

SECTION 08 4210**1301 SERIES ALL GLASS ENTRANCES****PART 1 - GENERAL****1.01 SUMMARY**

- A. This section includes:
 - 1. Vestibule doors matching entrance doors.
 - 2. Sidelites.
- B. Related work in other sections:
 - 1. Locking Panic Handles, Deadbolt Handles, and Push/Pull Handles for tempered glass entrance doors are specified in Division 08 7100 section "Door Hardware".

1.02 SUBMITTALS

- A. Product Data: Submit Manufacturer's product data for all glass entrance systems including:
 - 1. Manufacturer's standard details and fabrication method.
 - 2. Data on finishing, hardware and accessories.
 - 3. Recommendations for maintenance and cleaning of exterior finish surfaces.
 - 4. Test data on fabricated door.
- B. Shop drawings for each all glass entrance system are required, including:
 - 1. Layout and installation details.
 - 2. Elevations at 1/4-inch scale.
 - 3. Detail sections of fittings.
 - 4. Hardware mounting heights.
 - 5. Anchorage and reinforcement.
 - 6. Glazing details.
- C. Samples for approval:
 - 1. Submit pairs of samples of each specified metal color and finish on 9-inch long sections of extrusions or formed shapes.
 - 2. Submit samples of glass approximately 12 inches square showing the edge conditions.

1.03 QUALITY ASSURANCE

- A. Installer qualifications: Engage an experienced installer who has completed installations of all glass entrances similar in design and extent to those required for the project and whose work has resulted in construction with a record of successful in service performance.

- B. Manufacturer's qualifications: Provide all glass entrances produced by a firm experienced in manufacturing entrance systems that are similar to those indicated for this project and that have a record of successful in service performance. All door rail systems must be tested.
- C. Single source responsibility: Obtain all glass entrance systems from a single manufacturer to ensure full compatibility and warranty of parts.
- D. Design criteria: The drawings indicate the size, profile and dimensional requirements of the all glass entrance system required and are based on the specific types and models indicated. All glass entrances by other manufacturers may be considered, provided deviations in dimensions and profiles are minor and do not change the design concept as judged by the Architect. The burden of proof of equality is on the proposer.
- E. Safety glass standard: Provide tempered glass components that comply with ANSI Z97.1 and testing requirements of CPSC 16CFR Part 1201 for Category II materials.

1.04 **DELIVERY, STORAGE, AND HANDLING**

- A. Deliver all glass entrances and related components in the manufacturer's original protective packaging. Do not deliver entrance units until the work is ready for their installation.
 - 1. Inspect components for damage upon delivery. Unless minor defects in metal components can be made to meet the Architect's specifications and satisfaction, damaged parts should be removed and replaced.

1.05 **PROJECT CONDITIONS**

- A. **Field Measurements:** Check opening by accurate field measurement before fabrication. Show recorded measurements on shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of the work and possible damage to the finished product.
 - 1. Where necessary, proceed with fabrication without measurement and coordinate fabrication tolerances to insure proper fit.

PART 2 - PRODUCTS

2.01 **ACCEPTABLE MANUFACTURER'S**

- A. Basis of design: Design is based on the 1301 Series "All-Glass" Entrance Door System manufactured by:

C.R. Laurence Co., Inc. (CRL) / Blumcraft
Tel: (800) 421-6144 Fax: (800) 587-7501
Email: architectural@crlaurence.com
www.crlaurence.com

- B. Subject to compliance with requirements, "all-glass" entrances from other manufacturers meeting the specified requirements may be acceptable.

2.02 **MATERIALS**

- A. LEED® requirements:
1. Recycled Content Materials: Provide building materials with recycled content such that post-consumer recycled content plus one-half of pre-consumer recycled content constitutes a minimum of 20 percent of the cost of materials used for the project. See LEED® Green Building Rating System.
 2. Regional Materials: Provide a minimum of 10 percent (based on cost) of building materials that are regionally extracted, processed, and manufactured.
- B. Stainless steel or Naval Bronze with specific type and alloy required to produce work indicated and specified (not available in aluminum).
- C. Glass and Glazing
1. Comply with ASTM C1048, Kind FT (fully tempered), Condition A (uncoated), Type I (transparent, flat), Class 1 (clear), Quality q3 glazing select). Provide glass complying with requirements of CPSC 16CFR, Part 1201 for Category II materials.
 2. Thickness: 1/2", 5/8" or 3/4" (12, 16 or 19 mm) [1/2" (12 mm) thickness available in Starphire low iron, solar bronze, solar gray, or satin etch].
 3. All glass fabrication to be completed before tempering.
 4. Exposed edges to be bright flat polish.
 5. Glass to be tempered horizontally, visible tong marks or tong mark distortions are not permitted.

