

**Part 1 General**

**1.1 SUMMARY**

- .1 Section Includes:
  - .1 Fixed, extruded-aluminum louvered equipment screens.
  - .2 See mechanical drawing M09 and structural drawings S01 and S02 for dimensions and orientation.
  - .3 See structural drawings S01 and S02 for structural framing supporting louver sections.

**1.2 PERFORMANCE REQUIREMENTS**

- .1 Design: Design louvers, including comprehensive engineering analysis by a qualified engineering professional, using structural performance requirements and design criteria indicated.
- .2 Structural Performance: Louvers shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated without permanent deformation of louver components, noise or metal fatigue caused by louver blade rattle or flutter, or permanent damage to fasteners and anchors.
  - .1 Wind Loads: Determine loads based on a uniform pressure of 1435 Pa (30 lb./sq. ft.), acting inward or outward.

**1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data: For each type of product indicated.
  - .1 Shop Drawings: For equipment screens and accessories. Include plans, elevations, sections, details, and attachments to other work. Show frame profiles and blade profiles, angles, and spacing.
  - .2 Submittal: For louvers indicated to comply with structural performance requirements and design criteria indicated.

**1.4 CLOSEOUT SUBMITTALS**

- .1 Submit maintenance and operation data in accordance with Section 01 78 00 - Closeout Submittals.

**Part 2 Products**

**2.1 EQUIPMENT SCREENS**

- .1 MATERIALS
  - .1 Aluminum Extrusions: ASTM B 221M, Alloy 6063-T5.
  - .2 Aluminum Sheet: ASTM B 209M, Alloy 3003 with temper as required for forming.
  - .3 Fasteners: Use types and sizes to suit unit installation conditions.
  - .4 For fastening aluminum, use aluminum or 300 series stainless-steel fasteners
- .2 FABRICATION, GENERAL
  - .1 Join concealed frame members to each other and to fixed louver blades with fillet welds concealed from view welds, threaded fasteners, or both, as standard with louver manufacturer unless otherwise indicated or size of louver assembly makes bolted connections between frame members necessary.

- .3 EXTRUDED-ALUMINUM EQUIPMENT SCREEN
  - .1 Vertical Blade Louvered Equipment Screen
  - .2 Louver Blade Depth: 50mm (2 inches)
  - .3 Blade Profile: Tube style blade 121 mm (4.75 inches) wide
  - .4 Blade Spacing: 127 mm (5 inches)
  - .5 Blade Nominal Thickness: Not less than 2.03mm (0.080 inch).
  - .6 Framing Support Nominal Thickness: Not less than 3.2mm (0.125 inch)
- .4 ALUMINUM FINISHES
  - .1 High-Performance Organic Finish: 3-coat fluoropolymer finish complying with AAMA 2605 and containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pre-treat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
  - .2 Color and Gloss: Dove Gray / Satin.
- .5 DOORS
  - .1 Size: 914mm (W) x 2133 mm (H) (36 inch x 84 inch)
  - .2 Mounting Frame: 75 mm x 50 mm x 6mm (3" x 2" x ¼") Aluminum Angle.
  - .3 Hinge: Heavy duty 3.05mm (0.120") thickness aluminum continuous piano hinge (6.35mm (0.250") pin diameter.)
  - .4 Blade: to match screen per 2.1.3 above
  - .5 Frame: 1.6mm (0.063") thickness type 6063-T5 extruded aluminum
  - .6 Doorstop: 32mm x 25mm x 3.18mm (1 ¼" x 1" 1/8") aluminum angle.
  - .7 Provide lockable latching and hardware. (Main entrance door to be lockable from outside. The snow removal door to be lockable from inside.)
- .6 Acceptable Product: "Architectural Louvers Co." Model VeTV5 c/w doors and all required accessories and hardware or approved equivalent according to B7.

**Part 3 Execution**

**3.1 APPLICATION**

- .1 Manufacturer's Instructions: comply with manufacturer's written recommendations, including product technical bulletins, handling, storage and installation instructions, and datasheets.

**3.2 GENERAL**

- .1 Locate and place equipment screens level, plumb, and at indicated alignment with adjacent work.
- .2 Co-ordinate work with structural steel Contractor.
- .3 Use concealed anchorages where possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weather-tight connection.
- .4 Provide perimeter reveals and openings of uniform width to allow for thermal expansion, as indicated.
- .5 Repair damaged finishes so no evidence remains of corrective work. Return items that cannot be refinished in the field to the factory and refinish entire unit or provide new units.

**END OF SECTION**