

March, 2017

SECTION 08 12 13

MINIMALIST EXTRUDED ALUMINUM DOOR FRAMES

PART 1 GENERAL REQUIREMENTS

1.1 RELATED SECTIONS

- A. Division 08 - Flush Wood Doors and Clad Wood Doors
- B. Division 08 - Door Hardware Flush Wood Doors

1.2 REFERENCES

- A. AAMA 607.1 – Guide Specification and Inspection Methods for Clear Anodized finishes
- B. AAMA 609 & 610 – Cleaning and Maintenance Guide for Architecturally Finished Aluminum
- C. ASTM B221 – Standard Specification for Aluminum and Aluminum alloy Extruded Bars, Rods, Profiles and Tubes.
- E. ANSI/SDI A250.4-2011 Test Procedure and Acceptance Criteria for Physical Endurance for
- F. Steel Doors, Frames and Frame Anchors
- G. NFPA-80 Standard for Fire Doors

1.3 SUBMITTALS

- A. Product Data: Manufacturer's data sheets to include:
 - 1. Preparation instructions and recommendations.
 - 2. Storage/handling requirements and recommendations.
 - 3. Installation instructions.
- B. Shop Drawings: Submit drawings for fabrication and installation of flush interior aluminum frames, to include:
 - 1. Details jambs, headers, trims and connections
 - 2. Details and identification of each frame type
 - 3. Elevations
 - 4. Location and installation requirements of door hardware and reinforcements.
 - 5. Door Frame Schedule of openings and locations including fire rated frame requirements.
- C. Quality Assurance Certification: Submit manufacturer's certification that products have been constructed and tested
- D. Color Samples: Two sets of color chips representing manufacturer's full range of available colors
- E. Product Samples: Two samples, minimum size 6 inches long, representing specified product and color

March, 2017

- F. LEED Documents: Submit manufacturer's environmental documentation for sustainability credits.
- G. Certificates of Compliance: Submit product test report from Independent Laboratory indicating compliance with performance testing herein specified.

1.4 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. Flush frames to be 6063 T-5 extruded aluminum to meet ASTM B 221 specifications
 - 2. Recycled content of aluminum to be a minimum of 50% postconsumer

1.5 WARRANTY

- A. Provide manufacturer's written warranty against defects in materials and workmanship for a period of one year from date of substantial completion.

1.6 DELIVERY, STORAGE, AND HANDLING

Deliver frames in crates or cartons suitable for storage at the site. Do not bulk pack frames.

- 1. Protect products from damage by covering and properly storing in a cool, dry area, elevated above ground level as near as possible to final location. Do not use non-vented plastic or canvas covers.
- 2. Protect materials and finish from damage during handling and installation.

1.7 PROJECT CONDITIONS

- A. Field measurements: Verify actual dimensions of Minimalist interior aluminum frame openings by field measurement prior to installation of frames. Have incorrect openings corrected prior to frame installation.
- B. Work area must be completely enclosed and protected from the elements prior to Minimalist frame installation.
- C. Maintain temperature, humidity, and ventilation conditions so as to not adversely affect door frames or packaging. Keep cartons dry.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Provide Minimalist aluminum door frames as manufactured by:

Fry Reglet Corporation
1377 Stonefield Court
Alpharetta, GA 30005
800-237-9773

Fry Reglet Corporation
12342 Hawkins Street
Santa Fe Springs, CA 90670

March, 2017

- B. Substitutions: Alternate interior door frames will not be accepted without prior written and sample approval from Architect.

