4. Pot life: 6 hours, minimum @ 25° C (77°F)
   By observation of Ford B cup viscosity, pot life is deemed exceeded if the viscosity rose more than 30% or if gelled particles appear in the mix. A one liter (quart) container of mixed material is used.
5. Curing Time:
   a. Set-to-touch, ASTM D 1640: 4 hours Maximum @ 25°C (77°F)
   b. Dry To recoat, ASTM D 1640: 24 hours Maximum @ 25°C (77°F)
   c. Full cure: 7 days @ 10°C (50°F), Maximum
      No pick-up when rubbed with a cloth soaked in Methyl Ethyl Ketone
6. Fineness of Grind, ASTM D 1210: Hegman 3 minimum
7. Volatile Organic Compounds, maximum, ASTM D 3960:
   0.419 g/mL (3.5 lbs./gal.), as applied.

B. Material Quality Assurance for each component.

TEST	VARIANCE*
Density	± 2%
Viscosity	Dependent on test
Total Solids, % by weight	± 2
Pigment, % by weight	± 2
Nonvolatile Vehicle, % by weight	± 2

*Variance shall be within the noted range based upon the test average of the previously submitted sample.

910.04 Urethane Finish Coat. The urethane finish coat shall be a two-component polyester and/or acrylic aliphatic urethane and shall be suitable for use as a finish coat over the white epoxy polyamide intermediate coat.

A. Physical Requirements.

1. Finish: Specular Gloss, 60 degree, ASTM D 523: 85% minimum;
   70% minimum after 3000 hours weathering resistance
2. Volume Solids, ASTM D 2697: 42% minimum
3. Cure (Dry) Time at 25°C (77°F) and 50% RH
   Set to touch ASTM D 1640: 30 Minutes, minimum
   4 Hours, maximum
4. Pot Life: 4 hours minimum at 25°C (77°F)
   By observation of Ford B cup viscosity, pot life is deemed exceeded if the viscosity rose more than 30% or if gelled particles appear in the mix. A one liter (quart) container of mixed material is used.
5. Volatile Organic Compounds, ASTM D 3960: maximum, 0.419 g/mL (3.5 lbs./gal.), as applied.
6. Colors**

Gray FS-595B - 16440 - Use for the gloss test
Green FS-595B - 14260
Blue FS-595B - 15450
**Contractor's choice unless specified on plans.

B. Material Quality Assurance: Analysis for each component.

TEST	VARIANCE*
Density	± 2%
Viscosity,	Dependent on test
Total Solids, by Weight	± 2%
Pigment, by Weight	± 2%
Nonvolatile Vehicle, by weight	± 2%

*Variance shall be within the noted range based upon the test average of the previously submitted sample.

910.05 Performance Requirements. The coating system, which consists of the organic zinc prime coat, the epoxy intermediate coat, and the urethane topcoat, shall be tested prior to use.

Three panels for each of the specified tests shall be prepared to the requirements of the ASTM D 609 except that the thickness shall be 3 mm (1/8 inch) minimum and the steel shall be ASTM A 36/A 36 M hot rolled steel. The surface shall be blast cleaned (using coal slag abrasive) to equal, as nearly as is practical, the standard Sa 2-1/2 of ASTM D 2200 (Steel Structures Painting Council SSPC-SP10 meets this requirement), and the surface shall have a nominal height of profile of 25 to 88 μm (1 to 3.5) mils verified by using appropriate replica tape. The panels shall be coated and permitted to cure in accordance with the manufacturer's printed instructions. The dry film coating thickness in the system to be tested shall be as follows:

Organic Zinc: 75 - 125 μm (3.0 - 5.0 Mils)
Epoxy: 125 - 175 μm (5.0 - 7.0 Mils)
Urethane: 50 - 100 μm (2.0 - 4.0 Mils)

The coating system shall pass each of the following tests:

A. Fresh water resistance test (ASTM D 870). The panels shall be scribed as per ASTM D 1654 to the depth of the base metal in the form of an "X" having at least 50 mm (2-inch) legs and then immersed in fresh tap water at 25 ± 3ºC (75 ± 5ºF). After 30 days of immersion, the panels shall show no rusting nor shall the coating show any blistering, softening or discoloration. Blistering shall be rated by ASTM D 714.

B. Salt water resistance test (ASTM D 870). The panel shall be scribed as specified in "A" above and then immersed in a water solution of 5 percent sodium chloride at 25 ±