

SECTION 233416 - CENTRIFUGAL HVAC FANS

PART 1-GENERAL

1.1 SECTION INCLUDES

- A. Centrifugal Roof Ventilator
- C. Centrifugal square In-line Fans

1.2 SUBMITTALS

- A. Submit shop drawings and product data per applicable Division I Specifications.
- B. Shop drawings shall include material, capacities, quantities, and accessories.

1.3 QUALITY ASSURANCE

- A. Sound Power Level Rating: AMCA 301.
- B. Performance Requirements: AMCA 210.

1.4 WARRANTY

- A. Contractor shall warranty entire systems and equipment for a period of one (1) year.

PART 2-PRODUCTS

2.1 MANUFACTURERS

- A. Greenheck
- B. