

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

June 27, 2025

Abi Domond Civil Rights Analysis Intern Federal Highway Administration 3500 Financial Plaza, Suite 400 Tallahassee, Florida 32312

Re: State Specifications Office

Section: 975

Proposed Specification: 9750201 Structural Coating Materials

Dear Ms. Domond:

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

The changes are proposed by Adrian Steele to remove references to a device that is no longer manufactured or calibrated.

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

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/jb

Attachment

cc: Florida Transportation Builders' Assoc.

State Construction Engineer

## STRUCTURAL COATING MATERIALS (REV 5-7-25)

ARTICLE 975-4 is deleted and the following substituted:

## 975-4 Paint for Galvanized Steel Strain Poles, Mast Arms, Monotube Assemblies, Conventional Light Pole Assemblies, and Aluminum Poles, Pedestals, and Posts.

Paint systems shall meet the color requirements as specified in the Contract Documents. All paint systems shall possess physical properties and handling characteristics that are compatible with the application requirements of Section 649 for galvanized steel and Sections 646 and 715 for aluminum. Materials shall be specifically intended for use over galvanized steel or aluminum, as appropriate. Paint systems shall exhibit no loss of adhesion or total color difference ( $\Delta E^*_{ab}$ ) greater than 8.0 units for five years after final acceptance as specified in 5-11.

-Cumulative surface area of delamination in excess of 100 square inches will-constitutes an adhesion failure. Delamination shall be defined as any area of exposed metal surface subsequent to hand tool cleaning in accordance with SSPC-SP2. A ΔΕ\*<sub>ab</sub> value exceeding 8.0 units per the International Commission on Illumination L\*a\*b\* 1976 (CIELAB) space and color difference formula, measured in accordance with ASTM D2244, will-constitutes a color retention failure. Paint systems shall exhibit no loss of adhesion failure or total color difference (ΔΕ\*<sub>ab</sub>) greater than 8.0 units color retention failure for five years after final acceptance as specified in 5-11. Cumulative surface area of delamination in excess of 100 square inches will constitute an adhesion failure. Delamination shall be defined as any area of exposed metal surface subsequent to hand tool cleaning in accordance with SSPC-SP2. A ΔΕ\*<sub>ab</sub>-value exceeding 8.0 units per the International Commission on Illumination L\*a\*b\* 1976 (CIELAB) space and color difference formula, measured in accordance with ASTM D2244, will constitute a color retention failure.

The Department will measure and enter in the Department's database the CIELAB color chromaticity coordinates for the color of the top coattopcoat of sample coupons provided as required by 649-4.3 "Painting" using a BYK Gardner Handicolor colorimeter using a color measurement instrument using with D65 illuminant and 2-degree geometry settings. The Department-measured CIELAB chromaticity coordinates shall define the initial color and will be used for resolution of color retention failures and the resolution of color retention disputes.

SUBARTICLE 975-7.2 is deleted and the following substituted:

**975-7.2 Performance Requirements:** For laboratory testing, use flat test panels prepared in accordance with AASHTO R 31.

Outdoor exposure testing will be performed by the Department, if applicable. Submit <u>fourseven</u>, 4 inch by 8 inch fiber cement test panels to the SMO. Panels will be exposed at the Department's outdoor test site in accordance with ASTM G7. Coating performance shall meet the requirements in Table 975-6.

Upon request, submit a one quart wet sample of each component of each coating system to the SMO.