2.03 **HARDWARE**

IMPORTANT: The Series 1301 Top and Bottom Rails can vary in size to accommodate Electro-Magnetic Locks, Electric Drop Bolts, Automatic Operators, Overhead Closers, Walking Beam Top Pivots, and to align with adjacent materials. Contact CRL/Blumcraft Commercial Sales for details.

- A. **Rail Configuration:** Full width at top and bottom of doors, as indicated on drawings
- B. **Rails (square):**
- a. Top rail: 3/4" (19 mm) high solid
 - b. Bottom rail: 3/4" (19 mm) high solid
- C. **Handles and Locks:** Refer to Section 08 7100 Door Hardware for hardware set, application, and finish as selected by the Architect and supplied by **C.R. Laurence**.
- D. **Floor Closers:** to be CRL Jackson 900 with adjustable spring size.
- E. **Accessory Fittings:** Provide manufacturer's standard accessory fittings of the type indicated. Comply with requirements indicated for kind and form of metal and finish of door fittings.
1. **Overhead Door Stop:** Provide overhead door stop systems.
 2. **Sidelite Systems:** Provide sidelite systems matching metal and finish of door fittings.
 - a. Series 1301 Sidelites with top/bottom rails perfectly matching profile of doors (Must be glazed in the factory)
 - b. Series C7500 or C7501 Head Channels and Series EB500 or EB750 Base Channels enable the installer to use the 'lift and drop' method for larger glass panels. Channels also allow for recessing for a truly 'all-glass' look.

- F. **Anchors and Fasteners:** Manufacturer's standard concealed anchors and fastenings. Do not use exposed fasteners.
- G. **Weatherstripping:** Can be applied to edges of glass and top/bottom door rails to help reduce air and water infiltration. The weatherstripping shall be pile and replaceable without removing doors from opening.

2.04 **FABRICATION**

- A. General: Fabricate all glass entrance components to designs and sizes indicated. Size of door and profile requirements of fittings and hardware are indicated on the drawings.
 - 1. Locate and provide holes and cutouts in glass to receive hardware before tempering glass. Do not permit cutting, drilling or other alterations to glass after tempering.
 - 2. Fabricate work to accommodate required fittings, hardware, anchors, reinforcement, and accessory items.
- B. **Prefabrication:** Complete fabrication, assembly, finishing, hardware application and other work to the greatest extent possible before shipment to the project site. Disassemble components only as necessary for shipment and installation.
- C. **Continuity:** Maintain accurate relation of planes and angles with hairline fit of contracting members.

2.05 **MATERIAL FINISHES**

- A. Stainless steel:
 - 1. Satin #4 directional polish (US32D)
 - 2. Highly polished #8 non-directional (US32)
 - 3. Powder Coated (Specify Color)
- B. Naval Bronze
 - 1. Satin directional polish (US10)
 - 2. Highly polished non-directional (US9)
 - 3. Statuary (US10B)

PART 3 - EXECUTION

3.01 **EXAMINATION**

- A. Examine substrates and supports with the installer, present for compliance with requirements indicated, installation tolerances and other conditions that affect the installation of all glass entrances and storefronts. Correct unsatisfactory conditions before proceeding with the installation.
 - 1. Do not proceed with installation until unsatisfactory conditions are corrected.

3.02 **INSTALLATION**

- A. Install all glass entrance door and associated components in accordance with manufacturer's printed instructions and recommendations.
 - 1. Verify units level, plumb and true line.

2. Lubricate hardware and other moving parts as required.

3.03 **ADJUSTING**

- A. Adjust doors and hardware to provide a tight fit at meeting points and at weather-stripping for smooth operation and weather tight closure.
- B. Hardware: Adjust operating hardware to ensure proper operation. Set, seal, and grout floor closer cases. Coordinate cylinder installation.

3.04 **CLEANING**

- A. Clean door and frame surfaces after installation, exercising care to avoid damage to the finish.
- B. Clean glass surfaces after installation, complying with requirements contained in the "Glass and Glazing" section for cleaning and maintenance. Remove excess glazing sealant compounds, dirt or other substances.

3.05 **PROTECTION**

- A. Institute protective measures required throughout the remainder of the construction period to ensure that the all glass entrances do not incur any damage or deterioration, other than normal weathering, at the time of acceptance.

END OF SECTION