



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

November 2, 2010

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section **975**
Proposed Specification: **9750702 Structural Coating Materials.**

Dear Ms. Gourdine:

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

These changes were proposed by Paul Vinik of the State Materials Office to clarify outdoor testing requirements for sacrificial anti-graffiti coatings.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to SP965RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4280.

Sincerely,

signature on file

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/dt

Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

STRUCTURAL COATING MATERIALS.**(REV 7-20-10)**

SUBARTICLE 975-7.2 (of the Supplemental Specifications) is deleted and the following substituted:

975-7.2 Laboratory 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. Submit four 4 inch by 8 inch fiber cement test panels, with a mass of 7 to 9 pounds per square foot of surface area to the State Materials Office. Panels will be exposed at the Department's outdoor test site in accordance with ASTM G 7.*

Laboratory Testing- Non-Sacrificial		
Property	Test Method	Requirement
Cyclic Weather Testing	AASHTO -R-31	No blistering, cracking, checking, chalking, or delamination; color change less than 3 Delta E CIE LAB units; Retention of 60° Gloss ratio \geq -0.80
Taber Abrasion	ASTM -D 4060, CS17, 1,000 -g of sand	60 -g maximum weight loss
Impact Resistance	ASTM -D 2794	Minimum of 30 -inch-pounds, 1/2" impact, intrusion
Graffiti Resistance	ASTM -D 6578, Use identified marking materials; initial and recleanability; and after exposure initial and recleanability	Cleanability Level 8, 9, or 10.
MEK Double Rub	ASTM -D -4752; 50 rubs	No coating wear through (4 minimum rating)
Fluid Resistance	ASTM -D 1308- spot; Paint Thinner, Gasoline	No blistering, discoloration, softening or adhesion loss.

Laboratory Testing- Sacrificial		
Property	Test Method	Requirement
Cyclic Weather Testing	AASHTO -R-31, no salt fog, 95 °degrees Fahrenheit, 0%-90% Relative Humidity, 500 hours, alternating RH every 100 -hours	No melting or disbondment
<i>Outside Testing- Sacrificial</i>		
<i>Property</i>	<i>Test Method</i>	<i>Requirement</i>

Laboratory Testing- Sacrificial		
Property	Test Method	Requirement
Sacrificial Coating removability	Per Manufacturer's specifications: 6 -months exposure at FDOT test site	Complete removal of material from substrate

STRUCTURAL COATING MATERIALS.**(REV 7-20-10)**

SUBARTICLE 975-7.2 (of the Supplemental Specifications) 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. Submit four 4 inch by 8 inch fiber cement test panels, with a mass of 7 to 9 pounds per square foot of surface area to the State Materials Office. Panels will be exposed at the Department's outdoor test site in accordance with ASTM G 7.

Laboratory Testing- Non-Sacrificial		
Property	Test Method	Requirement
Cyclic Weather Testing	AASHTO R-31	No blistering, cracking, checking, chalking, or delamination; color change less than 3 Delta E CIE LAB units; Retention of 60° Gloss ratio ≥ 0.80
Taber Abrasion	ASTM D 4060, CS17, 1,000 g of sand	60 g maximum weight loss
Impact Resistance	ASTM D 2794	Minimum of 30 inch-pounds, 1/2" impact, intrusion
Graffiti Resistance	ASTM D 6578, Use identified marking materials; initial and recleanability; and after exposure initial and recleanability	Cleanability Level 8, 9, or 10.
MEK Double Rub	ASTM D 4752; 50 rubs	No coating wear through (4 minimum rating)
Fluid Resistance	ASTM D 1308- spot; Paint Thinner, Gasoline	No blistering, discoloration, softening or adhesion loss.

Laboratory Testing- Sacrificial		
Property	Test Method	Requirement
Cyclic Weather Testing	AASHTO R-31, no salt fog, 95°F, 0%- 90% Relative Humidity, 500 hours, alternating RH every 100 hours	No melting or disbondment
Outside Testing- Sacrificial		
Property	Test Method	Requirement
Sacrificial Coating removability	Per Manufacturer's specifications: 6 months exposure at FDOT test site	Complete removal of material from substrate