



****THIS IS A NEW IM. - PLEASE READ CAREFULLY.****

PAINT SHOP APPROVAL

GENERAL

Paints of all miscellaneous steel products shall conform to the requirements of the Iowa Department of Transportation Specification requirements and as described herein. Acceptance of all painted miscellaneous steel products shall be on the basis of certification from an approved paint shop.

PAINT SHOP APPROVAL

Each paint shop shall be approved PRIOR to the commencement of any paint work for the State of Iowa. Paint shops seeking approval shall provide the Central Materials Office a written application to become an approved paint shop. The application shall include the following:

1. Quality control procedures that the company has established to ensure quality paint work.
2. Source and type of paint
3. Sand blasting (outdoor, indoor and size of bulk sand hopper)
4. Painting bay (size in square feet, heated, unheated)
5. Paint storage room (heated, unheated)
6. Hoist (capacity in tons)
7. Lighting minimum requirement 50 foot-candles (lm/ft²)
8. Ventilation systems
9. Humidity/temperature/air flow
10. Qualified/certified painter
11. Paint certification
12. Storage of painted items
13. Shipping & handling

PRE-PAINTING APPLICATION REQUIREMENTS

1. Surface Preparation
 - a. Galvanized
 - b. Non-galvanized
2. Pretreatments or Blasting (SSPC Requirements), profile measurement
3. Material Handling & Storage
4. Approved Paints
 - a. Primer
 - b. Topcoat
 - c. Three-coat System
5. Mixing & Thinning

PAINT APPLICATION REQUIREMENTS

1. Contact Surfaces
2. Temperature Control
 - a. Metal Temperature
 - b. Room Temperature
 - c. Paint Temperature
3. Humidity Control
4. Paint Thickness
5. Paint Damage Repair/Re-coating/Touch-up

APPLICATION METHODS

Spray Application/Manufacturer's Recommendations

1. Air Spray

2. Airless Spray
3. Roller Application
4. Brush Application
5. Coating Thickness

CURING METHODS

1. Air at Room Temperature
2. Heated Bay
3. Other Methods

SHIPPING & HANDLING

Painted items shall be protected:

1. While in Storage
2. In Stocking
3. In Shipping & Handling

TEST PANEL

Each paint shop seeking approval by the State of Iowa shall demonstrate the ability to properly apply shop coats to test panel. Test panels shall be steel (hot-rolled or equivalent) measuring 6 inches by 8 inches or greater, shall be white metal blast-cleaned (SSPC SP5) with a nominal anchor profile between 1.5 to 3.5 mils and coated with zinc-rich paint.

Panels shall be blast-cleaned and coated on both sides and all edges. The paint shall be spray-applied and cured in accordance with manufacturer's recommendations. The dry film thickness shall be between 3.0 and 5.0 mils. Prior to any exposure testing, panels shall be aged for 14 days at 75°F-79°F and 45-55% relative humidity.

Mudcracking:

The coating after the cure period shall show no mudcracking to the naked eye and when viewed under 10x magnification.

Adhesion:

The coating when applied and hardened shall adhere to the steel substrate when subjected to testing.

Gloss & Color Retention & Ultraviolet (UV) Resistance Testing:

The paint manufacturer shall present a certificate of compliance by an independent certified laboratory stating that the paint has been tested for gloss and color retention and UV resistance and has met the intended specification requirements.