


TO:  <b>SUPERSEDED BY EB 99-025</b> <b>EFFECTIVE 3/17/99</b>	<h1 style="margin: 0;">ENGINEERING INSTRUCTION</h1> <p style="margin: 0;">NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>
<b>SUBJECT: PAINTING GALVANIZED SURFACES</b>	
Subject Code: 7.35-6	
<b>Distribution:</b> 30 Main Office      32 Regions      34 Special	<b>Code:</b> 89-11 <b>Date:</b> 4/13/89 <b>Supersedes:</b>
<b>APPROVED:</b>  <u>A. M. SHIROLE, Deputy Chief Engineer (Structures)</u>	

With the implementation of E.I. 88-36, lead based paints are no longer permitted as coatings for galvanized surfaces.

Since such coatings are still required, primarily for aesthetic purposes, the application of the now standard epoxy mastic-urethane system will be employed in accordance with the requirements of the Note (attached) titled: PAINTING GALVANIZED SURFACES. This note will be a Main Office insert.

Because urethane finish coats can be supplied in virtually any known color, it will be necessary for the designer to specify the desired color by means of standard color notations. Listed below are color notations for commonly used colors:

<u>Color</u>	<u>Federal Standard 595a</u>	<u>Munsell Book Notation</u>
Blue	35177	
Dark Blue	15090	
Brown	30111	
Brown-Gray	36306	
Weathered Brown	20059	
Light Gray		10B 6/1
Sage Green		7.5 GY 5/4

The following note shall be placed on the General Note Sheet whenever galvanized surfaces are to be coated:

'Standard specifications and special specifications that reference the painting of galvanized surfaces, or any galvanized surfaces required to be painted, shall be painted in accordance with the requirements of the note Painting Galvanized Surfaces, which is in the Proposal. Finish coat color shall be \_\_\_\_\_. The color shall conform to (Federal Standard 595a, or Munsell Book Notation). Viewing shall be done under North Standard Daylight. The cost of this work shall be included in the price bid for .'\*

\*It will be the designer's responsibility to choose the proper pay item to cover painting work of this type. Generally, if the project employs structural steel painting items, galvanized surface painting costs can be included in those items. If not, the designer should choose the most appropriate item; e.g., railing, downspout, etc.

This E. I. becomes effective with the letting of August 24, 1989 (P.S.&E. June 1, 1989).

PAINT SYSTEM - GALVANIZED METAL

ACCEPTABLE MANUFACTURERS AND PRODUCTS\*  
TWO COAT PAINT SYSTEM

Manufacturer	Epoxy First coat	Polyurethane Topcoat
Ameron Protective Coatings Div. Brea, CA	Amerlock 400** or Amerlock 400 AL**	Amershield
Carboline Company St. Louis, MO	Carbomastic 90 Aluminum** or Carboline 893 RCP**	Carboline 133 HB** or Carboline D834T**
Con-Lux Coatings, Inc. Edison, NJ	Epolon Mastic 36 White** or Epolon Mastic 81 Aluminum**	Acrolon 205 Multi-Mil Series
The Sherwin-Williams Company Cleveland, OH	Epoxy Mastic Aluminum** B62S10/B60V11 or Epoxy Mastic Coating** B58 Series/B58V1	Hi-Bild Aliphatic Polyurethane Enamel B65 Series/B60V2
The Valspar Corporation Baltimore, MD	Alumapoxy 75-A-1	V-Thane Hi-Solids Urethane Enamel 54-W-9

\*The Contractor is advised that some paint systems may not conform to existing regulations for the emission of Volatile Organic Compounds (VOC's). The Contractor shall be responsible for selecting a system that is suitable for application at the painting location.

No material substitutions will be allowed.

\*\*The Contractor may supply either product.

## PAINTING GALVANIZED SURFACES

Galvanized metal surfaces required to be painted, shall be painted in accordance with the following:

1. Paint shall be Department approved. The attached appendix lists approved manufacturers and paint systems. Only one paint system supplied by an approved manufacturer shall be used. No substitutions will be permitted.
2. All galvanized surfaces shall be cleaned in the manner required by SSPC-SPI, Solvent Cleaning.
3. Abrade all galvanized surfaces by brush blast methods, or other mechanical means approved by the Engineer/Inspector. The purpose of abrading is to roughen the surface, not to remove material.
4. Apply one coat of epoxy mastic primer, followed by one coat of polyurethane topcoat. Manufacturer's instructions for mixing and paint application shall be supplied to the Engineer/Inspector at least one week prior to the beginning of any painting work. The Contractor shall strictly follow these instructions.

Dry film thicknesses for each coat shall conform to the following:

Primer coat...	...4.0 mils.
Finish coat...	...3.0 mils.

5. The color of the finish, or top coat, shall be noted in the contract documents. If no color is so noted, the Regional Director shall select the proper color.
6. Paint application methods shall be in accordance with the following:
  - a. Shop: Spray, roller, or brush.
  - b. Field: Brush only.