

Paint over Galvanized

Paint over galvanized finishes on steel poles has proven to be very effective in corrosive atmospheres. It increases the life of poles installed in an area where salt spray is a corrosive factor.

The process consists of the following;

Galvanizing

Zinc Coating: The product is hot-dip galvanized to the requirements of either the current revision of ASTM A123 (Specification for Zinc Coatings on Iron and Steel Products) or the current revision of ASTM A153 (Specification for Zinc Coating on Iron and Steel Hardware). AASHTO, MILSPEC or International specifications can be accommodated when requested in advance. If repairs are required, they are done so in accordance with the current revision of ASTM A780 (Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings).

Powder Coating

The standard powder coat finish consists of Polyester, or Super Durable Powder.

Surface Preparation: The galvanized surface is prepared for painting by sweep blasting to current ASTM D6386 requirements using cast-steel abrasives conforming to the Society of Automotive Engineers (SAE) Recommended Practice J827. The blast method used is a re-circulating, closed-cycle centrifugal wheel system with abrasive conforming to SAE Shot Number S280.

Exterior Coating: All exterior surfaces are coated with Polyester Powder to an average dry film thickness (DFT) of 4.0 mils. The coating is electrostatically applied and cured in a gas-fired convection oven.

Packaging: Prior to shipment, small poles are wrapped in a protective polypropylene woven material, laminated to 3/32" micro foam. Larger poles are protected at dunnage points on the truck or trailer. Field painting procedures for paint over galvanized (spot repair).

Surface Preparation: All loose foreign materials by hand scraping. Surface is lightly sand galvanized by hand abrading or power abrading (coarse-grit sand paper or emery cloth is acceptable) to achieve a surface profile. Entire surface is solvent-wiped to remove all foreign particles and other contaminants.

Prime coat: Two (2) coating of component zinc-rich primer (TNEMEC series 90-97) is applied to the prepared areas to a minimum of three (3) mils dry film thickness (DFT). This allows coating to cure per coating vendor's recommendation.

Top coat: Apply two (2) component acrylic polyurethane (TNEMEC Series 1074, 1075, or 175) is applied to prime-coated areas to a minimum of three (3) mils dry film thickness (DFT).

Notes: To obtain a smooth transition, the prime-coated edges in the overlap area may require feathering with fine-grit sandpaper or emery cloth into the existing finish. Allow coating to cure per coating vendor's recommendations.

Due to the exposure age of the existing shop-applied coating and the nature of each (existing powder coating versus liquid repair coating), the two coatings may exhibit differing gloss characteristics initially, but will probably equate over time.

Hot-dip zinc coating is extremely durable and hard. It is unlikely the zinc coating would be compromised. However, zinc is a very active metal and when applied to carbon steel, it will sacrifice itself and self heal on any damage that is approximately .25" wide or smaller.

