SECTION 10 2819

GLASS ENCLOSURES

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes frameless glass enclosures and hardware as indicated on Drawings.

B. Related Documents and Sections: Examine Contract Documents for requirements that directly affect or are affected by Work of this Section. A list of those Documents and Sections include, but is not limited to the following:

1. General provisions of the Contract, including General and Supplementary Conditions, and Division 01 General Requirements Specification Sections.
2. Section 06 1000 - ROUGH CARPENTRY.
3. Section 09 3000 - TILING.
4. Section 09 3033 - STONE TILING.

1.2 SUBMITTALS

A. Product Data: For each type of product specified. Include details of construction relative to materials, dimensions of individual components, profiles, and finishes.

B. Shop Drawings: Show details of fabrication and installation, including but not limited to, the following:

1. Plans, elevations, and sections.
2. Details of fittings.
3. Hardware quantities, locations, and installation requirements.
4. Anchorages and reinforcement.
5. Glazing details.

C. Samples:

1. Of size indicated below and of same thickness and material indicated for Work. Show the full range of color and texture variations expected.
    a. Metal Finishes: 6-inch long sections of patch fittings, rails, and other items.
    b. Glass: 6 inches square showing exposed-edge finish.

1.3 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced installer to perform work of this Section who has specialized in installing glass shower enclosures similar to those required for this Project and with a record of successful in-service performance.

B. Source Limitations: Obtain each type of glass shower door through one source from a single manufacturer.

1.4 PROJECT CONDITIONS

A. Field Measurements: Verify opening dimensions of shower enclosures by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish opening dimensions and proceed with fabricating glass shower enclosures without field measurements as approved by the Architect. Coordinate construction to ensure actual opening dimensions correspond to established dimensions.

1.5 COORDINATION

A. Coordinate with Section 06 1000 - ROUGH CARPENTRY for concealed blocking where anchoring is required for glass shower enclosures.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Available Manufacturers:

1. Provide products of C. R. Laurence, or equivalent acceptable to the Architect.

2.2 MATERIALS

A. Tempered Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated), Type 1 (transparent flat glass), Quality-Q3. Provide products that have been tested for surface and edge compression according to ASTM C 1048 and for impact strength according to 16 CFR 1201 for Category II materials.

1. Shower doors and panels shall be constructed with Opti White translucent glass as indicated.
2. Glass Thickness: 1/4 inch or 3/8 inch as required by Code.
3. Edges: Polished and rounded.
4. All holes and notches shall be drilled prior to tempering.

2.3 ALUMINUM CHANNELS AND FITTINGS

A. Extruded aluminum components shall be alloy 6463-T5 alloy.

1. 3/8 inch deep profiles suitable for 1/2 inch or 3/8 inch tempered glass.
2. Finish: As selected by the Architect.

B. Hinges: Type 320 stainless steel or solid brass, of size and rating adequate for door assembly.

1. Self-centering within 15 degrees of closed position.
2. Reversible 5 degree pivot pin to provide positive closure.

C. Anchors and Fastenings: Manufacturer's standard, stainless steel concealed anchors and fastenings.

D. Seals: Manufacturer's standard sweep-type where indicated.

2.4 FABRICATION

A. General: Fabricate glass shower door components in sizes, profiles, and configurations indicated.

1. Provide holes and cutouts in glass to receive hardware, fittings, rails, and accessories before tempering glass. Do not cut, drill, or make other alterations to glass after tempering.
2. Fully temper glass using horizontal roller hearth process.
3. Factory assemble components and factory install hardware to greatest extent possible.

2.5 METAL FINISHES, GENERAL

A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipment.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.6 ALUMINUM FINISHES

A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.

B. Mechanical Finish: AA-M3x (Mechanical Finish: as specified); sand top rails, handrails, and intermediate rails in one direction only, parallel to length of railing, with 120- and 320-grit abrasive. After installation, polish railings with No. 0 steel wool immersed in paste wax, then rub to a luster with a soft dry cloth.

C. Clear Anodic Finish: AAMA 611, AA-M12C22A31, Class II, 0.010 mm or thicker.

2.7 STAINLESS-STEEL FINISHES

A. Remove or blend tool and die marks and stretch lines into finish.

B. Grind and polish surfaces to produce uniform, directional textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.

C. Finish: Satin No. 4 finish.

D. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of glass shower enclosures. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install glass shower enclosures and associated components according to manufacturer's written instructions.

B. Set units level and plumb.

C. Maintain uniform clearances between adjacent construction.

D. Set, seal, and grout floor closer cases as required by hardware and substrate.

3.3 ADJUSTING AND CLEANING

A. Adjust enclosures and hardware to provide tight fit at contact points and seals, smooth operation, and weathertight closure.

B. Remove excess sealant and glazing compounds and dirt from glass shower door surfaces.

3.4 PROTECTION

A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure glass shower enclosures are without damage or deterioration at the time of Substantial Completion.

END OF SECTION