SECTION 10 2310

CRL 487

GLAZED INTERIOR WALL AND DOOR ASSEMBLIES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Framed glazed interior wall and door assemblies.

1.2 RELATED REQUIREMENTS

A. Section 08 7100 - Door Hardware.

1.3 REFERENCE STANDARDS

- A. AAMA 611 Voluntary Specification for Anodized Architectural Aluminum; 2012.
- B. ASTM B221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2013.
- C. ASTM B221M Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]; 2013.
- D. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014.
- E. ASTM C1036 Standard Specification for Flat Glass; 2011e1.
- F. ASTM C1048 Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2012.
- G. WDMA I.S.1-A Architectural Wood Flush Doors; Window and Door Manufacturers Association; 2011.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Pre-installation Meeting: Convene at project site seven calendar days prior to scheduled beginning of construction activities of this section to review section requirements.
 - 1. Require attendance by representatives of installer, other entities directly affecting, or affected by, construction activities of this section.
 - 2. Notify Architect four calendar days in advance of scheduled meeting date.

1.5 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's descriptive literature for each component in partition assembly.
- C. Shop Drawings: Drawings showing layout, dimensions, identification of components, and interface with adjacent construction.
 - 1. Include field measurements of openings.
 - 2. Include Elevations Showing:
 - a. Locations and identification of manufacturer-supplied door hardware and fittings.
 - b. Locations and sizes of cut-outs and drilled holes for other door hardware.
 - 3. Include Details Showing:
 - a. Requirements for support and bracing of overhead track.
 - b. Installation details.
 - c. Appearance of manufacturer-supplied door hardware and fittings.
- D. Selection Samples: Two sets, representing manufacturer's full range of available metal materials and finishes.
- E. Verification Samples: Two samples, minimum size 2 by 3 inches (50 by 75 mm), representing actual material and finish of exposed metal.
- F. Design Data: Design calculations, bearing seal and signature of structural engineer licensed to practice in the State in which the Project is located, showing loads at points of attachment to the building structure.
- G. Certificates: Contractor to certify that installer of partition assemblies meets specified qualifications.
- H. Operation and Maintenance Data: For manufacturer-supplied operating hardware.

- I. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
- J. Specimen Warranty.
- K. Manufacturer's Installation Instructions: Include complete preparation, installation, and cleaning requirements.

1.6 QUALITY ASSURANCE

A. Fabricator Qualifications: Minimum three years of experience designing, assembling, and installing partition assemblies similar to those specified in this section.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until installation.

1.8 WARRANTY

- A. See Section 01 7800 Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a one year period after date of Substantial Completion.
- C. Provide five year manufacturer warranty against excessive degradation of metal finishes. Include provision for replacement of units with excessive fading, chalking, or flaking.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Framed Glazed Interior Wall and Door Assemblies:
 - 1. C.R. Laurence Co., Inc; CRL 487 Series Framed Glass Wall Office System: www.crl-arch.com.
 - 2. Substitutions: See Section 01 6000 Product Requirements.

2.2 FRAMED GLAZED INTERIOR WALL AND DOOR ASSEMBLIES

- A. Framed Glazed Interior Wall Assembly: Factory fabricated assemblies consisting of center-glazed rectilinear aluminum framing with screw spline or clip joinery.
 - 1. Configuration: As indicated on drawings.
 - 2. Profile Width: 1-1/2 inch (38 mm).
 - 3. Profile Depth: 5-11/16 inch (144 mm) overall.
 - 4. Profile Face Trim: 1-1/2 inch (38 mm) wide by 3/8 inch (9.5 mm) deep, snap in place.
 - 5. Wall Construction Width, Throat Size: 4-7/8 inch (124 mm) maximum wall, consisting of metal studs.
 - 6. Frame Finish: Class I natural anodized.
 - 7. Provide wood blocking at sill of glazing frame to match height of floor finish.
 - 8. Exposed Fasteners: Aluminum.
 - 9. Perimeter Anchors: Steel, properly separated from aluminum framing.
 - Coordinate wall and door assembly preparation and provide hardware as necessary for fully operable installation.
 - 11. Design system to withstand normal operation without damage, racking, sagging, or deflection.
 - Factory assembled to greatest extent practical; may be disassembled to accommodate shipping constraints.
- B. Pivoting Glass Doors: Dry glazed patch fittings.
 - Door Configuration: As indicated on drawings.
 - 2. Height: 2 inch (51 mm).
 - 3. Length: 6-7/16 inch (164 mm).
 - 4. Cladding Finish: Satin anodized.
 - 5. Glass Thickness: 1/2 inch (12.7 mm), tempered.
 - 6. Door Hardware: Locking ladder pulls, brushed stainless steel tubing.
 - 7. Provide accessories as required for complete installation.
 - 8. Basis of Design: C.R. Laurence Co., Inc; CRL Commercial Patch Hardware, Catalog No. PH20AA (Top), PH10CA (Bottom): www.crl-arch.com.
- C. Pivoting Glass Doors: Full length dry glazed rail fittings.
 - 1. Door Configuration: As indicated on drawings.

