

SECTION 15932

AIR OUTLETS AND INLETS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1, apply to work of this section.

1.2 RELATED DOCUMENTS

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1.3 DESCRIPTION OF WORK

- A. Extent of air outlets and inlets work is indicated by drawings and schedules, and by requirements of this section.
- B. Types of air outlets and inlets required for project include the following:
 - 1. Supply diffusers
 - 2. Registers and grilles.
- C. Refer to other Division 15 sections for ductwork and duct accessories required in conjunction with air outlets and inlets; not work of this section.
- D. Refer to other Division 15 sections for balancing of air outlets and inlets; not work of this section.

1.4 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Firms regularly engaged in manufacture of air outlets and inlets of types and capacities required, whose products have been in satisfactory use in similar service for not less than 5 years.
- B. Codes and Standards:
 - 1. ADC Compliance: Test and rate air outlets and inlets in certified laboratories under requirements of ADC 1062 "Certification, Rating and Test Manual".
 - 2. ADC Seal: Provide air outlets and inlets bearing ADC Certified Rating Seal.
 - 3. NFPA Compliance: Install air outlets and inlets in accordance with NFPA 90A "Standard for the Installation of Air Conditioning and Ventilating Systems".

1.5 SUBMITTALS

- A. Product Data: Submit manufacturer's technical product data for air outlets and inlets including the following:
- B. Schedule of air outlets and inlets indicating drawing designation, room location, number furnished, model number, size, and accessories furnished.
- C. Data sheet for each type of air outlet and inlet, and accessory furnished; indicating construction, finish, and mounting details.
- D. Performance data for each type of air outlet and inlet furnished, throw and drop, and noise criteria ratings. Indicate selections on data.

- E. Shop Drawings: Submit manufacturer's assembly-type shop drawing for each type of air outlet and inlet, indicating materials and methods of assembly of components.
- F. Maintenance Data: Submit maintenance data, including cleaning instructions for finishes, and spare parts lists. Include this data, product data, and shop drawings in maintenance manuals; in accordance with requirements of Division 1.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver air outlets and inlets wrapped in factory-fabricated fiberboard type containers. Identify on outside of container type of outlet or inlet and location to be installed. Avoid crushing or bending and prevent dirt and debris from entering and settling in devices.
- B. Store air outlets and inlets in original cartons and protect from weather and construction work traffic. Where possible, store indoors; when necessary to store outdoors, store above grade and enclose with waterproof wrapping.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Carnes
- B. Titus
- C. Anemostat

2.2 CEILING AIR DIFFUSERS, REGISTERS, AND GRILLES

- A. General: Except as otherwise indicated, provide manufacturer's standard ceiling air diffusers where shown; of size, shape, capacity and type indicated; constructed of materials and components as indicated, and as required for complete installation.
- B. Performance: Provide ceiling air diffusers that have, as minimum, temperature and velocity traverses, throw and drop, and noise criteria ratings for each size device as listed in manufacturer's current data.
- C. Finishes: registers and grilles: Semi-gloss white enamel prime finish.
- D. Finish of sidewall outlets baked aluminum enamel or electroplated core and factory prime coated frame, as applicable to aluminum and steel respectively. All outlets in shops and toilet rooms natural anodized aluminum or electroplated frame and core, as applicable to aluminum and steel respectively.
- E. Diffusers and registers shall be provided with opposed blade volume dampers.

2.3 CEILING REGISTERS, AND GRILLES

- A. Sidewall supply registers shall be Titus 301FL or equal for supply.
- B. Sidewall return air and exhaust registers shall be Titus 350FL or equal for return or exhaust.

PART 3 EXECUTION

3.1 INSPECTION

- A. Examine areas and conditions under which air outlets and inlets are to be installed. Do not proceed with work until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Install air outlets and inlets in accordance with manufacturer's written instructions and in accordance with recognized industry practices to insure that products serve intended functions.
- B. Coordinate with other work, including ductwork and duct accessories, as necessary to interface installation of air outlets and inlets with other work.
- C. Supply outlets to provide the required air throw and spread with no apparent drafts or excessive air movement within space being supplied. Contractor to provide necessary accessories to accomplish satisfactory air distribution.

END OF SECTION