

SECTION 15855 - DIFFUSERS, REGISTERS, AND GRILLES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Rectangular and square ceiling diffusers.
2. Louver face diffusers.
3. Linear bar diffusers.
4. Fixed face registers.

B. Related Sections:

1. Division 15 Section "Duct Accessories" for fire and smoke dampers and volume-control dampers not integral to diffusers, registers, and grilles.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product indicated, include the following:

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

B. Samples: For each exposed product and for each color and texture specified.

PART 2 - PRODUCTS

2.1 CEILING DIFFUSERS

A. Square Ceiling Diffusers SD:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
2. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:
 - a. Anemostat Products; a Mestek company.
 - b. Carnes.
 - c. Krueger.

- d. Titus.
 - e. Tuttle & Bailey.
- 3. Devices shall be specifically designed for variable-air-volume flows.
 - 4. Material: Aluminum.
 - 5. Finish: Baked enamel, white.
 - 6. Face Size: 24 by 24 inches.
 - 7. Face Style: Three cone.
 - 8. Mounting: T-bar.
 - 9. Pattern: Fixed.
 - 10. Dampers: Combination damper and grid.
 - 11. Accessories:
 - a. Equalizing grid.

2.2 REGISTERS AND GRILLES

A. Fixed Face Grille:

- 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- 2. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:
 - a. Anemostat Products; a Mestek company.
 - b. Carnes.
 - c. Krueger.
 - d. Titus.
 - e. Tuttle & Bailey.
- 3. Material: Aluminum.
- 4. Finish: Baked enamel, white.
- 5. Face Arrangement: 1/2-by-1/2-by-1/2-inch grid core.
- 6. Core Construction: Removable.
- 7. Frame: 1 inch wide.
- 8. Mounting: Lay in.

2.3 SOURCE QUALITY CONTROL

- A. Verification of Performance: Rate diffusers, registers, and grilles according to ASHRAE 70, "Method of Testing for Rating the Performance of Air Outlets and Inlets."

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install diffusers, registers, and grilles level and plumb.
- B. 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. Make final locations where indicated, as much as practical. 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.
- C. Install diffusers, registers, and grilles with airtight connections to ducts.

3.2 ADJUSTING

- A. After installation, adjust diffusers, registers, and grilles to air patterns indicated, or as directed, before starting air balancing.

END OF SECTION 15855