Table 975-6				
Anti-Graffiti Coatings Performance Requirements				
Outdoor Exposure Testing – Non-Sacrificial				
Property	Test Method	Acceptance Criteria		
	FM 5-580:			
Graffiti Resistance (water cleanable)	6 months exposure at FDOT	Complete removal of solvent based acrylic,		
	test site	and alkyd based spray paint. No delamination		
	(2500 psi using pressure	or visual defects.		
	washer)			
Laboratory Testing - Sacrificial				
Property	Test Method	Acceptance Criteria		
	AASHTO R 31: no salt fog,			
Cyclic Weather	95°F, 0%- 90% Relative	No melting or disbondment		
Testing	Humidity, 500 hours,	140 metting of dispondment		
	alternating RH every 100 hours			
Outdoor Exposure Testing - Sacrificial				
Property	Test Method	Acceptance Criteria		
	FM 5-580: 6 months exposure			
Sacrificial Coating		Complete removal of solvent based acrylic,		
removability	(2500 psi using pressure	and alkyd based spray paint from substrate		
	washer)			

## STRUCTURAL COATING MATERIALS (REV 5-7-25)

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## 975-4 Paint for Galvanized Steel Strain Poles, Mast Arms, Monotube Assemblies, Conventional Light Pole Assemblies, and Aluminum Poles, Pedestals, and Posts.

Paint systems shall meet the color requirements as specified in the Contract Documents. All paint systems shall possess physical properties and handling characteristics that are compatible with the application requirements of Section 649 for galvanized steel and Sections 646 and 715 for aluminum. Materials shall be specifically intended for use over galvanized steel or aluminum, as appropriate. Paint systems shall exhibit no loss of adhesion or total color difference ( $\Delta E^*_{ab}$ ) greater than 8.0 units for five years after final acceptance as specified in 5-11.

Cumulative surface area of delamination in excess of 100 square inches constitutes an adhesion failure. Delamination shall be defined as any area of exposed metal surface subsequent to hand tool cleaning in accordance with SSPC-SP2. A  $\Delta E^*_{ab}$  value exceeding 8.0 units per the International Commission on Illumination L\*a\*b\* 1976 (CIELAB) space and color difference formula, measured in accordance with ASTM D2244, constitutes a color retention failure. Paint systems shall exhibit no adhesion failure or color retention failure for five years after final acceptance as specified in 5-11.

The Department will measure and enter in the Department's database the CIELAB color chromaticity coordinates for the color of the topcoat of sample coupons provided as required by 649-4.3 "Painting" using a color measurement instrument with D65 illuminant and 2-degree geometry settings. The Department-measured CIELAB chromaticity coordinates shall define the initial color and will be used for resolution of color retention failures and the resolution of color retention disputes.

SUBARTICLE 975-7.2 is deleted and the following substituted:

**975-7.2 Performance Requirements:** For laboratory testing, use flat test panels prepared in accordance with AASHTO R 31.

Outdoor exposure testing will be performed by the Department, if applicable. Submit seven, 4 inch by 8 inch fiber cement test panels to the SMO. Panels will be exposed at the Department's outdoor test site in accordance with ASTM G7. Coating performance shall meet the requirements in Table 975-6.

Upon request, submit a one quart wet sample of each component of each coating system to the SMO.

Table 975-6				
Anti-Graffiti Coatings Performance Requirements				
Outdoor Exposure Testing – Non-Sacrificial				
Property	Test Method	Acceptance Criteria		

Table 975-6				
Anti-Graffiti Coatings Performance Requirements				
Graffiti Resistance (water cleanable)	FM 5-580:			
	6 months exposure at FDOT	Complete removal of solvent based acrylic,		
	test site	and alkyd based spray paint. No delamination		
	(2500 psi using pressure	or visual defects.		
	washer)			
Laboratory Testing - Sacrificial				
Property	Test Method	Acceptance Criteria		
	AASHTO R 31: no salt fog,			
Cyclic Weather	95°F, 0%- 90% Relative	No melting or disbondment		
Testing	Humidity, 500 hours,	No merting of dispondment		
	alternating RH every 100 hours			
Outdoor Exposure Testing - Sacrificial				
Property	Test Method	Acceptance Criteria		
	FM 5-580: 6 months exposure			
Sacrificial Coating	at FDOT test site	Complete removal of solvent based acrylic,		
removability	(2500 psi using pressure	and alkyd based spray paint from substrate		
	washer)			