Key Specifications for Architectural Metal Castings

Shop Drawings
- Scale to be a minimum of one inch equals one foot.
- Show all fasteners and weldments.
- Indicate all finishes.
- Indicate order quantities.

Patterns
- Must account for shrinkage at a rate of one eighth of an inch per linear foot.
- All edges and details must be clearly defined.
- Use of remnants as patterns.

Castings/Material
- Sand cast Class 30 Grey Iron ASTM A48
- Sand cast Aluminum Alloy 319 ASTM B 221
- Sand cast Bronze #12A Silicon Bronze ASTM B198
- All castings should be free of typical foundry defects such as porosity, cold shuts and warpage.

Surface
- Molding sand must have a minimum AFS 70 grain fineness on a 3 screen distribution.
- All gating and flashing must be thoroughly cleaned.
- All castings must be cleaned to bare white metal prior to the application of any finish coatings.

Coatings
- Iron/ Steel
  - Pre-prime Zinc Chromate (shop applied)
  - Primer Two component Epoxy Primer
  - Finish Acrylic Polyurethane
- Aluminum
  - Primer Two component Epoxy Primer
  - Finish Acrylic Polyurethane
- Bronze
  - #Satin Finish-Brushed
  - Chemical Patina-Highlighted
  - Lacquer/Paste Wax
Construction
- All weldments must be in strict accordance with AWS practices and procedures.
  - Cast Iron  41MP Pure Nickel Rod
  - Aluminum Alloy R4043 Aluminum Rod
  - Bronze Alloy 351B Silicon Bronze Rod
- All fasteners are to be:
  - Stainless Steel with Iron/Steel/Aluminum
  - #12A Silicon Bronze with Copper-Based Alloys

Sealants
- One-component elastomeric gun-grade polyurethane sealant.

Labor
- Only qualified craftsmen with proper certification are recommended.
- A minimum of five years experience is suggested.