TECHNICAL INFORMATION Fortina Anodized Data > QuickShip

204-R1 Anodized Finishes

General Information

- Conventional sulfuric acid anodizing (MIL-8625 Type 2)
- Anodic coating thickness range is 0.4 mil to 0.7 mil (AAMA Class 2)
- Aluminum Association Designation is AA-M12C22A31
- M12 As Extruded (no mechanical finishing required)
- + C22 Medium Matte Etch (standard sodium hydroxide solution
- A31 Anodic Coating Thickness ranges from 0.4 mil to 0.7 mil with natural color (nondyed)

Specification Compliance

- · AAMA 611 Class 2 (Type A3)
- · MIL-8625 Type 2 Class 1

Tests Conducted

- Salt Spray per ASTM B117 tested monthly
- Anodic Coating Weight per ASTM B137 tested monthly
- \cdot Anodic Coating Thickness per ASTM B244 tested every load
- Anodic Seal Quality per ASTM B136 tested daily
- \cdot Anodic Seal Quality per ASTM B680 & ISO 3210 tested twice a day with dye stain every load
- · Bath parameters are tested and controlled using instruments or chemistries calibrated with NIST certified standards



TECHNICAL INFORMATION Fortina Anodized Data > All Other

Surface Treatment: Anodized Coating Composite Film (Anodizing + Clear Coating)

The performance of the anodized coating composite film (equivalent to Type A1) is shown in the table below.

| Category | | | Performance |
|---|---|--|--|
| Thickness of Anodized Coat- ing (Average Film Thickness) | | | The thickness must be at least 5 μ m, and the film thickness at all measurement points must be no less than 80% of the average film thickness. |
| CASS Corrosion Resistance (120h) | | | RN 9.5 or higher |
| Coating Adhesion | Cross-Cut Test | | 25/25 |
| | Boiling Water Cross-Cut Test | Boiling Water Test (5h) | Appearance: The coating must not exhibit wrinkles, cracks, blistering, or significant discoloration. |
| | | Cross-Cut Test After Boiling Water Test | 25/25 |
| Coating Solvent Resistance | | | The decrease in pencil hardness of the coating before and after the test must be within one unit on the hard- ness scale. |
| Alkali Resistance (24h) | | | RN 9.5 or higher |
| Composite Corrosion Resis- tance | UV Fluorescent Lamp Accelerated Weathering Test (240h) | | RN 9 or higher |
| | CASS Test (120h) | | RN 9 or higher |
| Accelerated Weathering Re- sistance | Xenon Lamp Accel- erated Weathering Test | | Appearance: Significant discoloration or chalking must not occur. |
| | 4000h | | Gloss Retention: 75% or higher |
| | Sunshine Carbon Arc Lamp Method | | Appearance: Significant fading or chalking must not occur. |
| | 3000h | | Gloss Retention: 75% or higher |

Both combined corrosion resistance and weather resistance performance requirements must be satisfied.

Weather resistance shall be evaluated using either the Xenon Lamp Accelerated Weathering Test or the Sunshine Carbon Arc Lamp Accelerated Weathering Test.

The combined corrosion resistance test shall be conducted by performing the CASS test after the UV fluorescent lamp accelerated weathering test.