2.2 DESIGN / PERFORMANCE REQUIREMENTS (STANDARD HINGES)

- A. General: Fabricate Minimalist frames for scheduled openings providing extruded flanges for integration to adjoining drywall.
 - 1. Minimum Frame Extrusion Wall Thickness: 0.078 inch (1.98 mm).
 - 2. Construction: Extruded aluminum hinge jamb, strike jamb and header section factory mitered to install with hair-line seams.
 - 3. Provide continuous door silencer of Thermoplastic Vulcanizate (TPV) material
 - 4. Frame sections shall be extruded to include continuous, punched, tapping flanges along each exposed section for application of tape, mud, primer and paint
- B. Door Sizes: Minimalist aluminum frame capable of accepting standard 1-3/4 inch (44.5 mm) door thicknesses:
 - 1. Minimalist door frame throat size: 3 - 1/2 inches (88.90 mm).
 - 2. Minimalist door frame throat size: 3 – 3/4 inches (117.48 mm).
 - 3. Minimalist door frame throat size: 4 – 5/8 inches (117.48 mm).
 - 4. Minimalist door frame throat size: 4 – 7/8 inches (123.83 mm).
 - 5. Minimalist door frame throat size: 6 - 5/8 inches (168.27mm).
 - 6. Minimalist door frame throat size: 6 – 7/8 inches (174.62 mm).
 - 7. Minimalist door frame throat size: 7– 1/4 inches (184.15 mm).
- C. Test procedures and Performances: Provide independent lab test report based on *ANSI/SDI A250.4-2011 Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors* indicating that frame has been tested and achieved a count of at least 35,000 cycles when subjected to a shutting force of 7 pounds per cycle, showing no visible cracking in abutting drywall finishing.
- D. Hardware Installation: Provide flush mounting plates for field sizing to accommodate hardware locations as defined in the specifications and drawings.
- E. Reinforcements: Include integral hinge and strike reinforcements designed to position hinge and strike plates flush with face of frame.

2.3 DESIGN / PERFORMANCE REQUIREMENTS (CONCEALED HINGES)

- A. General: Fabricate Minimalist frames for scheduled openings providing extruded flanges for integration to adjoining drywall.
 - 1. Minimum Frame Extrusion Wall Thickness: 0.078 inch (1.98 mm).
 - 2. Construction: Extruded aluminum hinge jamb, strike jamb and header section factory mitered to install with hair-line seams.

March, 2017

3. Provide continuous door silencer of Thermoplastic Vulcanizate (TPV) material.
 4. Frame sections shall be extruded to include continuous, punched, tapping flanges along each exposed section for application of tape, mud, primer and paint.
- B. Door Sizes: Minimalist aluminum frame capable of accepting fire-rated standard 1-3/4 inch (44.5 mm) door thicknesses:
1. Minimalist door frame throat size: 3 - 1/2 inches (88.90 mm).
 2. Minimalist door frame throat size: 3 – 3/4 inches (117.48 mm).
 3. Minimalist door frame throat size: 4 – 5/8 inches (117.48 mm).
 4. Minimalist door frame throat size: 4 – 7/8 inches (123.83 mm).
 5. Minimalist door frame throat size: 6 - 5/8 inches (168.27mm).
 6. Minimalist door frame throat size: 6 – 7/8 inches (174.62 mm).
 7. Minimalist door frame throat size: 7– 1/4 inches (184.15 mm).
- C. Test procedures and Performances: Provide independent lab test report based on *ANSI/SDI A250.4-2011 Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors* indicating that frame has been tested and achieved a count of at least 35,000 cycles when subjected to a shutting force of 7 pounds per cycle, showing no visible cracking in abutting drywall finishing.
- D. Hardware Installation: Hinge jamb to be factory assembled with concealed hinges
- E. Refer to *Minimalist Door Frame with Concealed Hinges* installation instructions for framing information.

2.4 DESIGN / PERFORMANCE REQUIREMENTS (STANDARD HINGES) – 20 Minute Fire Rated

- A. General: Fabricate Minimalist frames for scheduled openings providing extruded flanges for integration to adjoining one-hour rated drywall.
1. Minimum Frame Extrusion Wall Thickness: 0.078 inch (1.98 mm).
 2. Construction: Extruded aluminum hinge jamb, strike jamb and header section factory mitered to install with hair-line seams.
 3. Provide continuous door silencer of Thermoplastic Vulcanizate (TPV) material.
 4. Frame sections shall be extruded to include continuous, punched, tapping flanges along each exposed section for application of tape, mud, primer and paint.
- B. Door Sizes: Minimalist aluminum frame capable of accepting fire-rated standard 1-3/4 inch (44.5 mm) door thicknesses:
1. Minimalist door frame throat size: 4 – 7/8 inches (123.83 mm).
 2. Minimalist door frame throat size: 6 - 5/8 inches (168.27mm).
 3. Minimalist door frame throat size: 6 – 7/8 inches (174.62 mm).
 4. Minimalist door frame throat size: 7– 1/4 inches (184.15 mm).
- C. Test procedures and Performances: Provide independent lab test report based on *ANSI/SDI A250.4-2011 Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and*

