Sharonville Fire Station 87 November 2019

SECTION 233713 - DIFFUSERS, REGISTERS AND LOUVERS

PART 1 - GENERAL

1.1 SUBMITTAL REQUIREMENTS

A. Product Data

- 1. For each type of product indicated, include the following.
- 2. Data Sheet: Indicate materials of construction, finish, and mounting details; and performance data including throw and drop, static-pressure drop, and noise ratings.
- 3. Diffuser, Register, and Grille Schedule: Indicate drawing designation, room location, quantity, model number, size, and accessories furnished.

PART 2 - PRODUCTS

2.1 DIFFUSERS AND REGISTERS DIFFUSERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Anemostat Products; a Mestek company.
 - 2. Carnes.
 - 3. METALAIRE, Inc.
 - 4. Nailor Industries Inc.
 - 5. Price Industries.
 - 6. Titus.
 - 7. Tuttle & Bailey.
 - 8. Warren Technologies.

2.2 LOUVERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Airolite Co.
 - 2. Air Balance
 - 3. American Warming & Ventilating, Inc.
 - 4. Arrow United Industries, Inc.
 - 5. Carnes
 - 6. Greenheck
 - 7. Louvers & Dampers, Inc.
 - 8. Penn Ventilator Co., Inc.
 - 9. Ruskin Mfg. Co.
 - 10. Dowco.

- 11. United Enertech
- 12. Nailor
- B. Performance: Provide louvers that have maximum free area, and minimum pressure drop for each type as listed in manufacturer's current data, complying with louver schedule.
- C. Substrate Compatibility: Provide louvers with frame and sill styles that are compatible with adjacent substrate, and that are specifically manufactured to fit into construction openings with accurate fit and adequate support, for weatherproof installation. Refer to general construction drawings and specifications for types of substrate, which will contain each type of louver.
- D. Plenum: Provide insulated plenum on all louvers, same dimension as louver with minimum depth of 12". Provide transition to plenum for proper air distribution. Seal around all plenums to wall to prevent air leakage.
- E. Louver Screens: On inside face of exterior louvers, provide 1/2" square mesh anodized aluminum wire bird screens mounted in removable extruded aluminum frames.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Ceiling-Mounted Outlets and Inlets: Drawings indicate general arrangement of ducts, fittings, and accessories. Air outlet and inlet locations have been indicated to achieve design requirements for air volume, noise criteria, airflow pattern, throw, and pressure drop. For units installed in lay-in ceiling panels, locate units in the center of panel. Where architectural features or other items conflict with installation, notify Architect for a determination of final location.
- B. Install diffusers, registers, and grilles with airtight connections to ducts and to allow service and maintenance of dampers, air extractors, and fire dampers.
- C. All return air devices installed opening into a plenum or ceiling space shall be provided with an internally lined 24 gauge sheet metal sound boot, per details, minimum of 24" in length.

END OF SECTION 233713