Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

RACHEL D. CONE
INTERIM SECRETARY

May 5, 2017

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: **5600204 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 of the State Materials Office (SMO) to update the language for consistency with industry practice.

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

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

Sincerely,

Signature on file

Dan Hurtado, P.E.
State Specifications Engineer

DH/dt
Attachment
cc: Florida Transportation Builders' Assoc.
State Construction Engineer

COATING NEW STRUCTURAL STEEL.
(REV ~~3-30-17~~4-10-17)

SUBARTICLE 560-2.4 is deleted and the following substituted:

560-2.4 Soluble Salts Test Kit: Use a soluble salts test kit in accordance with SSPC-Guide 15 utilizing a ~~Class A~~Table 1 retrieval method. Ensure the test sleeve or cell creates a sealed, encapsulated environment during ion extraction and is suitable for testing all structural steel surfaces. As an alternative, electronic conductivity meters approved for use by the Engineer may be used.

SUBARTICLE 560-7.5 is deleted and the following substituted:

560-7.5 Soluble Salts Detection and Removal: When using SSPC Guide 15, ~~Class A~~Table 1 retrieval methods, determine the chloride, sulfate and nitrate concentrations on all steel surfaces using soluble salts test kits meeting the requirements of 560-2.4. Measure the concentration levels using the method described in SSPC-TU 4. Perform the tests after washing and after each applied coat of the coating system. Ensure the non-visible surface contaminant concentrations on blast-cleaned surfaces do not exceed 7 $\mu g/cm^2$ ~~g/gm^2~~ for chlorides, 10 $\mu g/cm^2$ ~~g/cm^2~~ for soluble ferrous iron, 17 $\mu g/cm^2$ ~~g/m^2~~ for sulfates and 10 $\mu g/cm^2$ for nitrates. When using electronic conductivity meters, use meters meeting the requirements of 560-2.4 and measure the surface conductivity as prescribed by the manufacturer. The instrument shall be properly calibrated and maintained according to the manufacturer's recommendations. Ensure the surface conductivity does not exceed 70 micro-Siemens per centimeter squared. For either contaminant assessment method (salt test kits or conductivity meter) test three random locations in the first 1000 square feet and one random location for each subsequent 1000 square feet. When quality control documentation at a fixed location indicates 36 months of historical sequential soluble salt/conductivity levels below those specified above, soluble salt/conductivity testing frequency may be reduced to one test per day. When any concentration or conductivity measurement exceeds the levels given above, rewash the entire surface area and retest all potentially contaminated steel to the satisfaction of the Engineer. If additional washing does not reduce the concentration to the acceptable level, a surface treatment or water additive may be used. Use a surface treatment or water additive that is approved by the coating system supplier and the Engineer.

COATING NEW STRUCTURAL STEEL.
(REV 4-10-17)

SUBARTICLE 560-2.4 is deleted and the following substituted:

560-2.4 Soluble Salts Test Kit: Use a soluble salts test kit in accordance with SSPC-Guide 15 utilizing a Table 1 retrieval method. Ensure the test sleeve or cell creates a sealed, encapsulated environment during ion extraction and is suitable for testing all structural steel surfaces. As an alternative, electronic conductivity meters approved for use by the Engineer may be used.

SUBARTICLE 560-7.5 is deleted and the following substituted:

560-7.5 Soluble Salts Detection and Removal: When using SSPC Guide 15, Table 1 retrieval methods, determine the chloride, sulfate and nitrate concentrations on all steel surfaces using soluble salts test kits meeting the requirements of 560-2.4. Measure the concentration levels using the method described in SSPC-TU 4. Perform the tests after washing and after each applied coat of the coating system. Ensure the non-visible surface contaminant concentrations on blast-cleaned surfaces do not exceed 7 $\mu g/cm^2$ for chlorides, 10 $\mu g/cm^2$ for soluble ferrous iron, 17 $\mu g/cm^2$ for sulfates and 10 $\mu g/cm^2$ for nitrates. When using electronic conductivity meters, use meters meeting the requirements of 560-2.4 and measure the surface conductivity as prescribed by the manufacturer. The instrument shall be properly calibrated and maintained according to the manufacturer's recommendations. Ensure the surface conductivity does not exceed 70 micro-Siemens per centimeter squared. For either contaminant assessment method (salt test kits or conductivity meter) test three random locations in the first 1000 square feet and one random location for each subsequent 1000 square feet. When quality control documentation at a fixed location indicates 36 months of historical sequential soluble salt/conductivity levels below those specified above, soluble salt/conductivity testing frequency may be reduced to one test per day. When any concentration or conductivity measurement exceeds the levels given above, rewash the entire surface area and retest all potentially contaminated steel to the satisfaction of the Engineer. If additional washing does not reduce the concentration to the acceptable level, a surface treatment or water additive may be used. Use a surface treatment or water additive that is approved by the coating system supplier and the Engineer.