SP-150248
(New)

SPECIAL PROVISIONS
FOR
COMBINATION COATING – GALVANIZED-POWDER TOP COAT

Black Hawk County
NHSX-063-6(87)--3H-07

Effective Date
March 21, 2017

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

150248.01 DESCRIPTION.

This special provision includes requirements for coating systems for certain items on the project, including light poles, light pole mast arms, light pole bases, luminaries, signal poles, pedestal poles, push button poles, mast arms, and bases.

150248.02 MATERIALS.

A. Surface Preparations.
Prior to being incorporated into an assembled product, steel plates 3/4 inch or more in thickness shall be blast cleaned to remove rolled-in mill scale, impurities and non-metallic foreign materials. After assembly, all weld flux shall be mechanically removed. The iron or steel product shall be prepared for zinc coating in accordance with ASTM 232.

B. Zinc Coating.
The product shall be hot-dip galvanized to the requirements of ASTM A123 (fabricated products). The entire product shall be totally immersed, with no part of it protruding out of the zinc (no double dipping). This is to limit a risk of trapped contaminates containing chlorides and reduce the risk of bare spots. Maximum aluminum content of the bath shall be 0.01 %. Flux ash shall be skimmed from the bath surface prior to immersion and extraction of the product to assure a debris-free zinc coating.

C. Exterior Coating.
All galvanized exterior surfaces shall be coated with a Urethane or Triglycidyl Isocyanurate (TGIC) Polyester Powder to a minimum film thickness of 2.0 mils. Prior to application, the surfaces to be powder coated shall be mechanically etched by brush blasting (Ref. Society for Protective Coatings [SSPC] SP-7) and the zinc-coated substrate preheated to 450°F for a minimum of 1 hour in a gas-fired convection oven by heating the zinc-coated substrate to a minimum of 350°F and a maximum of 400°F. The thermosetting powder resin shall provide both intercoat as well as substrate fusion adhesion that meets 5A or 5B classifications of ASTM D3359. Color shall be a semigloss black

selected from the manufacturer's standard color table, and shall be readily matchable for future repair.

150248.03 CONSTRUCTION.

A. Packaging.
Prior to shipment, all items shall be protected to prevent damage during shipment and handling at project site.

B. Field Repair Procedures.
Where factory applied coatings have become damaged or abraded due to handling, transport, installation, welding or other circumstances, they shall be repaired in accordance with manufacturer's recommendations. All damaged areas shall be thoroughly wire brushed. All dirt, oil, grease or other contaminants shall be removed in accordance with SSPC-SP1 and SP5. Touch-up paint shall be supplied by the galvanizer or steel fabricator, and shall be identical in color and composition to that used in the plant. Touch-up paint shall be applied to all prepared surfaces to a dry film thickness of at least 4.0 mils.

150248.04 METHOD OF MEASUREMENT.
All work covered by this specifications shall be incidental to the lump sum price for Traffic Signalization and the each unit price for the Lighting Poles, complete, in place, and operating.

150248.05 BASIS OF PAYMENT.
Compensation to the Contractor for all work covered by this specifications shall be incidental to the lump sum price for Traffic Signalization and the each unit price for the Lighting Poles, complete, in place, and operating. The lump sum price and the each unit price payments shall be full compensation for all items of work and no separate payment for any individual items will be made.