

# ALL-ALUMINUM DOOR & WINDOW FRAMING WITH INTEGRATED ALUMINUM DOOR STOP

## SECTION 08 41 13 ALUMINUM FRAMED ENTRANCES AND STOREFRONTS SPECIFICATION

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES:

- A. Prefinished aluminum door frames for interior use.
- B. Prefinished aluminum window frames for interior use.
- C. Prefinished aluminum framing systems for interior use.
- D. Prefinished aluminum glass doors for interior use.

#### 1.2 RELATED SECTIONS

- A. Section 08 11 16 – Aluminum Doors and Frames
- B. Section 08 13 00 – Metal Doors
- C. Section 08 14 00 – Wood Doors
- D. Section 08 32 00 – Sliding Glass Doors
- E. Section 08 71 00 – Door Hardware
- F. Section 08 80 00 – Glazing
- G. Section 09 29 00 – Gypsum Board
- H. Section 09 51 00 – Acoustical Ceilings
- I. Section 09 68 00 – Carpeting
- J. Section 10 22 19 – Demountable Movable Partitions

#### 1.3 REFERENCED STANDARDS

- A. AA: Aluminum Association.
  - 1. AA DAF-45 (2003): Designation System for Aluminum Finishes.
- B. AAMA: American Architectural Manufacturers Association.
  - 1. AAMA 611-98: Voluntary Specification for Anodized Architectural Aluminum
  - 2. AAMA 2603-02 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
- C. Americans with Disabilities Act (ADA).
- D. ANSI: American National Standards Institute
  - 1. ANSI/BIFMA X5.6L: American National Standard for Office Furnishings – Panel Systems Tests.
- E. ASTM International.
  - 1. ASTM B221-08: Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
  - 2. ASTM E90-09: Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
  - 3. ASTM E413-04: Classification for Rating Sound Insulation.
- F. AWI: Quality Standards.
- G. OSHA: Nationally Recognized Testing Laboratory (NRTL) Program.
- H. UL: Approval Listings.

#### 1.4 SYSTEM DESCRIPTION

- A. A full-height Aluminum Glazing partition system for interior use, designed to permit relocation, reconfiguration, and reuse of components.
- B. Erected and disassembled in a manner that prevents damage to adjacent building surfaces and elements, including floors, wall ceilings, columns and window mullions.
- C. Permits two-, three-, and four-way panel connections.
- D. Butt-hinge doors (standard) and pivot-hinge wood doors (optional) use metal frames and door hardware that is attached to the frame and not the floor.
- E. Factory-finished requiring minimal on-site assembly.

#### 1.5 SUBMITTALS

- A. Submit under provisions of Section 01 33 00
- B. Product Data: Manufacturer's fabrication and installation instructions.
- C. Shop Drawings.
  - 1. Provide standard installation details for typical architectural conditions.
  - 2. Provide details on connections to special construction and other custom features.
- D. Selection Samples: Provide 2" x 4" (51mm x 102mm) aluminum chips showing full range of manufacturer's standard finishes for Architect's colour selection.
- E. Provide Manufacturer's Installation Instructions.

#### 1.6 QUALITY ASSURANCE

- A. Manufacturer: Provide aluminum frames manufactured by a single firm specializing in production of this type of work for a minimum of five years.

#### 1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver frames packaged to provide protection during transit and storage at project site.
- B. Inspect frames upon delivery for damage.
  - 1. Repair minor damage to polyester finish by using air drying spray enamel of matching colour.
  - 2. Replace frames that cannot be satisfactorily repaired.
- C. Store frames at project site under cover and as near as possible to final installation location. Do not use covering material that will cause discoloration of aluminum finish.

#### 1.8 ENVIRONMENTAL REQUIREMENTS

- A. Do not begin installation until site conditions provide protection from weather and outside elements, and environmental conditions within the building are approximately equivalent to those that will exist after the installation.
- B. Maintain temperature and humidity in areas of installation within reasonable limits, as close as possible to final occupancy standards. If necessary, provide artificial heating, cooling and ventilation to maintain required environmental conditions.

## **PART 2 PRODUCTS**

### **2.1 MANUFACTURER**

#### **A. PSL Partition Systems Ltd.**

##### **Edmonton**

1220 - 70 Avenue  
Edmonton, Alberta T6P 1P5  
Phone: 1-780-465-9327  
Fax: 1-780-465-2195  
E-mail: edmonton@partitions.com

##### **Calgary**

950 55 Ave N.E.  
Calgary, Alberta T2E 6Y4  
Phone: 1-403-272-7600  
Fax: 1-403-272-6490  
E-mail: calgary@partitions.com

##### **Vancouver**

108, 6871 Elmbridge Way  
Richmond, BC V7C 5A4  
Phone: 1-604-270-8926  
Fax: 1-604-270-2911  
E-mail: vancouver@partitions.com

Website: [www.partitions.com](http://www.partitions.com)

- B. Substitutions: Products by other manufacturers require prior approval under provisions of Section 01 60 00.

