## 560 COATING NEW STRUCTURAL STEEL. (REV 1-16-13) (FA 2-1-13) (7-13)

SUBARTICLE 560-2.4 (Page 743) 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 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 560-2.5 (Page 743) is deleted and the following substituted:

**560-2.5 Abrasives:** Use properly sized abrasives to achieve the required cleanliness and anchor profile. Use abrasives meeting the requirements of SSPC-AB 1, Mineral and Slag Abrasives, SSPC-AB 2, Cleanliness of Recycled Ferrous Metallic Abrasives, or SSPC-AB 3, Newly Manufactured or Re-Manufactured Steel Abrasive and do not introduce any contamination that interferes with the coating application and performance.

Provide certification to the Engineer that the abrasives used meet the requirements of this Section and do not contain any chlorides and other salts.

For non- metallic abrasives, verify compliance with the conductivity and cleanliness requirements of SSPC-AB1. For recycled abrasives, verify compliance with the conductivity and cleanliness requirements of SSPC-AB 2 after each recycling or more frequently if required by the Engineer. Select a sample from each recycling machine in use and conduct the water-soluble contaminant and oil content tests outlined in SSPC-AB 2 at least one time each week or more frequently if directed by the Engineer. Conduct the non-abrasive residue and lead content tests as directed by the Engineer. If test results do not meet requirements, notify the Engineer immediately, remove and replace the abrasive, clean the recycling equipment, and conduct tests each day to confirm the equipment is functioning properly. Return to the weekly testing interval as directed by the Engineer.

SUBARTICLE 560-6.3 (Page 744) is deleted and the following substituted:

**560-6.3 Quality Control Inspectors in the Shop and Field:** Provide documentation to the Engineer that all personnel performing quality control inspections are certified at a minimum as a National Association of Corrosion Engineers (NACE) Coating Inspector Level I or a SSPC Level 1 Bridge Coating Inspector and that they report directly to a Quality Control Supervisor who is certified either as a NACE Coating Inspector Level 3 or a SSPC Level 2 Bridge Coating Inspector.

SUBARTICLE 560-7.4 (Page 745) is deleted and the following substituted:

**560-7.4 Washing:** Clean all steel surfaces in accordance with the requirements of SSPC-SP 12 LPWC WJ4.

## SUBARTICLE 560-7.5 (Page 745) is deleted and the following substituted:

560-7.5 Soluble Salts Detection and Removal: When using SSPC Guide 15, Class A 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  $g/gm^2$  for chlorides, 10  $g/cm^2$  for soluble ferrous iron, 17 g/m<sup>2</sup> for sulfates and 10  $\mu$ g/cm<sup>2</sup> 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 in the first 1000 square feet and one test every 2000 square feet of steel surface area thereafter. When any concentration or conductivity measurement exceeds the levels given above, rewash the entire surface area and retest. 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.

SUBARTICLE 560-7.7 (Page 745) is deleted and the following substituted:

**560-7.7 Hand and Power Tool Cleaning:** Prepare steel by power and hand tool cleaning as defined in SSPC-SP 11, SSPC-SP 15, SSPC-SP 3, and SSPC-SP 2 for touch up and repair when approved by the Engineer. Use SSPC-VIS 3 as an aid in establishing cleanliness.

SUBARTICLE 560-9.3 (Page 746) is deleted and the following substituted:

**560-9.3 Sealing Using Caulk:** Apply caulk after the intermediate coat has cured to a condition suitable for recoating in accordance with the manufacturer's product data sheet, and before application of the finish coat. Completely seal the perimeter of all faying surfaces, cracks and crevices, joints open less than 1/2 inch, and skip-welded joints using caulk. Apply the caulk to the joint following the caulk manufacturer's recommendations. Ensure the caulk bead has a smooth and uniform finish and is cured according to the caulk manufacturer's curing schedule prior to the application of the finish coat. It is unnecessary to caulk cracks and crevices less than 0.003 inches in width, located on the interior surface area of box girders.

SUBARTICLE 560-9.7 (Page 747) is deleted and the following substituted:

**560-9.7 Stripe Coating:** Apply stripe coats for both intermediate and finish coats to achieve complete coverage and proper thickness on welds, corners, crevices, sharp edges, bolts, nuts, rivets, and rough or pitted surfaces. A stripe coat of clear coating is not required. Do not apply subsequent coats until the previous stripe coat has cured per the manufacturer's product data sheet for recoating. Stripe coating is not required for the inside surface area of all steel box girders.

SUBARTICLE 560-9.8 (Page 747) is deleted and the following substituted:

**560-9.8 Thickness of Coats:** Apply coatings to the thickness as identified in the manufacturer's product data sheet. After application of each coat, thoroughly inspect the surfaces and measure the dry film thickness (DFT) in accordance with SSPC-PA 2. As an exception to SSPC-PA2, the DFT of the prime coat shall not be less than the minimum specified by the manufacturer's product data sheet. When the DFT is deficient or excessive, correct in accordance with the coating manufacturer's recommendations and retest the area.