



Key Specifications for Architectural Metal Castings

Key Specifications

- Shop Drawings
- Patterns
- Castings Surface
- Coatings
- Construction
- Sealants
- Labor

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 Polyurathane

Aluminum

- Primer Two component Epoxy Primer
- Finish Acrylic Polyurethane

Bronze

- # 4Satin Finish-Brushed
- Chemical Patina-Highlighted
- Incelac 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 3S1B Silicon Bronze Rod
- All fasteners are to be:
- Stainless Steel with Iron/Steel/Aluminum
- #12A Silicon Bronze with Copper-based alloys

Sealants

- One-part color matched Silicone sealant such as Dow Corning 795

Labor

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