### **2.2 COMPONENTS / MATERIALS**

- A. **RETAINER CLIPS, FASTENERS AND CONNECTORS:** As recommended by partition manufacturer.
- B. **DOOR FRAMES:** All Aluminum door frames with integrated door stop consisting of Aluminum Association alloy 6063-T5 (ASTM B221) extrusions with 0.060" minimum thickness, to accept 45 mm (1-3/4") minimum thick door.
- C. **GLAZING FRAMES:** Association alloy 6063-T5 (ASTM B221) extrusions with 0.060" minimum thickness; PVC glass stops and glazing beads designed to accept minimum 5 mm (3/16") glass.
- D. **DOOR STOP:** Size 12.7 mm x 4.8 mm (1/2" x 3/16") integral aluminum stop.
- E. **STRIKE PLATE:** ASA strike plate with dust box, size 123.8 mm (4-7/8"). Special cut outs for electric strike available on request.
- F. **HINGES:** Factory installed ball-bearing hinges, C-15 satin finish, size 114.3 mm x 114.3 mm (4-1/2" x 4-1/2").
- G. **REINFORCEMENT:** Factory installed steel backer plates at all hinge and strike locations. Hinges shall be mounted with self-drilling screws onto aluminum bracket plates, for structural reinforcements.
- H. **DOOR SEAL:** Factory installed mohair mute.

- I. BATTEN TRIM:
  1. Aluminum snap-on trim complete with patented dual durometer Batten Saver Clip, installed between aluminum covers and aluminum frames, to eliminate rattles and facilitate easy installation and removal of covers without destruction, size 31.8 mm (1-1/4")
  2. Wide aluminum snap-on trim complete with patented dual durometer Batten Saver Clip, installed between aluminum covers and aluminum frames, to eliminate rattles and facilitate easy installation and removal of covers without destruction, size 44.4 mm (1-3/4").
  3. PVC snap-on trim, size 28.6 mm (1-1/8")
  
- J. CEILING TRIM
  1. Aluminum snap-on trim complete with patented dual durometer Batten Saver Clip, installed between aluminum covers and aluminum frames, to eliminate rattles and facilitate easy installation and removal of covers without destruction, size 38.1 mm (1-1/2")
  2. PVC snap-on trim, size 34.9 mm (1-3/8").
  
- K. PARTITION BASE: 101.6 mm (4") aluminum or PVC snap-on base on all glazed partition walls.

## 2.3 EXTRUDED ALUMINUM FRAMES

- A. **All-Aluminum Door & Window Framing System:** Provide frames with the following characteristics:
  1. Integrated aluminum door stop
  2. Rectilinear design
  3. 1¾ inch face profile
  4. Trim: 1¼ PVC or Aluminum or 1¾ inch wide Aluminum Flush Aluminum Trim
  5. Other Trim options as selected from manufacturer's catalogue
  6. Throat sizes 3 ½", 3 ¾", 4 5/8", 4 7/8", 6 ¼", 7 ¼"

## 2.4 FABRICATION

- A. Butt-hinged doors and door frames
  1. Pre-machine jambs and prepare for hardware, with concealed reinforcement plates crimped in place
  2. Manufactured to receive 4 ½" x 4 ½" square hinges
  3. Manufactured to receive standard 4 7/8" A.S.A. strike plate
  4. Supplied with 1/8" thick steel strike and hinge back up plate, pre-mounted on jambs
  
- B. Fabricate all components to allow secure installation without exposed fasteners.

## 2.5 FINISHES

- A. Factory finished extruded frame components such that any part exposed to view upon completion of installation will be uniform in finish and color.
  1. Painted finish:
    - i. Standard Architectural Quality: Comply with AAMA 2603-02.

2. Clear Anodized Coating:
  - i. Architectural Class II: Comply with AAMA 611-02, AA-M12C22A31, 10 microns (0.4 mil) thickness minimum.
3. Colour Anodized Coatings:
  - i. Architectural Class I: Comply with AAMA 611-02, AA-M12C22A44, 18 microns (0.7 mil) thickness minimum (Optional).
    1. Black
    2. Light Bronze
    3. Medium Bronze
    4. Dark Bronze
    5. Champagne

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Examine project conditions and take site measurements of existing building to verify that the work of this section may commence properly. Do not proceed with installation until unsatisfactory conditions have been corrected.
- B. Verify wall thickness does not exceed standard tolerances allowed by specified frame throat sizes.

### **3.2 INSTALLATION**

- A. Comply with frame manufacturer's printed installation instructions and approved shop drawings. Strictly adhere to maintaining specified wall thickness to insure dimension does not exceed frame throat size specified.
- 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, with no component less than 4 feet. Fasten to suspended ceiling grid at 48 inches on center maximum, using #6 sheet metal screws or other fasteners approved by frame manufacturer.
  1. Use concealed installation clips to assure that splices and connections are tightly butted and properly aligned.
  2. Secure clips to main structural components and not to snap-in or trim members.
  3. Do not use screws or other fasteners that will be exposed to view when installation is complete.
- D. Acoustically treated partitions: Ensure that closed cell foam tape at partition perimeter is continuous and under compression when installed. Ensure that all potential sound transmission leaks are completely sealed.

3.3 ADJUSTING AND CLEANING

- A. Clean exposed frames promptly after installation, using cleaning methods recommended by frame manufacturer.
- B. Touch up marred areas so that touch-up is not visible from a distance of 4 feet. Remove and replace frames that cannot be satisfactorily adjusted.
- C. Replace damaged components with new to match.
- D. Adjust doors to operate smoothly.

3.4 PROTECTION

- A. Provide protection required to assure that frames will be without damage or deterioration upon substantial completion of the project.