

QUV - Method: ASTM G 53 (ES-40 bulbs, 4 hours light, 4 hours dark)  
SALT SPRAY (FOG) - Method: ASTM B 117  
FLEXIBILITY  
PENCIL HARDNESS

E. Quality Assurance for Hot-Dip Galvanizing and Factory-Applied Metal Coatings:

- 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.
- Factory-applied metal coatings shall be performed in a facility acceptable to the coating manufacturer.
- Submit two 3 inch by 6 inch samples of factory-applied coatings and colors proposed for use for approval prior to coating application.
- 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 within the same facility as outlined herein. The Architect has the right to inspect and the facility where the work is to be done and who will apply the galvanizing and coatings approve or reject the galvanizer/galvanizing facility.
- Handle and install materials with factory-applied coatings as recommended by galvanizer and coating manufacturer to prevent damage to coatings prior to and after installation.
- Touch-up factory-applied metal coatings as recommended by galvanizer and coating manufacturer.
- Coatings not matching approved submittals shall be removed and replaced at no additional expense to the Owner.
- Certificate of compliance that the galvanizer has certified weighers on premises with a certification from the local municipality, and a certified scale or municipal scale has been utilized by the galvanizer.
- 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.
- 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 ARCHITECTURAL FINISH WITH CLEARCOAT -  
COLORGALV CLEARCOAT

- Hot-Dip Galvanizing: Provide coating for iron and steel fabrications applied by the hot-dip process, Duragal® 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 sacrificial materials.
- 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.
  - Surface blasting prior to application of factory-applied post galvanizing wet coatings will produce a high rugosity and not be acceptable.
- Architectural Finish: Provide factory-applied architectural coating over hot-dip galvanized steel, Colorgalv® by Duncan Galvanizing matching approved samples.
  - Primer coat shall be factory-applied prime coat. 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.
  - Finish coat shall be factory-applied color-pigmented architectural finish. Apply finish coating at the galvanizer's plant, in a controlled environment meeting applicable environmental regulations and as recommended by the finish coating manufacturer.
  - Coatings shall be certified VOC compliant and conform to applicable regulations and EPA standards.
  - Apply the galvanizing, primer and coating within the same facility and provide single-source responsibility for galvanizing, priming and finish coating.
  - Blast cleaning of the galvanized surface is not acceptable.
- Performance Criteria: Coatings must meet or exceed the criteria for the following categories as stipulated by the coatings manufacturer:
  - Primer:  
ABRASION - Method: ASTM D 4060 (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  
PENCIL HARDNESS