SECTION 084126.23 - INTERIOR ALL-GLASS ENTRANCES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Interior, manual-swinging, all-glass entrance systems.

B. Related Requirements:

1. Section 088000 "Glazing"
2. Section 087813 "All Glass Entrance Hardware"

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

A. Product Data:

1. Interior, manual-swinging, all-glass entrance systems.

B. Product Data Submittals: For each product.

1. Construction details, material descriptions, dimensions of individual components and profiles, and finishes.

C. Shop Drawings:

1. Plans, elevations, and sections.
2. Details of fittings and glazing, including isometric drawings of fittings.
3. Door hardware locations, mounting heights, and installation requirements.

D. Entrance Door Hardware Schedule: Prepared by or under supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate final door hardware schedule with door components, assemblies, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1.4 INFORMATIONAL SUBMITTALS

A. Sample Warranties: For interior all-glass entrance systems.

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1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For interior all-glass entrance systems. Furnish a complete set of specialized tools and maintenance instructions as required for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

1.6 QUALITY ASSURANCE

A. Installer Qualifications:

1. Entity that is certified under the North American Contractor Certification Program (NACC) and that employs installers and supervisors who are trained and approved by manufacturer.

B. Product Options: Information on Drawings and in Specifications establishes requirements for aesthetic effects and performance characteristics of assemblies. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.

1. Do not change intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If changes are proposed, submit comprehensive explanatory data to Architect for review.

1.7 WARRANTY

A. Special Warranty: Manufacturer and Installer agree to repair or replace components of interior all-glass entrance systems that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Faulty operation of metal trim sections, pivots, and closers.
b. Deterioration of metals, metal finishes, and other materials beyond normal use.

2. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

A. Obtain all components of interior all-glass entrance systems, including accessories, from single manufacturer.

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2.2 INTERIOR, MANUAL-SWINGING, ALL-GLASS ENTRANCE SYSTEMS

A. Manufacturers: Subject to compliance with requirements, provide products by the following:

1. C.R. Laurence Co. Inc. (CRL)

B. Fitting Configuration:

1. Door Fittings: Continuous rail fitting at top and bottom.

a. Product: CRL 4" tapered without lock, custom length.
b. Model: DR4 TSA 34C
c. Length for door glazing panel: 40-inch glass
d. Continuous fitting top & bottom of glass panel.
e. Finish: Satin Anodized Aluminum.

2. Sidelight Fittings: Recessed glazing channel at top and continuous rail fitting at bottom.

a. Product CRL 4" tapered sidelite rail with end caps, each end of rails
b. Base fitting, Model: CRL SR4 TSA 3812 SL (120" Length) with floor mount saddle included (FMS2SA)
c. Finger Guard: As needed for glass to glass panel joints.
d. Glazing: 3/8" to 1/2" thickness. (10-12mm)
e. Top sidelight fitting: Recessed aluminum headrail channel to receive top of glazing, include neoprene gaskets as needed.
f. Academic Side Headrail

1) Recessed Headrail channel, Model: 4-1/2" wide, Custom length, Two Pocket, Single Door Header. Glazing pocket at either side of door for fixed sidelites. Reference hardware spec for custom milling required.
2) Model: CRL DCHOSAC
3) Optional configuration: CRL HCSA120, 4-1/2" header channel with snap in glazing channel CRL PS1SA120 and Cover plate for overhead concealed door closer CRL 8010CPAL and blank infill alum. panel CRL FS1SA120. (120" basic lengths)
4) Finish: Satin Anodized Aluminum

g. Clinic Side Headrail

1) Recessed Headrail Channel, 4-1/2" Header with glazing pocket only, custom length. Channel section to either side of door auto-opener/operator.
2) Model: CRL DCH0SAC
3) Finish: Satin Anodized Aluminum

h. Meeting / Study Room 461 Head & Sill channels for Sidelites: Provide U-Channel top & bottom, surface mounted, as follows.

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1) Product: Aluminum U-Channel in custom length with top loading, roll in gasketing. Base channel to utilize 4" long aluminum setting blocks with neoprene on the top to provide a rigid glass support. For use with 3/8" to 1/2" glass. Reference Section 088000.
2) Model: CRL UCSA3812 CL for both top & bottom channels. Surface mount, per drawings. Lift & drop installation. Include CRL matching End Caps as needed, or butt up to other finish material or aluminum jamb sections.
3) Size: ~1-3/4" x 1-3/4"
4) Finish: Satin Anodized Aluminum, non-clad.

C. Fitting Material: Aluminum.

D. Rail Fittings:

1. Height:

a. Top Rail: 4 inches.
b. Bottom Rail: 4 inches.

2. Profile: Tapered.
3. End Caps: Manufacturer's standard precision-fit end caps for rail fittings.

E. Anchors and Fastenings: Concealed.

F. Door Hardware: In sizes, quantities, and types specified for interior all-glass entrance systems indicated. For exposed parts, match metal and finish of fittings.

1. Swing: Single acting.

2. Opening-Force Requirements:

a. Accessible Interior (Swinging) Doors: Not more than **5 lbf** to fully open door.

3. For glass door hardware, see Section 087813.

2.3 GLASS

A. Glazing as specified in Section 088000.

2.4 MATERIALS

A. Aluminum: **ASTM B221** with strength and durability characteristics of not less than Alloy 6063-T5 for extruded bars, rods, profiles, and tubes. **ASTM B209** for sheet and plate.

1. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

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2.5 FABRICATION

A. Provide holes and cutouts in glass to receive hardware, fittings, and accessory fittings before tempering glass. Do not cut, drill, or make other alterations to glass after tempering.

1. Fully temper glass using horizontal (roller-hearth) process, and fabricate so that when glass is installed, roll-wave distortion is parallel with bottom edge of door or lite.

B. Factory assemble components and factory install hardware and fittings to greatest extent possible.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

A. Install interior all-glass entrance systems and associated components in accordance with manufacturer's written instructions.

B. Set units level, plumb, and true to line, with uniform joints.

C. Maintain uniform clearances between adjacent components.

D. Lubricate hardware and other moving parts in accordance with manufacturer's written instructions.

E. Set, seal, and grout floor closer cases as required to suit hardware and substrate indicated.

3.3 ADJUSTING AND CLEANING

A. Adjust all-glass doors and hardware to function smoothly and fit tightly at contact points.

1. For interior all-glass, swinging entrance doors accessible to people with disabilities, adjust closers to provide a three-second closer sweep period for doors to move from a 70-degree open position to **3 inches** from the latch measured to the leading door edge.

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B. Remove excess sealant and glazing compounds and dirt from surfaces.

END OF SECTION 084126.23

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