

## SECTION 238700 - POWER VENTILATORS

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Exhaust fans

#### 1.2 SUBMITTALS

- A. Product Data: Provide data on fans and accessories including fan curves with specified operating point clearly plotted, sound power levels at rated capacity, and electrical characteristics and connection requirements.
- B. Manufacturer's Installation Instructions.

#### 1.3 OPERATION AND MAINTENANCE DATA

- A. Maintenance Data: Include instructions for lubrication, motor and drive replacement, spare parts list, and wiring diagrams.

### PART 2 - PRODUCTS

#### 2.1 CEILING EXHAUST FANS

- A. Ceiling Exhaust Fan: Direct driven with galvanized steel housing, resilient mounted motor, gravity backdraft damper in discharge, and molded white plastic grille.
- B. Electrical Characteristics and Components:
  - 1. Motor: NEMA MG1
  - 2. Wiring Terminations: Provide terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Enclose terminal lugs in terminal box sized to NFPA 70.
  - 3. Disconnect Switch: Cord and plug in housing for thermal overload protected motor.
- C. Accessories: Refer to schedule on Contract Drawings.
- D. Capacities and Characteristics: Refer to schedule on Contract Drawings.

#### 2.2 INLINE EXHAUST FANS

- A. Housing: Split, spun aluminum with aluminum straightening vanes, inlet and outlet flanges, and support bracket adaptable to floor, side wall, or ceiling mounting.

- B. Direct-Drive Units: Motor mounted in airstream, factory wired to disconnect switch located on outside of fan housing.
- C. Belt-Driven Units: Motor mounted on adjustable base, with adjustable sheaves, enclosure around belts within fan housing, and lubricating tubes from fan bearings extended to outside of fan housing.
- D. Fan Wheels: Aluminum, airfoil blades welded to aluminum hub.
- E. Accessories: Refer to schedule on Contract Drawings.
- F. Capacities and Characteristics: Refer to schedule on Contract Drawings.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Counterflash duct to wall opening.
- C. Install flexible connections between fan inlet and ductwork. Ensure metal bands of connectors are parallel with minimum one inch flex between ductwork and fan while running.
- D. Provide backdraft dampers on outlet from cabinet and ceiling exhausters fans and as indicated.
- E. Do not operate fans for any purpose until ductwork is clean, filters in place, bearings lubricated, and fan has been test run under observation.

END OF SECTION 238700