from the date of this DCA to complete the required AASHTO testing if they have not already done so.

#### **Notice to New Jersey Turnpike Authority Staff and Design Consultants**

Effective immediately, all contracts currently in the design phase shall incorporate the revisions herein. For advertised contracts awaiting the opening of bids this revision shall be incorporated via addendum. Contact your New Jersey Turnpike Authority Project Manager for instruction.

The revisions may be accessed on the Authority's webpage: <https://www.njta.com/doing-business/professional-services>

#### **Recommended By:**

*(signature on original)*

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Lamis T. Malak, P.E.  
Deputy Chief Engineer - Design

#### **Approved By:**

*(signature on original)*

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Daniel L. Hesslein, P.E.  
Acting Chief Engineer

**NOTE: The following language is ADDED to the latest version of the 2016 Standard Supplementary Specifications.**

**SECTION 101 - GENERAL INFORMATION**

**101.02 Definitions**

**(B) Terms**

Add the following to the table:

AASHTO Product Evaluation and Audit Solutions	A program administered by AASHTO that combines the professional and physical resources of the AASHTO member departments in order to evaluate materials, products, and devices of common interest for use in highway and bridge construction. The primary goal of the program is to provide cost-effective evaluations by eliminating duplication of testing and auditing by States and duplication of effort by manufacturers that provide products for evaluation.
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**NOTE: The following language REPLACES their corresponding Subsections in the latest version of the 2016 Standard Supplementary Specifications.**

#### **905.15 Non-Shrink, High Early Strength Mortar**

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Delete this Subsection and replace it with the following:

Products submitted under this product type shall have AASHTO Product Evaluation and Audit Solutions test data in accordance with the submission cycles stated in AASHTO's Rapid Hardening Concrete Patching (RHCP) technical committee work plan.

The material shall conform to ASTM C928. The material shall be pre-packaged and be ready for mixing immediately prior to use in accordance with manufacturer instructions.

**NOTE: The following language is ADDED to the latest version of the 2016 Standard Supplementary Specifications.**

## **SECTION 905 – CONCRETE, MORTAR AND GROUT**

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### **905.18 Epoxy Bonding Coat**

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Delete this Subsection and replace it with the following:

Products submitted under this product type shall have AASHTO Product Evaluation and Audit Solutions test data in accordance with the submission cycles stated in AASHTO's Epoxy Resin Bonding (ERB) technical committee work plan.

Epoxy bonding coat shall be a two-component, epoxy-resin, bonding system for application to Portland cement concrete. The coating shall conform to ASTM C881. The system type, grade, and class shall depend on the condition of intended use. Color shall be clear or gray to match the color of the adjacent concrete.

**NOTE: The following language REPLACES their corresponding Subsections in the latest version of the 2016 Standard Supplementary Specifications.**

## **SECTION 905 – CONCRETE, MORTAR AND GROUT**

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### **905.25 Non-shrink, High Early Strength Mortar Suitable for Vertical and Overhead Repairs**

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Products submitted under this product type shall have AASHTO Product Evaluation and Audit Solutions test data in accordance with the submission cycles stated in AASHTO's Rapid Hardening Concrete Patching (RHCP) technical committee work plan.

The material shall conform to ASTM C928. The material shall have a minimum bond strength of 1500 psi as per ASTM C882 and a minimum relative dynamic modulus of 90% as per ASTM C666.



**NOTE: The following language REPLACES their corresponding Subsections in the latest version of the 2016 Standard Supplementary Specifications.**

## SECTION 923 – MISCELLANEOUS

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### 923.08 Epoxy Bonding Compound

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Delete this Subsection and replace it with the following:

Products submitted under this product type shall have AASHTO Product Evaluation and Audit Solutions test data in accordance with the submission cycles stated in AASHTO's Epoxy Resin Bonding (ERB) technical committee work plan.

The epoxy bonding compound shall be a 2-component, epoxy-resin, bonding system for application to concrete. It shall conform to the requirements of ASTM C881. If used in load-bearing applications, the material shall conform to the requirements of ASTM C881, Type IV or V, Grade 1 or 2, Class B or C as per Project requirements.

No epoxy bonding compound shall be used six months after the date of manufacture.

### 923.22 Epoxy Resin System

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Products submitted under this product type shall have AASHTO Product Evaluation and Audit Solutions test data in accordance with the submission cycles stated in AASHTO's Epoxy Resin Bonding (ERB) technical committee work plan.

#### (A) Epoxy Resin for Injection

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Delete the first paragraph and replace it with:

Epoxy resin system for injection materials to fill structural voids and cracks shall be a two component, 100% solids, moisture insensitive, high modulus, high strength epoxy resin adhesive. The material shall conform to ASTM C881, Type I or IV, having a minimum compressive strength of 10,000 psi per ASTM D695 and a minimum bond strength of 2,000 psi per ASTM C882.

The pressure injected epoxy shall be capable of penetrating the cracks and voids to their full depth and bond to surfaces of cracked concrete and/or structural steel.

#### (B) Epoxy/Resin/Grout for Anchor Bolts in Nominal Holes

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Delete this paragraph and replace it with the following:

Epoxy resin system to injection materials to install anchor bolts in non-tension applications in drilled holes of a nominal diameter shall conform to ASTM C881, Type IV, having a minimum compressive strength of 10,000 psi per ASTM D695 and a minimum bond strength of 2,000 psi per ASTM C882.

#### (C) Epoxy/Resin/Grout for Anchor Bolts in Oversize Holes

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Delete this paragraph and replace it with the following:

Epoxy resin system for injection materials to install anchor bolts in non-tension applications in drilled or preformed holes of up to 3" in diameter shall conform to ASTM C881, Type I or IV, having a minimum compressive strength of 10,000 psi per ASTM D695 and a minimum bond strength of 2,000 psi per ASTM C882.

### 923.23 Epoxy Crack Sealant

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Delete this Subsection replace it with the following:

Products submitted under this product type shall have AASHTO Product Evaluation and Audit Solutions test data in accordance with the submission cycles stated in AASHTO's Epoxy Resin Bonding (ERB) technical committee work plan.

The material shall be an epoxy resin gel and conform to ASTM C881, Type IV or V, Grade 3 and Class C.