

SECTION 10210

LOUVERS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the requirements for furnishing and installing the following:
 - 1. Extruded aluminum drainable blade louvers.

1.02 SUBMITTALS

- A. Shop Drawings: Furnish shop drawings of louver units and accessories. Include plans, elevations, sections, and details showing profiles, angles, spacing of louver blades, unit dimensions related to wall openings and construction, free areas for each size, and profiles of frames at jambs, heads, and sills.
- B. Samples: 6-inch square samples of each required finish. Prepare samples on metal of same gauge and alloy to be used in work.

1.03 QUALITY ASSURANCE

- A. Comply with Sheet Metal and Air Conditioning Contractors National Association (SMACNA) recommendations for fabrication, construction details and installation procedures, except as otherwise indicated.
- B. Welding Standards: Comply with applicable provisions of D1.2 "Structural Welding Code - Aluminum" and D1.3 "Structural Welding Code - Sheet Steel".

1.04 PROJECT CONDITIONS

- A. Field Measurements: Verify size, location and placement of louver units prior to fabrication, and show on shop drawings. Coordinate fabrication schedule with construction progress to avoid delaying the work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Aluminum Sheet: ASTM B209, Alloy 3003 or 5005 with temper as required for forming.
- B. Aluminum Extrusions: ASTM B221, Alloy 6063-T5 or T52.
- C. Fastenings: Same material as items fastened or 300 series stainless steel. Do not use metals that are corrosive or incompatible with joined materials. Use Phillips flat-head machine screws for exposed fasteners, unless otherwise indicated.
- D. Anchors and Inserts: Non-ferrous metal or hot-dip galvanized for exterior installations and as required for corrosion resistance. Use steel or lead expansion bolt devices for drilled-in-place anchors.
- E. Bituminous Paint: Cold-applied asphalt mastic.

2.02 FABRICATION

- A. Provide louvers and accessories of design, materials, sizes, depth, arrangement, and metal thicknesses indicated or as required.

- B. Assemble louvers in shop to minimize field splicing and assembly. Disassemble units as required for shipping and handling limitations. Mark units for reassembly and coordinated installation.
- C. Maintain equal louver blade spacing, including separation between blades and frames at head and sill, to produce uniform appearance.
- D. Fabricate frames, including integral sills, to fit in openings of sizes indicated, with allowances made for fabrication and installation tolerances of louvers, adjoining construction, and perimeter sealant joints.
- E. Include supports, anchorages, and accessories required for complete assembly.
- F. Provide sill extensions and loose sills made of same material as louvers where required for drainage to exterior and to prevent water penetrating to interior.
- G. Join frame members to one another and to stationary louver blades by welding, except where otherwise indicated or where field bolted connections between frame members are required. Maintain equal blade spacing, including separation between blades and frames at head and sill.

2.03 EXTRUDED ALUMINUM DRAINABLE BLADE LOUVERS

- A. 4-Inch Deep Louvers: Airlite Type K6774 or approved equal.
 - 1. Extrusion Thickness: .081-inch.
 - 2. Blade Centers: 3-1/2-inches.
 - 3. Blade Angle: 45-degrees.
 - 4. Free Area: 46-percent for a 4- x 4-foot louver.
 - 5. Size and Configuration: As indicated.

2.04 LOUVER SCREENS

- A. Provide removable screens for exterior louvers.
- B. Fabricate screen frames of same metal and finish as louvers.
- C. Provide rewirable frames consisting of formed or extruded metal with a driven spline or insert for securing screen mesh.
- D. Bird Screens: 1/2-inch sq. mesh, 0.063-inch aluminum wire.
- E. Locate screens on inside face of louvers, unless otherwise indicated. Secure to louver frames with machine screws, spaced at each corner and at 12-inch centers.

2.05 BLANK-OFF PANELS

- A. Fabricate blank-off panels from materials and to sizes indicated. Match finish applied to louvers with respect to coating type, color, and gloss unless otherwise directed by the Architect.
- B. Attach blank-off panels to back of louver frames with clips or stainless steel screws.
- C. Fabricate sheets from minimum 0.051-inch thick aluminum.

2.06 FINISHES

- A. High-Performance Organic Coating Finish: High-performance coating; inhibitive thermo-cured primer, 0.2-mil minimum dry film thickness, and thermo-cured fluorocarbon coating containing "Kynar 500" resin, 1.0-mil minimum dry film thickness, custom color to match color sample furnished by Architect.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Locate and place louvers plumb, level and in proper alignment with adjacent work.
- B. Use concealed anchorages wherever possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weathertight connection.
- C. Form closely fitted joints with exposed connections accurately located and secured.
- D. Repair finishes damaged by cutting, welding, soldering and grinding operations required for fitting and jointing. Restore finishes with no evidence of corrective work. Return items that cannot be refinished in the field to the shop, make required alterations, and refinish entire unit, or provide new units.
- E. Protect galvanized and non-ferrous metal surfaces from corrosion or galvanic action by application of a heavy coating of bituminous paint on surfaces which will be in contact with concrete, masonry or dissimilar metals.
- F. Install concealed gaskets, flashings, joint fillers, and insulations, and install as work progresses to make installations weather-tight.

3.02 ADJUSTING AND PROTECTION

- A. Protect louvers and vents from damage during construction, including use of temporary protective coverings where required.
- B. Restore louvers and vents damaged during installation and construction so that no evidence remains of corrective work. If restoration results are unsuccessful as judged by the Architect, remove damaged units and replace with new units.

3.03 CLEANING

- A. Periodically clean exposed surfaces of louvers and vents that are not protected by temporary covering to remove fingerprints and soil during construction period. Do not let soil accumulate until final cleaning.
- B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to finishes. Rinse surfaces thoroughly and dry.

END OF SECTION