

SECTION 08120

INTERIOR ALUMINUM DOOR AND WINDOW FRAMING

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Interior aluminum door frames and fixed window frames.

1.2 RELATED SECTIONS

- A. Section 08210 - Wood Doors: Door type scheduled for aluminum frames.
- B. Section 08710 - Door Hardware: Product and installation requirements.
- C. Section 08810 - Glass: Schedule of glazing.

1.3 REFERENCES

- A. Aluminum Extrusion Manual-1987 by the Aluminum Extrusion Council -- Recommended Alloys.
- B. ALCOA - Anodic Finish Designations.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Submit drawings for fabrication and installation of interior aluminum frames, including the following information.
 - 1. Details of construction, joints, and connections.
 - 2. Details of each frame type, including anchorage.
 - 3. Elevations of each opening type.
 - 4. Conditions at openings, including coordination with glass and glazing requirements.
 - 5. Location and installation requirements of door hardware and reinforcements.
 - 6. Schedule of openings coordinated with numbering system used in contract documents.

- D. Quality Assurance Certification: Submit manufacturer's certification that products have been constructed and tested in full compliance with the ALUMINUM EXTRUSION MANUAL and ALCOA- Anodic Finish Designations.
- E. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- F. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 years experience in manufacturing similar systems.
- B. Installer Qualifications: Minimum 2 years experience installing similar systems and acceptable to the manufacturer.
- C. Product Qualifications:
 - 1. Constructed and tested in full compliance with the ALUMINUM EXTRUSION MANUAL and ALCOA - Anodic Finish Designations.
 - 2. Labeled Assemblies: At all locations where fire-rated door and frame assemblies are required, provide assemblies which comply with NFPA 80 and have been tested and labeled in accordance with ASTM E 152 by agency acceptable to governing authorities. All frames and doors shall have UL, ICC ES, I.C.B.O., Warnock Hersey, Factory Mutual, or California State Fire Marshal Label.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in crates or cartons suitable for storage at the site.
- B. Replace items damaged in delivery, unless damage is minor and can be repaired to match intact items, as determined by Architect.
- C. Store products under cover, raised above ground level, and stacked to prevent warping and to promote air circulation.
 - 1. Prevent moisture from accumulating and remove saturated packaging before products can be damaged.

1.7 COORDINATION

- A. Coordination: Transmit copy of final shop drawings to door manufacturer to allow prefitting of doors to aluminum frames if such frames are not SMR.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Modulex a Division of Pacific National Group , which is located at: 2392 S. Bateman Ave. Suite 175 ; Irwindale, CA 91010; Toll Free Tel: 800-966-8724; Tel: 626-256-9508; Fax: 626-256-9591; Email: [request info](#); Web: www.modulexinc.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 ALUMINUM FRAMES

- A. General: Fabricate frames for scheduled openings, in standard manufacturer's styles and profiles, as shown, using concealed fasteners.
 - 1. Minimum Frame Extrusion Wall Thickness: 0.080 inch (2 mm).
 - 2. Construction: Base Frame, butt-jointed. Trim to be mitered with hair-line seam.
 - 3. Door Mute: Provide heavy duty Vinyl Mute at all door frames.
 - 4. Glazing Bead: Provide heavy duty Vinyl Glazing Bead, one side of glass, to accommodate 1/4 inch and 3/8 inch (6 mm and 9.5 mm) glass.
- B. Size: For both 1-3/8 inch (35 mm) and 1-3/4 inch (44.5 mm) door thicknesses:
 - 1. Door frame throat size: 3-0 inches (76 mm).
 - 2. Door frame throat size: 3-1/4 inches (83 mm).
 - 3. Door frame throat size: 3-3/8 inches (86 mm).
 - 4. Door frame throat size: 3-1/2 inches (89 mm).
 - 5. Door frame throat size: 3-3/4 inches (95 mm).
 - 6. Door frame throat size: 4-5/8 inches (117 mm).
 - 7. Door frame throat size: 4-7/8 inches (124 mm).
 - 8. Door frame throat size: 5-1/8 inches (130 mm).
 - 9. Door frame throat size: 5-1/4 inches (133 mm).
 - 10. Door frame throat size: 5-3/8 inches (137 mm).
 - 11. Door frame throat size: 5-5/8 inches (143 mm).
 - 12. Door frame throat size: 6-1/4 inches (159 mm).
 - 13. Door frame throat size: 6-7/8 inches (175 mm).
 - 14. Door frame throat size: 7-1/4 inches (184 mm).
 - 15. Window wall size: 3 inches (76 mm), 300 Series.
 - 16. Window wall size: 3-1/4 inches (82 mm), 300 Series.
 - 17. Window wall size: 3-3/8 inches (86 mm), 200 and 300 Series.
 - 18. Window wall size: 3-3/4 inches (95 mm), 200 and 300 Series.
 - 19. Window wall size: 4-5/8 inches (117 mm), 300 Series.
 - 20. Window wall size: 4-3/4 inches (121 mm), 300 Series.
 - 21. Window wall size: 4-7/8 inches (124 mm), 200 and 300 Series.
 - 22. Window wall size: 5-1/4 inches (133 mm), 300 Series.
 - 23. Window wall size: 5-5/8 inches (143 mm), 300 Series.
 - 24. Window wall size: 6-1/4 inches (159 mm), 300 Series.
 - 25. Window wall size: 6-7/8 inches (175 mm), 300 Series.
 - 26. Window wall size: 7-1/4 inches (184 mm), 300 Series
- C. Product: Delta 200 Series as manufactured by Modulex, a Division of Pacific National group.
- D. Product: Delta 300 Series as manufactured by Modulex, a Division of Pacific National group.
- E. Product: Delta Plus Fire Rated Frame Series as manufactured by Modulex, a Division of Pacific National group.

2.3 FABRICATION

- A. General: Factory-fabricate assemblies to greatest extent possible, assuring that installed units will be without warp, twist, bow, or other defect in appearance or function.
- B. Door Frames- SMR DELTA (two and three piece), Self-mortising, nonhanded, and reversible. Throat openings as required. All fasteners concealed except in finish hardware. Delta demountable with 100 percent salvageability, factory fabricated.
- C. Windows/sidelight Frames- SMR glazing sections. Factory fabricated and complete per manufacturer's standard extrusion details. Coordinate with glass provided as work of another specification section.
- D. Hardware Preparation: Comply with DHI A115 series specifications for door and frame preparation, using final hardware schedule and templates from hardware supplier.
 - 1. Reinforcement: Reinforce frames for field-installed exposed hardware items. Provide frames non-handed, Self Mortising and Reversible, for placement of Hinges and Strike Plates in the field.
 - 2. Locations: Comply with final shop drawings and approved door submittals.

2.4 MATERIALS

- A. Extrusion Alloy: 6063 T5.
- B. Finish: Clear - Commercial Clear Anodized #AAM10 C22 A21.
- C. Finish: Bronze - Commercial, Bronze Anodized #AAM10.
- D. Finish: Black anodized.
- E. Finish: Painted aluminum, baked enamel.
- F. Finish: Custom finish processes as selected by Architect after consultation with manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

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

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. General: Install aluminum frames and accessories to comply with manufacturer's recommendations.
 - 1. Comply with detailed installation requirements of final shop drawings.
- C. Frame Installation:

1. General: Adhere to manufacturer's recommendations.
2. Place pre-finished frames after wall finishing is complete, braced securely to achieve plumb, planar installation. Remove braces after anchorages have achieved final set, leaving frames in smooth, undamaged condition.
3. Anchors: Use screws, per manufacturer's standard installation instruction, for secure attachment to wall conditions.
4. Fire-rated openings: Comply with manufacturer's requirements and requirements of NFPA 80.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.
- C. Clean-Up: Clean frames, if necessary, using mild soap and water. Use NO abrasive agents.
- D. Final Operating Adjustments: Check hardware at all openings for proper operation of doors, making final corrections as required to assure that work of this section is complete and undamaged.

END OF SECTION