

T N E M E T E C H



SUBJECT

Surface Preparation and Coating of Hot-Dipped Galvanized (Non-Immersion Service)

PURPOSE

To provide Tnemec sales representatives surface preparation and coating recommendations for hot-dipped galvanized surfaces in non-immersion service. This Technical Bulletin does not apply to “paintable primers”, which are sometimes applied to coil stock. Some, but not all, “paintable primers” have been found to be compatible with certain Tnemec Products. Contact Tnemec Technical Services for information about compatible “paintable primers,” test results and potential testing of untested “paintable primers”.

GENERAL

This Technical Bulletin simplifies and standardizes the surface preparation and coating system recommendations for hot-dipped galvanized surfaces for non-immersion service.

There are many types of galvanizing and passivation treatments. For the purposes of this technical bulletin, it is to be assumed that all galvanized surfaces are passivated. In general, all galvanized surfaces must be clean, dry, and properly prepared prior to coating.

Coating Galvanizing Using Series 115

Interior -- Dry/Benign Exposures:

Tnemec recommends the following surface preparation and coating system when applying coatings over galvanized surfaces in dry, benign interior exposures (e.g. Dry goods warehouses, gymnasiums, mechanical rooms, hospitals, schools and general office space).

- Surface Preparation: Visible deposits of oil, grease, or other contaminants shall be removed as required by SSPC-SP1. Remove any storage stains per Section A3 of SSPC-SP16. Galvanized surfaces must be clean, dry, and contaminant free prior to application of coatings.
- Prime Coat: Tnemec Series 115 at 2.0 to 4.0 mils DFT. No exceptions.
- Finish Coat (Optional): Tnemec Series 115 at 2.0 to 4.0 mils DFT.
- Total Film Thickness: 2.0 to 4.0 mils or 4.0 to 8.0 mils DFT.

Interior -- Moderate Exposures:

Tnemec recommends the following surface preparation and coating system when applying coatings over galvanized surfaces in moderate interior exposures (e.g. Kitchens, pharmaceutical, natatoriums, light manufacturing and textile plants).

Surface Preparation: Visible deposits of oil, grease, or other contaminants shall be removed as required by SSPC-SP1. Remove any storage stains per Section A3 of SSPC-SP16. Galvanized surfaces must be clean, dry, and contaminant free prior to application of coatings.

Prime Coat: Tnemec Series 115 at 2.0 to 4.0 mils DFT. No exceptions.

Finish Coat: Tnemec Series 115 at 2.0 to 4.0 mils DFT. No exceptions.

Total Film Thickness: 4.0 to 8.0 mils DFT.

Coating Galvanizing Using Epoxies and/or All Other Exposures

For the best performance, Tnemec recommends the following surface preparation and coating systems when applying coatings over galvanized surfaces using Tnemec epoxies and/or all other exposures:

Surface Preparation: Visible deposits of oil, grease, or other contaminants shall be removed as required by SSPC-SP1. Sweep (Abrasive) Blasting per SSPC-SP16 to achieve a uniform anchor profile (1.0 to 2.0 mils). Galvanized surfaces must be clean, dry, and contaminant free prior to application of coatings.

Prime Coat: Tnemec Series 27, 27WB, 66, N69, 115, 118, 135, and 161 at 2.0 to 3.0 mils DFT.

Finish Coat: Compatible Tnemec Finish at 2.0 to 3.0 mils DFT.

Total Film Thickness: 4.0 to 6.0 mils DFT.

Mock-Up (for all applications over galvanizing)

Before commencing the coating application, Tnemec recommends that the applicator, with the owners/specifiers review and approval, install a mock up or test area of the surface preparation and coating system application to show final color, appearance, compatibility, and acceptability of performance.

After a minimum of 1 week of exposure, perform adhesion testing per ASTM D 3359; Test A (X-Cut) Standard Test Method for Measuring Adhesion by Tape Test A minimum adhesion rating of 4A is required on a 0 to 5 scale, without blasting.

Immersion Service

For immersion service, please consult Tnemec Technical Services.

JG