

## SECTION 15610

### FANS

#### 1.0 GENERAL

##### 1.1 DESCRIPTION

1. General Provisions and other mechanical systems are specified in other Sections of Division 15.
2. This Section covers exhaust fan equipment and accessories.
3. Testing, adjusting and balancing is specified in Section 15900, HVAC Testing, Adjusting and Balancing.

##### 1.2 QUALITY ASSURANCE

1. All equipment specified herein shall have performance ratings that are based on tests made in accordance with AMCA Standard 210. All fans shall be licensed to bear the AMCA seal.
2. Sound ratings for the equipment shall be in accordance with AMCA Standard 300.
3. Codes and regulations referred to are minimum standards. Where the requirements of these specifications or drawings exceed those of the codes and regulations, the drawings or specifications govern.

##### 1.3 PERFORMANCE

1. Fans and blowers shall be guaranteed to meet the capacity at the static pressure noted on the Mechanical Equipment Schedules.

#### 2.0 PRODUCTS

##### 2.1 CENTRIFUGAL ROOF EXHAUST FANS

1. Centrifugal roof exhausters shall have fan shroud and motor housings constructed of heavy gauge, spun aluminum. Curb cap shall be constructed of one-piece aluminum with integral spun aluminum venturi inlet. Fan wheel and drive assembly shall be supported internally by galvanized steel structural steel members and supported on vibration isolators.
2. Fan wheels shall be non-overloading, backward inclined, centrifugal type constructed of aluminum.
3. Fans shall be belt driven with an adjustable motor base on self-aligning rails for belt tensioning and adjustment.
4. Motor pulleys shall be adjustable, constructed of machined cast iron. Drives shall be sized for 150 % of the motor horsepower.
5. Motor and drives shall be located out of the exhaust air stream and protected from the weather by a removable motor housing, designed to provide positive motor cooling.
6. Motors shall be as specified under Section 15170, Electrical Requirements for Mechanical Equipment.
7. Accessories: Furnish fan with a disconnect switch, factory wired to the motor for customer's connection, optional gravity backdraft damper, birdscreen and roof curb, sloped to match the roof pitch as detailed on the drawings. Roof curb to be a minimum of 12" in height.
8. Manufacturer: Greenheck, Penn, Cook, Carnes, ACME, or Breidert.

#### 3.0 EXECUTION

- 3.1 Install fans and ventilation equipment as detailed on the drawings.
- 3.2 Set roof mounted fans on factory supplied curbs where applicable. Curbs are to be provided under this section. Installation must be coordinated with the roofing contractor. Division 15 contractor is responsible for ensuring that roof curbs are installed in accordance with the manufacturer's recommendation, and that they are available and in place in a timely fashion so as not to delay roof construction.

- 3.3 For roof mounted equipment, secure fans and ventilators to roof curb with lag screws.
- 3.4 Provide flexible connections on inlet and outlet of fans connected to ductwork.

END OF SECTION