

SECTION 08 91 00
LOUVERS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Louvers, frames, and accessories for small exhaust louvers.

1.2 RELATED REQUIREMENTS

- A. Section 07 9200 - Joint Sealants: Sealing joints between frames and adjacent construction.

1.3 REFERENCE STANDARDS

- A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.

1.4 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data describing design characteristics, maximum recommended air velocity, design free area, materials and finishes.
- C. Shop Drawings: Indicate louver layout plan and elevations, opening and clearance dimensions, tolerances; head, jamb and sill details; blade configuration, screens, and frames. Include locations, sizes, profiles, and anchoring requirements for louver support brackets.
- D. Samples: Submit full size sample to be used when approved; in size illustrating finish and color of exterior surfaces.
- E. Test Reports: Independent agency reports showing compliance with specified performance criteria.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this section, with minimum three years of documented experience.
- B. Installer Qualifications: Company specializing in performing work of type specified and with at least three years of documented experience.
- C. Delegated Design of Support Brackets. Engage a qualified professional engineer to design louver support brackets and bracket anchoring system.

1.6 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

- B. Provide twenty-year manufacturer warranty against distortion, metal degradation, and failure of connections.
 - 1. Finish: Include coverage against degradation of exterior finish.

PART 2 PRODUCTS

2.1 LOUVERS

A. FIXED, EXTRUDED-ALUMINUM LOUVERS

- 1. Vertical, Wind-Driven-Rain-Resistant Louver:
- 2. Basis-of-Design Product: Subject to compliance with requirements, provide Louver Type Model EL-2, by United Enertech or comparable product approved by the architect:
- 3. Extruded Aluminum Louver - 8" diameter round
- 4. Louver Depth: 2.16 inches,
- 5. Frame and Blade Nominal Thickness: Not less than 0.060 inch. Blade extruded aluminum positioned on a 37degree angle on approximately 1.47" centers.
- 6. Louver Performance Ratings:
 - a. Free Area: minimum .25SF of free area.
 - b. Air Performance: Not more than 0.26-inch wg static pressure drop at 1000-fpm free-area intake velocity.
 - c. Wind-Driven Rain Performance: Not less than 99 percent effectiveness when subjected to a rainfall rate of 8 inches per hour and a wind speed of 50 mph at a core-area intake velocity of 400 fpm.
 - d. AMCA Seal: Mark units with AMCA Certified Ratings Seal.
- 7. Screen: Provide screen at each exterior louver.
 - a. Screen Location for Fixed Louvers: Interior face.
 - b. Screening Type: .75" x .051", flattened aluminum wire screen.
 - c. Secure screen frames to louver frames with machine screws with heads finished to match louver.
 - d. Metal: Same type and form of metal as indicated for louver to which screens are attached. Reinforce extruded-aluminum screen frames.
 - e. Finish: Same finish as louver frames to which louver screens are attached.

2.2 MATERIALS

- A. Extruded Aluminum: ASTM B221 (ASTM B221M).

2.3 FINISHES

- A. Clear Anodize 204 R-1 Class II (AA-C22A31) (0.4 to 0.7 mil)

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install louver assembly in accordance with manufacturer's instructions.

END OF SECTION