

2.XX HOT-DIP GALVANIZING - DURAGALV

- A. Hot-Dip Galvanizing: Provide coating for iron and steel fabrications applied by the hot-dip process, Duragalv® by Duncan Galvanizing. Comply with ASTM A 123 for fabricated products and ASTM A 153 for hardware. Provide thickness of galvanizing specified in referenced standards. The galvanizing bath shall contain high grade zinc, nickel, and other earthy materials.
- B. Galvanizing shall exhibit a rugosity (smoothness) not greater than 4 rug (16-20 microns of variation) when measured by a profilometer over a 1 inch straight line on the surface of architectural and structural elements that are less than 24 pounds per running foot. Profilometer shall be capable of operating in 1 micron increments.
1. Surface blasting prior to application of factory-applied post-galvanizing wet coatings will produce a high rugosity and not be acceptable.
- C. Quality Assurance for Hot-Dip Galvanizing:
1. Galvanizing shall be performed by a company with a minimum of five years experience in the successful application of hot-dip galvanizing utilizing the dry kettle process.
 2. Engage the services of a galvanizer who has demonstrated a minimum of five years experience in the successful performance of the processes outlined in this specification in the facility where the work is to be done and who will apply the galvanizing and coatings within the same facility as outlined herein. The Architect has the right to inspect and approve or reject the galvanizer/galvanizing facility.
 3. The galvanizer/galvanizing facility must have an ongoing Quality Control/Quality Assurance program acceptable to the Architect which has been in effect for a minimum of five years and shall provide the Architect with process and final inspection documentation.
 4. Touch-up damaged galvanizing after installation using organic zinc coating complying with ASTM A780 and as recommended by galvanizer.
 5. Certificate of compliance that the galvanizer has certified weighers on premises with a certification from the local municipality, and a certified scale of municipal scale has been utilized by the galvanizer.
 6. Fabricator shall provide a notarized statement from the galvanizer, along with a description of the material processed, indicating that all work has been done in conformance with this specification prior to receiving payment.
 7. Certificate of Compliance for Shop Drawing Review by Galvanizer: Submit galvanizer's certification that shop drawings for metal fabrications to receive metal coatings have been reviewed and that fabrications are acceptable to galvanizer for proper application of galvanizing and metal coatings. All drawings should be stamped by the galvanizer to indicate approval of design for galvanizing.

2.XX HOT-DIP GALVANIZING AND FACTORY-APPLIED PRIMER - PRIMERGALV

- A. Hot-Dip Galvanizing: Provide coating for iron and steel fabrications applied by the hot-dip process, Duragalv® by Duncan Galvanizing. Comply with ASTM A 123 for fabricated products and ASTM A 153 for hardware. Provide thickness of galvanizing specified in referenced standards. The galvanizing bath shall contain high grade zinc, nickel, and other earthy materials.
- NTS: Delete paragraph B if priming is over "black steel" or aluminum
- B. Galvanizing shall exhibit a rugosity (smoothness) not greater than 4 rug (16-20 microns of variation) when measured by a profilometer over a 1 inch straight line on the surface of architectural and structural elements that are less than 24 pounds per running foot. Profilometer shall be capable of operating in 1 micron increments.
1. Surface blasting prior to application of factory-applied post galvanizing wet coatings will produce a high rugosity and not be acceptable.
- C. Factory-Applied Primer: Provide factory-applied prime coat, Primergalv® by Duncan Galvanizing, certified VOC compliant, conforming to applicable regulations and EPA standards. Apply primer within 12 hours after galvanizing at the same facility where the galvanizing is done in a controlled environment meeting applicable environmental regulations and as recommended by the primer coating manufacturer. Blast cleaning of the surface is unacceptable for surface preparation.
- D. Performance Criteria: Coatings must meet or exceed the criteria for the following categories as stipulated by the coatings manufacturer:
- ABRASION - Method: ASTM D 4080 (CS17 Wheel, 1,000 grams load),
ADHESION - Method: ASTM D 3359, (Method B, 5 mm Crosshatch),
HUMIDITY - Method: ASTM D 4585
SALT SPRAY (FOG) - Method: ASTM B 117
- E. Quality Assurance for Hot-Dip Galvanizing and Factory-Applied Metal Coatings: