
SECTION 08 12 16 – INTERIOR ALUMINUM FRAMES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes the furnishing and installing:

1. Aluminum door frames.

1.3 RELATED WORK

A. Coordinate work of this Section with work of other Sections as required to properly execute the Work and as necessary to maintain satisfactory progress of the work of other Sections.

1.4 SUBMITTALS

A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each product specified.

B. Shop Drawings: Show fabrication and installation details. Include plans, elevations, sections, and details of components including hardware, glazing, and glazing stops. Show attachments to other work.

C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for units with factory-applied color finishes.

D. Samples for Verification: For each type of exposed finish required, prepared on Samples of manufacturer's standard sizes and of same thickness and material indicated for the work. If finishes involve normal color and texture variations, include sample sets showing the full range of variations expected.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who has completed interior aluminum framing systems similar in material, design, and extent to those indicated for this project and whose work has resulted in construction with a record of successful in-service performance.

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- B. Manufacturer Qualifications:** A firm experienced in manufacturing interior aluminum framing systems similar to those indicated for this project and with a record of successful in-service performance.
 - C. Source Limitations:** Obtain aluminum frames through one source from a single manufacturer with the capacity and resources to provide products of consistent quality in appearance and physical properties.
 - D. Product Options:** Drawings indicate dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction size. Other manufacturer's products complying with requirements may be considered. Refer to Division 1 Section "Product Requirements."
 - E.** Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
 - F. Fire-Rated Door Frames:** Frames complying with NFPA 80, UL10C (2009), UBC 7.2 positive pressure, that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction for fire ratings scheduled on the drawings, based on testing according to NFPA 252.

1.6 DELIVERY, STORAGE, AND HANDLING

- A.** Deliver frames palletted, wrapped, or crated to provide protection during transit and job storage.
- B.** Inspect frames on delivery for damage. Minor damages may be repaired provided refinished items match new work and are approved by Architect; otherwise, remove and replace damaged items as directed.
- C.** Store frames at building site under cover and as near as possible to final installation location. Do not use covering material that will cause discoloration of aluminum finish.

1.7 PROJECT CONDITIONS

- A. Environmental Limitations:** Do not install interior aluminum frames until spaces are enclosed and weatherproof; wet work in spaces is complete and dry; flooring, walls, ceilings, and work above ceilings is complete; and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Field Measurements:** Verify interior aluminum frame dimensions by field measurements before fabrication and indicate measurements on Shop drawings. Coordinate fabrication schedule with construction progress to avoid delaying the work.

C. Established Dimensions: Where field measurements cannot be made without delaying the work, establish opening and wall dimensions and note on Shop drawings that these are not measured dimensions. Proceed with fabricating interior aluminum frames without field measurements. Coordinate wall, floor, and ceiling construction to ensure that actual opening dimensions correspond to established dimensions.

PART 2 – PRODUCTS

2.1 PRODUCTS AND MANUFACTURERS

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

1. Aluma Pro L.P. Houston, Texas
2. Frameworks Manufacturing, Inc., Houston, Texas
3. Western Integrated, California

2.2 MATERIALS

A. Extruded Aluminum: ASTM B 221 alloy 6063-T5, or alloy and temper required to suit structural and finish requirements. Billets shall be composed of at least 33% recycled aluminum.

2.3 COMPONENTS

A. General: Provide interior aluminum frame components that comply with dimensions, profiles, and relationships to adjoining work of components indicated on drawings.

B. Door Frames: Extruded aluminum, rabbet wall thickness is nominal 0.062-inch (1.575mm) thick, reinforced for hinges and strikes.

2.4 ACCESSORIES

A. Fasteners: Aluminum, nonmagnetic stainless-steel or other non-corrosive metal fasteners compatible with frames, stops, panels, reinforcement plates, hardware, anchors, and other items being fastened.

B. Door Silencers (Mutes): Manufacturer's standard mohair or vinyl.

C. Glazing: As specified in Division 8 Section "Glass and Glazing."

D. Hardware: As specified in Division 8 Section "Finish Hardware."

2.5 FABRICATION

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- A. Machine jambs and prepare for hardware, with concealed reinforcement plates, drilled and tapped as required, and fastened within frame with concealed screws.
 - B. Provide concealed corner reinforcements and alignment clips for precise butt or mitered connections.
 - C. Fabricate frames for glass to allow glass replacement without dismantling frame.
 - D. Fabricate all components to allow secure installation without exposed fasteners.

2.6 FINISHES

Factory finish extruded frame so that all parts are of uniform finish and color. Exposed surfaces shall be free of scratches and other serious blemishes.

- A. Factory Applied Baked on Enamel: Comply with AAMA 2603/603.8 and AA-DAF-45.
- B. Factory Applied Powder Coated Finish: (LEEDS CREDITS AVAILABLE)
- C. Clear Anodized: (QUALIFIES FOR SOME LEEDS CREDITS) AA-M12C22A21, etched, medium matte, clear anodized coating.

2.7 SUSTAINABLE DESIGN

Furnish aluminum frames to meet the following LEEDS requirements:

- A. LEED Indoor Environmental Quality (EQ) Credit 4.2- Low Emitting Materials, Paints and Coatings.
- B. LEED Materials and Resources Credits 4.1/4.2- Recycled Content
- C. LEED Materials and Resources Credit 5- Regional Materials.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine walls, floors, and ceiling for suitable conditions where interior aluminum frames are to be installed.
- B. Verify that wall thickness does not exceed standard tolerances allowed by throat size indicated.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with frame manufacturer's written installation instructions and approved Shop Drawings.

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- B.** Install frames plumb and square, securely anchored to substrates with fasteners recommended by frame manufacturer.
 - C.** Install partition components in the longest possible lengths; components up to 48 inches (1200mm) long must be one piece. Fasten to suspended ceiling grid on maximum 48-inch (1200mm) centers, using sheet metal screws or other fasteners approved by frame manufacturer.
 - D.** Use concealed installation clips to ensure that splices and connections are tightly butted and properly aligned.
 - E.** Secure clips to main structural extrusion components and not to snap-in or trim members.
 - F.** Do not leave screws or other fasteners exposed to view when installation is complete.

3.3 CLEANING AND ADJUSTING

- A.** Clean exposed frames promptly after installation, using cleaning methods recommended by frame manufacturer.
 - 1.** Clean and maintain anodized aluminum according to AAMA 609.
- B.** Touch up marred areas so touchup is not visible from a distance of 48 inches (1200 mm). Remove and replace frames with damaged finish that cannot be satisfactorily repaired.

3.4 PROTECTION

- A.** Provide protection required to ensure that framing will be without damage or deterioration on Substantial Completion.

END OF SECTION 08 12 16