- Full Length Top and Bottom Rails: 2-5/16 inch (59 mm) high by 1-1/2 inch (38 mm) deep with end caps.
- 3. Glass Thickness: 1/2 inch (12.7 mm), tempered.
- 4. Sidelite Rails: Match door rail sightlines and finish.
- Aluminum Finish: Satin anodized.
- 6. Door Hardware: Refer to Section 08 7100.
- 7. Provide accessories as required for complete installation.
- 8. Basis of Design: C.R. Laurence Co., Inc; CRL Wedge-Lock Low Profile Door Rail System: www.crl-arch.com.
- D. Sliding Framed Glass Doors: Top supported without holes required in glass.
 - 1. Door Configuration: As indicated on drawings.
 - 2. Door Weight: 200 lbs, maximum.
 - 3. Glass Thickness: 3/8, 1/2 inch, tempered.
 - 4. Door Hardware: Manufacturer Std Hardware
 - 5. Provide accessories as required for complete installation.
 - 6. Basis of Design: C.R. Laurence Co., Inc; CRL200 Series Top Hung Sliding Door System: www.crl-arch.com.
- E. Sliding Frameless Glass Doors: Top supported without holes required in glass.
 - Door Configuration: As indicated on drawings.
 - 2. Door Weight: 264 lbs ,maximum.
 - 3. Glass Thickness: 3/8 inch, 1/2 inch, tempered.
 - 4. Door Hardware: Manufacturer Std Hardware
 - 5. Provide accessories as required for complete installation.
 - 6. Basis of Design: C.R. Laurence Co., Inc; CRL290 Series Top Hung Sliding Door System: www.crl-arch.com.
- F. Pivoting Aluminum Doors: Wide stile aluminum doors, 6063-T5 extruded aluminum.
 - 1. Door Configuration: As indicated drawings.
 - 2. Door Width: 36 inch (0.914 m).
 - 3. Door Height: 80 inch (2 m).
 - 4. Stile Width: 5 inch (127 mm).
 - 5. Top Rail Height: 5-1/2 inch (140 mm).
 - 6. Bottom Rail Height: 6-1/2 inch (165 mm).
 - 7. Glazing Infill: As indicated on drawings.
 - 8. Glazing Stops: As indicated on drawings.
 - 9. Finish: Class I natural anodized.
 - 10. Finish Color: Clear anodized.
 - 11. Door Hardware: As indicated on drawings.
 - 12. Provide accessories as required for complete installation.
 - 13. Provide metal backing plate at door hinges and securely fasten within partition framing.
 - 14. Basis of Design: C.R. Laurence Co., Inc; CRL550 Series Wide Stile Aluminum Doors.
- G. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of another manufacturer.
- H. Substitutions: See Section 01 6000 Product Requirements.
 - 1. For any product not identified as "Basis of Design", submit information as specified for substitutions.

2.03 FITTINGS AND HARDWARE

A. Operable Panel Hardware: Coordinate with additional requirements as specified in Section 08 7100.

2.04 MATERIALS

- A. Glass: Flat glass meeting requirements of ASTM C1036, Type I Transparent Flat Glass, Quality Q3, fully tempered in accordance with ASTM C1048, Kind FT, and as follows:
 - 1. Thickness: As indicated.

- 2. Color: As indicated on drawings.
- 3. Glazing Stops: Square edge, with rubber glazing gaskets.
- 4. Glazing Gaskets: Provide flexible vinyl for non-fire rated and elastomeric silicone for fire rated frames.
- 5. Prepare glazing panels for indicated fittings and hardware before tempering.
- 6. Polish edges that will be exposed in finished work to bright flat polish.
- 7. Temper glass materials horizontally; visible tong marks or tong mark distortions are not permitted.
- B. Aluminum Components: Conforming to ASTM B221 (ASTM B221M), Alloy 6063, T5 Temper.
- C. Sealant: One-part silicone sealant, conforming to ASTM C920, clear.

2.05 FINISHES

A. Class I Natural Anodized Finish: AAMA 611 AA-M12C22A41 Clear anodic coating not less than 0.7 mils (0.018 mm) thick.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that track supports are properly braced, level within 1/4 inch (6 mm) of required position and parallel to the floor surface.
- C. Verify floor flatness of 1/8 inch in 10 feet (3 mm in 3 m), non-cumulative.
- D. Do not begin installation until supports and adjacent substrates have been properly prepared.
- E. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean substrates thoroughly prior to installation.
- B. Prepare substrates using the methods recommended by the manufacturer for achieving acceptable result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with glazed interior wall and door assembly manufacturer's instructions.
- B. Fit and align glazed interior wall and door assembly level and plumb.

3.4 ADJUSTING

- A. Adjust glazed interior wall and door assembly to operate smoothly from sliding or pivoting positions.
- B. Adjust swing door hardware for smooth operation.

3.5 CLEANING

- A. Clean installed work to like-new condition.
- B. See Section 01 7419 Construction Waste Management and Disposal, for additional requirements.

3.6 CLOSEOUT ACTIVITIES

- A. See Section 01 7800 Closeout Submittals, for closeout submittals.
- B. Demonstrate operation of glazed interior wall and door assembly and identify potential operational problems.

3.7 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before date of Substantial Completion.

END OF SECTION