

SECTION 15800
HEATING AND VENTILATING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Scope

1. Furnish and install all products as specified under this section, as indicated on the Drawings and as required for the entire heating and ventilating requirements of this contract

B. Additional Requirements Specified Elsewhere

1. Section 01340: Shop Drawings, Product Data and Samples
2. Section 01400: Quality Control
3. Section 01600: Materials and Equipment
4. Section 01730: Operating and Maintenance Data

C. Related Requirements Specified Elsewhere

1. Section 06100: Carpentry
2. Section 07600: Flashing and Sheet Metal
3. Section 07900: Joint Sealants
4. Section 09900: Painting
5. Section 15058: Common Motor Requirements for HVAC Equipment
6. Section 15060: Pipe and Pipe Fittings
7. Section 15070: Pipe Supports
8. Section 15077: Identification for HVAC Piping and Equipment
9. Section 15083: HVAC Insulation
10. Section 15195: Natural Gas Piping
11. Section 15815: Metal Ducts
12. Section 15820: Duct Accessories
13. Section 15855: Diffusers, Registers and Grilles
14. Section 15950: Testing, Adjusting and Balancing
15. Division 16: Electrical

1.2 SUBMITTALS

- A. Catalog Data: Submit manufacturer's literature and illustrations sufficient to verify compliance with the specifications

- B. Shop Drawings and Product Data in accordance with Section 01340

1. Dimensions
2. Construction details
3. Materials
4. Assembled weight

- 5. Wiring diagrams
- C. Installation Instructions: Complete Manufacturer's Installation Instructions
- D. Certification of Compliance
 - 1. Manufacturer's affidavit of compliance certifying
 - a. All tests have been conducted
 - b. All materials and equipment comply with applicable standards
 - c. All materials and equipment comply with these specifications
- E. Operating and Maintenance Data in accordance with Section 01730
 - 1. Maintenance instructions
 - 2. Parts lists

1.3 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle equipment and devices in a manner to prevent damage to materials or coatings
- B. Handle carefully to prevent bending or denting of metal parts
- C. Promptly clean and touch-up scratches or abrasions with suitable coating materials

PART 2 - PRODUCTS

2.1 LOUVERS/DAMPERS

- A. Adjustable weather type with Type K drainable blades
- B. Constructed of extruded aluminum sections
 - 1. Securely and permanently assembled to form a sturdy, rigid unit
- C. Provided with
 - 1. Extended sills
 - 2. ½" mesh aluminum bird screen
- D. Sizes and products as scheduled on the Drawings
- E. Damper Operators
 - 1. Manual Operators
 - a. Furnish and install where indicated and scheduled on the Drawings
 - b. Hand operated with wing-nut or crank type adjustment to hold blades in desired position
 - c. Provide adjustable linkage bar
 - 2. Motor Operators
 - a. Furnish and install where indicated and scheduled on the Drawings

- 1) Two position with linkage as required
- 2) Suitable for 120 V, single phase, 60 Hz
3. All components shall be corrosion-proof in a domestic wastewater environment

2.2 VENTILATING FANS

A. Supply Fans

1. Refer to schedules on Drawings for product and accessories. Substitutions shall be submitted to the Engineer for approval

B. Duct Fans

1. Refer to schedules on Drawings for product and accessories. Substitutions shall be submitted to the Engineer for approval

C. Exhaust Fans

1. Refer to schedules on Drawings for product and accessories. Substitutions shall be submitted to the Engineer for approval

2.3 AIR CONDITIONING EQUIPMENT

- A. Refer to schedules on Drawings for products and accessories. Substitutions shall be submitted to the Engineer for approval.

2.4 HEATING EQUIPMENT

A. Electric Duct Coils

1. Refer to schedules on Drawings for products and accessories. Substitutions shall be submitted to the Engineer for approval

B. Gas Unit Heaters

1. Refer to schedules on Drawings for products and accessories. Substitutions shall be submitted to the Engineer for approval

C. Furnaces

1. Refer to schedules on Drawings for products and accessories. Substitutions shall be submitted to the Engineer for approval

D. Makeup Air Units

1. Refer to schedules on Drawings for products and accessories. Substitutions shall be submitted to the Engineer for approval

2.5 GRILLES, REGISTERS AND DIFFUSERS

A. Supply Air Registers

1. Refer to schedules on Drawings for products and accessories

B. Diffusers

1. Refer to schedules on Drawings for products and accessories

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine all equipment and devices for defects and damage
- B. Remove defective equipment and devices from the site
- C. Repair or replace all damaged coatings
- D. If equipment or materials are found to be defective by the Owner or Engineer, the Contractor shall promptly remove the defective material whether installed or not, and immediately replace it with acceptable material

3.2 INSTALLATION

- A. Install equipment and devices in accordance with manufacturer's instructions and recommendations
- B. Furnish and install flashings and sealants as necessary to provide a weather tight installation
- C. Clean exterior surfaces and prepare for painting per Section 09900

3.3 CLEANING AND ADJUSTMENT

- A. Remove all grease, dirt, excess paint, etc. from product surfaces prior to final acceptance
- B. Check and adjust all equipment and devices for operation in accordance with manufacturer's instructions and these specifications
- C. Confirm proper operation of each system under all operating conditions
 1. Demonstrate operation of each system in the presence of the Owner and Engineer

END OF SECTION