



Florida Department of Transportation

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SECRETARY

November 13, 2007

Dr. Leslie McCarthy, PhD, P.E.
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 975
Proposed Specification: 9750900 - Structural Coating Materials

Dear Dr. McCarthy:

We are submitting, for your approval, two copies of a proposed Supplemental Specification for Structural Coating Materials.

This change was proposed by Dale Cook of the State Maintenance Office to add Anti-Graffiti Coating material requirements.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965DB or duane.brautigam@dot.state.fl.us.

If you have any questions relating to this specification change, please call Duane F. Brautigam, State Specifications Engineer at 414-4110.

Sincerely,

Duane F. Brautigam, P.E.
State Specifications Engineer

DFB/sh

Attachment

cc: Gregory Jones, General Counsel
Florida Transportation Builders' Assoc.
State Construction Engineer

STRUCTURAL COATING MATERIALS.**(REV 2-167-17-06)**

SECTION 975 (of the Supplemental Specifications) is expanded by the following new Article:

975-9 Anti-Graffiti Coating Materials.

975-9.1 General Requirements: Anti-graffiti coatings intended for use under this specification shall be of a composition to be capable of preventing the adhesion of graffiti and/or facilitating the removal of graffiti. All anti-graffiti coatings must possess the physical and handling characteristics that are compatible with the requirements of Section 563.

Anti-graffiti coatings shall contain less than ~~600 g/L [5.0 lb/gal]~~ **5.0 lb/gal** volatile organic compounds (VOC) as defined by 40 CFR Part 59, Subpart D.

The manufacturer will supply the following additional information:

a. Cleaning instructions and materials, as applicable. Surfaces must be cleanable with nonproprietary cleaners as defined in ASTM D6578.

b. Sacrificial Coating Removal instructions, as applicable.

c. Recommended base coat, as applicable.

d. Identification of coating system and type, as applicable.

e. Clear coats must contain a UV degradable color for inspection purposes. UV degradable color must dissipate in a reasonable time period to allow inspection but not detract from visual impact of the structure.

975-9.2 Material Tests: Meet the following requirements:

Additional Laboratory Performance and Tests		
Test	Method	Limits
Accelerated Weathering Cyclic Weather Testing	AASHTO R-31	No blistering, cracking, checking, chalking, or delamination; color change less than 13 Delta E CIE LAB units; Retention of 60° Gloss ratio ≥ 0.80
Abrasion Resistance	ASTM D968, 1,000 liters of sand	No loss of coating thickness per ASTM D1005
Impact Resistance	ASTM D2794	Minimum of 30 inch-pounds
Graffiti Resistance	ASTM D6578, Use identified marking materials; initial and recleanability; and after exposure initial and recleanability	Cleanability Level 1, 2, or 3.
Sacrificial Coating removability	Per Manufacturer's specifications: 6 months exposure at FDOT test site	Complete removal of material from substrate
MEK Double Rub	ASTM D 5402; 50 rubs	No coating wear through (4 minimum rating)

Additional Laboratory Performance and Tests		
Test	Method	Limits
Fluid Resistance	ASTM D1308; Paint Thinner, Gasoline	No blistering, discoloration, softening or adhesion loss.

STRUCTURAL COATING MATERIALS.
(REV 7-17-06)

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975-9.1 General Requirements: Anti-graffiti coatings intended for use under this specification shall be of a composition to be capable of preventing the adhesion of graffiti and/or facilitating the removal of graffiti. All anti-graffiti coatings must possess the physical and handling characteristics that are compatible with the requirements of Section 563.

Anti-graffiti coatings shall contain less than [5.0 lb/gal]volatile organic compounds (VOC) as defined by 40 CFR Part 59, Subpart D.

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b. Sacrificial Coating Removal instructions, as applicable.

c. Recommended base coat, as applicable.

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975-9.2 Material Tests: Meet the following requirements:

Additional Laboratory Performance and Tests		
Test	Method	Limits
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Abrasion Resistance	ASTM D968, 1,000 liters of sand	No loss of coating thickness per ASTM D1005
Impact Resistance	ASTM D2794	Minimum of 30 inch-pounds
Graffiti Resistance	ASTM D6578, Use identified marking materials; initial and recleanability; and after exposure initial and recleanability	Cleanability Level 1, 2, or 3.
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