

# 200-351-452 entrance specifications



## I. GENERAL

### DESCRIPTION

Work Included: Furnish all necessary materials, labor and equipment for the complete installation of aluminum swing doors and frames as shown on the drawings and specified herein.

Work not included: Structural support of aluminum framing, trim, shims, and perimeter sealants.  
(Specifier: list any other exclusions.)

Related Work Specified Elsewhere: (Specifier List)

### Quality Assurance

Drawings and specifications are based upon the series (choose one: 200-351-452) doors as manufactured by CMI-Cronstroms, Inc., Eagan, MN. When substitute products are to be considered, technical literature, samples, drawings, and performance test data must be submitted ten (10) days prior to bid date. Test reports certified by an independent laboratory must be made available upon request.

### PERFORMANCE REQUIREMENTS

**Air Infiltration:** (applies only to single acting offset pivot or butt hinged doors.) Shall be tested in accordance with ASTM E 283 at a pressure differential of 1.567 P.S.F.. a single 3'-0" x 7'-0" entrance door and frame shall not exceed .50 CFM per lineal foot of crack. A pair 6'-0" x 7'-0" entrance doors and frame shall not exceed 1.0 CFM per lineal foot of perimeter crack.

**Structural:** Resistance to corner racking shall be tested by moment load testing as follows:

- Test section shall consist of a standard top door corner assembly. Side rail section shall be 12" long.
- Anchor top rail positively to test bench so that corner protrudes 3" beyond bench edge.
- Anchor a lever arm positively to the side rail at a point 19" from inside edge of top rail. Attach weight support pad at a point 19" from inner edge of side rail.
- Test section shall withstand a load of \_\_\_\_\_ (choose one: 130 pounds for 200 Door or 165 pounds for 351 Door) on the lever arm before reaching the point of failure. Failure is defined as a joint separation of 1/16" during test loading or a vertical rail rotational displacement of 3-1/2 degrees during test loading.

## II. PRODUCTS

### MATERIAL

Extrusions shall be 6063-T5 alloy and temper (ASTM B221 alloy G.S. 10A-T5). Fasteners used for assembly, shall be stainless steel, aluminum, or zinc plated steel in accordance with ASTM A 164. Perimeter anchors shall be stainless or zinc plated steel. (Anchors are provided by glazing contractors). Glazing gaskets shall be E.P.D.M., Elastometric or Neoprene.

### HARDWARE

Specifier Note:

If entrance hardware must be furnished under the "Finish Hardware" section of the specifications; (please specify:) The finish hardware supplier shall be responsible for furnishing physical hardware to the entrance manufacturer prior to fabrication." If lock cylinders are to be master-keyed, it is recommended that cylinders be included under the "Finish Hardware" section of the specifications.

Hardware for entrance doors and frames shall be as follows:

- Pivots/Butt Hinges \_\_\_\_\_
- Locks:
  - Active Leaf \_\_\_\_\_
  - Inactive Leaf \_\_\_\_\_
- Closer \_\_\_\_\_
- Exit Device \_\_\_\_\_
- Push/Pull \_\_\_\_\_
- Threshold \_\_\_\_\_
- Miscellaneous \_\_\_\_\_

Include style, finish, type, model, series, manufacturer, etc. to assure a complete description.

Refer to Section A for standard hardware offered with stock entrance packages.

Refer to Section D for complete listing and description of entrance hardware.

### FINISH

All exposed aluminum surfaces shall be free of scratches and other blemishes. All exposed surfaces shall be given a caustic etch by an anodic oxide treatment to obtain the following finish: (Specifier select).

An Architectural Class II clear anodic coating in accordance with Aluminum Association Standard AA-M12 C22 A31 designated as #20 Clear. An Architectural Class I anodic coating with integral color in accordance with the Aluminum Association Standard AA-M12 C22 A44 designated as #33 Dark Bronze.

(Specifier note: #30 Champagne, #31 Lt. Bronze, #32 Medium Bronze, #35 Black, and #37 Burgundy are available colors offered at a premium price.)

**ORGANIC COATING:** High performance fluorocarbon coatings in accordance with AAMA 605. Color as selected by Architect and offered at a premium price.

### FABRICATION

The door stile and rail dimensions of the \_\_\_\_\_ (choose one: 200-351-452) entrance doors shall be as follows:

| Door  | Stiles | Top Rail | Bottom Rail |
|-------|--------|----------|-------------|
| "200" | 2-1/8" | 2-7/8"   | 3-5/16"     |
| "351" | 3-1/2" | 3-5/16"  | 6"          |
| "452" | 4-1/2" | 4-1/2"   | 6"          |

Corner construction shall consist of a mechanical fastener applied block and fillet weld connection. Glass stops shall be hook-in type, square fit for 1/4" or 1" glazing, with EPDM glazing gaskets. Door frames shall be 450 F.G. Series (1-3/4" x 4-1/2") requiring screw spline or shear block assembly.

## III. EXECUTION

### INSTALLATION

Framing shall be installed, glazed and adjusted by experienced workmen in accordance with the manufacturer's installation instructions and/or approved shop drawings.

### CLEANING AND PROTECTION

After installation all metal surfaces shall be cleaned to remove mortar, plaster, paint or other contaminants. After cleaning, all work shall be protected against damage until it is accepted by the General Contractor. Thereafter, it shall be the responsibility of the General Contractor to maintain protection and provide final cleaning.

(NOTE: Product improvements may require specification changes without notice.)