

RON DESANTIS GOVERNOR 605 Suwannee Street Tallahassee, FL 32399-0450 JARED W. PERDUE, P.E. SECRETARY

September 11, 2023

Khoa Nguyen Director, Office of Technical Services Federal Highway Administration 3500 Financial Plaza, Suite 400 Tallahassee, Florida 32312

Re: State Specifications Office Section: 560 Proposed Specification: 5600201 Coating New Structural Steel.

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Tim McCullough to add a second coating option (and requirements for application) that can be applied to sheet pile, over the inorganic zinc rich primer.

Please review and transmit your comments, if any, within two weeks (10 business days). Comments should be sent via email <u>daniel.strickland@dot.state.fl.us</u>.

If you have any questions relating to this specification change, please call me at (850) 414-4130.

Sincerely,

Signature on File

Daniel Strickland, P.E. State Specifications Engineer

DS/dh

Attachment

cc: Florida Transportation Builders' Assoc. State Construction Engineer

COATING NEW STRUCTURAL STEEL. (REV 8-10-23)

SUBARTICLE 560-2.1 is deleted and the following substituted:

560-2 Materials.

560-2.1 Coating System: Use only coating products and systems meeting the requirements of Section 975 and listed on the Department's Approved Product List (APL). All components of coating systems must be from the same manufacturer.

Use Type M coal tar <u>or glass flake</u> epoxy coatings meeting the requirements of Section 926. <u>Apply these products over a primer and</u> listed on the Department's APL for coating of permanent bulkhead sheet piles and H piles.

SUBARTICLE 560-11.2 is deleted and the following substituted:

560-11.2 Application of Coating: Unless otherwise shown in the Contract Documents, apply the inorganic zinc primer to all surfaces of H and sheet piles and the exterior surface of pipe piles in accordance with the limitations of 560-8. Unless otherwise shown in the Contract Documents, apply coal tar<u>or glass flake</u> -epoxy coatings to the exposed side of sheet piles from the top of the piles to a depth of five feet below the lower of the design ground surface or the design scour depth in accordance with the limitations of 560-8. Apply the inorganic zinc primer in accordance with this Section. Apply the coal tar<u>or glass flake</u> -epoxy in accordance with the following specific requirements:

1. Apply the coal tar <u>or glass flake</u> -epoxy system in two coats. The time interval between the first coat and the second coat will be in strict accordance with the coating manufacturer's published specifications. Apply the first coat to yield a dry film thickness of 8 to 10 mils. Apply the second coat to Coal tar epoxies must attain a total dry film thickness (zinc primer and coal tar epoxy) at a minimum 18 of the two coats between 16 and 20 mils (on each side). Glass flake epoxies must attain a total dry film thickness (zinc primer and glass flake epoxy) at a minimum 10 mils (on each side).

2. Ensure that no <u>area measurements portion</u> of the coating is less than <u>80% of</u> the specified minimum film thicknesses, <u>as determined by AMPP Paint Application Standard No. 2</u> (PA-2). The total minimum film thickness for any combination of coats will be the sum total of the averages of the specified thickness range of the individual coats.

3. After applying the coating on the steel piles, the Engineer will thoroughly inspect the surfaces and make film thickness measurements at the approximate rate of one for each 25 square feet of area unless deficient thickness is found. In this case, the rate of <u>additional</u> measurements will be increased as required to determine the extent of the deficient area.

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SUBARTICLE 560-2.1 is deleted and the following substituted:

560-2 Materials.

560-2.1 Coating System: Use only coating products and systems meeting the requirements of Section 975 and listed on the Department's Approved Product List (APL). All components of coating systems must be from the same manufacturer.

Use Type M coal tar or glass flake epoxy coatings meeting the requirements of Section 926. Apply these products over a primer listed on the Department's APL for coating of permanent bulkhead sheet piles and H piles.

SUBARTICLE 560-11.2 is deleted and the following substituted:

560-11.2 Application of Coating: Unless otherwise shown in the Contract Documents, apply the inorganic zinc primer to all surfaces of H and sheet piles and the exterior surface of pipe piles in accordance with the limitations of 560-8. Unless otherwise shown in the Contract Documents, apply coal tar or glass flake epoxy coatings to the exposed side of sheet piles from the top of the piles to a depth of five feet below the lower of the design ground surface or the design scour depth in accordance with the limitations of 560-8. Apply the inorganic zinc primer in accordance with this Section. Apply the coal tar or glass flake epoxy in accordance with the following specific requirements:

1. Apply the coal tar or glass flake epoxy system in strict accordance with the coating manufacturer's published specifications. Coal tar epoxies must attain a total dry film thickness (zinc primer and coal tar epoxy) at a minimum 18 mils (on each side). Glass flake epoxies must attain a total dry film thickness (zinc primer and glass flake epoxy) at a minimum 10 mils (on each side).

2. Ensure that no area measurements of the coating is less than 80% of the specified minimum film thicknesses, as determined by AMPP Paint Application Standard No. 2 (PA-2). The total minimum film thickness for any combination of coats will be the sum total of the averages of the specified thickness range of the individual coats.

3. After applying the coating on the steel piles, the Engineer will thoroughly inspect the surfaces and make film thickness measurements at the approximate rate of one for each 25 square feet of area unless deficient thickness is found. In this case, the rate of additional measurements will be increased as required to determine the extent of the deficient area.