ORIGINATION FORM

Date: **11/19/2012**
Originator: Specs Office
Contact Information: **Paul Vinik**

Specification Title: **Structural Coating Materials**
Specification Section, Article, or Subarticle Number: **975**

Why does the existing language need to be changed? **To accommodate newer anti-graffiti technologies.**

Summary of the changes: **Removed cyclic weather testing from non-sacrificial testing. These coatings are not meant to prevent corrosion.**

Are these changes applicable to all Department jobs? **All jobs with non-sacrificial A/G coatings**
If not, what are the restrictions? **N/A**

Will these changes result in an increase or decrease in project costs? **No**
If yes, what is the estimated change in costs?

With who have you discussed these changes? **Specs**

What other offices will be impacted by these changes? **Maintenance**

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? **I am not aware of any needed changes.**

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed? **No**

Contact the State Specifications Office for assistance in completing this form.
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M E M O R A N D U M

DATE: November 26, 2012

TO: Specification Review Distribution List

FROM: Trey Tillander, State Specifications Engineer

SUBJECT: Proposed Specification: **9750204 Structural Coating Materials.**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Paul Vinik, State Materials Office, to accommodate newer anti-graffiti technologies by removing cyclic weather testing from non-sacrificial testing. These coatings are not meant to prevent corrosion.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at SP965TT or trey.tillander@dot.state.fl.us. Comments received after **December 24, 2012,** may not be considered. Your input is encouraged.

TT/cah
Attachment

STRUCTURAL COATING MATERIALS.
(REV 11-8-12)

SUBARTICLE 975-2.4.1 (Page 1112) is deleted and the following substituted:

975-2.4.1 Prime Coat: Zinc dust pigment shall be a minimum of Type II in accordance with ASTM D520. Organic zinc rich primers shall meet the requirements SSPC Paint 20, Type II, Level 2.

Zinc primers shall be used as Galvanizing Repair Compounds for areas greater than 100 square inches.

ARTICLE 975-7 (Pages 1114 – 1115) is deleted and the following substituted:

975-7 Anti-Graffiti Coating Materials.

975-7.1 General Requirements: Anti-graffiti coatings intended for use under this specification shall be of a composition capable of preventing the adhesion of and facilitating the removal of acrylic, polyurethane, and alkyd spray paint. All anti-graffiti coatings shall possess the physical and handling characteristics that are compatible with the requirements of Section 563. *The manufacturer shall designate the Non-Sacrificial product as ~~W~~water ~~C~~cleanable or ~~S~~solvent ~~C~~cleanable in accordance with this section.*

Anti-graffiti coatings shall contain less than 5.0 lb per gallon volatile organic compounds (VOC) as defined by 40 CFR Part 59, Subpart D, ~~and~~ evaluated as per ASTM D3960.

The manufacturer shall supply the following additional information:

a. *Technical date sheet that includes installation instructions and ~~G~~g*raffiti removal instructions, including any solvents or other materials, as necessary. Graffiti removal must be accomplished with nonproprietary cleaners as defined in ASTM D6578.

b. Sacrificial Coating Removal instructions, as applicable.

c. *Certification that Non-Sacrificial ~~A~~anti-~~G~~graffiti coating shall not blister, crack, check, chalk, delaminate, or exhibit a color change of more than 8 Delta E CIE ~~L~~lab units for a period of one year after installation* ~~Identification of coating components~~.

975-7.2 Performance Requirements: For laboratory testing, use flat test panels prepared in accordance with AASHTO R31. Outdoor exposure testing will be performed by the Department. Submit four, 4 inch*~~es~~* by 8 inch*~~es~~* fiber cement test panels to the State Materials Office. Panels will be exposed at the Department's outdoor test site in accordance with ASTM G .

Laboratory Testing - Non-Sacrificial		
Property	Test Method	Requirement
~~Cyclic Weather Testing (solvent cleanable and water cleanable)~~	~~AASHTO R31~~	~~No blistering, cracking, checking, chalking, or delamination; color change less than 3 Delta E CIE LAB units; Retention of 60°Gloss ratio >= 0.80~~

Laboratory Testing - Non-Sacrificial		
Property	Test Method	Requirement
Graffiti Resistance (solvent cleanable)	ASTM D6578. Complete removal of solvent-based acrylic, polyurethane, and alkyd spray paint; after exposure; and recleanability	Cleanability Level 8, 9, or 10.
Fluid Resistance (solvent cleanable)	ASTM D1308 – Spot Test; Paint Thinner, Gasoline	No blistering, discoloration, softening or adhesion loss.
Outdoor Exposure Testing – Non-Sacrificial		
Property	Test Method	Requirement
Graffiti Resistance (water cleanable)	ASTM G7: 6 months exposure at FDOT test site 2500 psi using pressure washer	Complete removal of solvent based acrylic, polyurethane, and alkyd based spray paint. No delamination or visual defects.

Laboratory Testing - Sacrificial		
Property	Test Method	Requirement
Cyclic Weather Testing	AASHTO R31, no salt fog, 95°F, 0%- 90% Relative Humidity, 500 hours, alternating RH every 100 hours	No melting or disbondment
Outdoor Exposure Testing - Sacrificial		
Property	Test Method	Requirement
Sacrificial Coating removability	ASTM G7: 6 months exposure at FDOT test site	Complete removal of solvent based acrylic, polyurethane, and alkyd based spray paint from substrate