March, 2017

Frame Anchors indicating that frame has been tested and achieved a count of at least 35,000 cycles when subjected to a shutting force of 7 pounds per cycle, showing no visible cracking in abutting drywall finishing.

Provide Underwriters Laboratories Listing for 20 Minute Fire Endurance or equivalent.

- D. Hardware Installation: Provide flush mounting plates for field sizing to accommodate hardware locations as defined in the specifications and drawings.
- E. Reinforcements: Include integral hinge and strike reinforcements designed to position hinge and strike plates flush with face of frame.

2.5 DESIGN / PERFORMANCE REQUIREMENTS (CONCEALED HINGES) – 20 Minute Fire Rated

- A. General: Fabricate Minimalist frames for scheduled one-hour fire-rated openings providing extruded flanges for integration to adjoining drywall.
 - 1. Minimum Frame Extrusion Wall Thickness: 0.078 inch (1.98 mm).
 - 2. Construction: Extruded aluminum hinge jamb, strike jamb and header section factory mitered to install with hair-line seams.
 - 3. Provide continuous door silencer of Thermoplastic Vulcanizate (TPV) material.
 - 4. Frame sections shall be extruded to include continuous, punched, tapping flanges along each exposed section for application of tape, mud, primer and paint.
- B. Door Sizes: Minimalist aluminum frame capable of accepting fire-rated standard 1-3/4 inch (44.5 mm) door thicknesses:
 - 1. Minimalist door frame throat size: 4 – 7/8 inches (123.83 mm).
 - 2. Minimalist door frame throat size: 6 - 5/8 inches (168.27mm).
 - 3. Minimalist door frame throat size: 6 – 7/8 inches (174.62 mm).
 - 4. Minimalist door frame throat size: 7– 1/4 inches (184.15 mm).
- C. Test procedures and Performances: Provide independent lab test report based on *ANSI/SDI A250.4-2011 Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors* indicating that frame has been tested and achieved a count of at least 35,000 cycles when subjected to a shutting force of 7 pounds per cycle,

Provide Underwriters Laboratories Listing for 20 Minute Fire Endurance or equivalent.

- D. Hardware Installation: Hinge jamb to be factory assembled with fire-rated concealed hinges
- E. Refer to *Minimalist Door Frame with Concealed Hinges* installation instructions for framing information.

2.6 MATERIALS

- A. Extrusion Alloy: 6063 T5.

March, 2017

- B. Finish: Clear - Commercial Clear Anodized – Comply with AAMA 607.1
- C. Finish: Factory powder painted in standard manufacturer color
- D. Finish: Custom powder painted color as selected by Architect
- E. Finish: Alodine finish for field painting
- F. Hardware: As specified in Division 08 Section “Door Hardware”, or factory installed concealed hinges.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until rough opening sizes have been verified.
- B. If rough openings sizes are not correct, notify Architect of incorrect dimensions and have corrected before proceeding.
- C. Before beginning installation, verify that wall thickness does not exceed industry standard tolerance of + or – 1/16”.

3.2 INSTALLATION

1. Install in accordance with manufacturer's instructions, comply with detailed installation requirements of final approved shop drawings. Set frames plumb, square and level.
2. Fasteners: Use screws, per manufacturer's standard installation instruction, for secure attachment to wall conditions.
3. Adjust doors and hardware to operate properly.

3.3 PROTECTION

- A. Protect installed flush frames until completion of project.
- B. Touch-up, repair or replace damaged areas before Substantial Completion.
- C. Clean-Up: Clean frames, if necessary, using mild soap and water. Use NO abrasive agents.

END OF SECTION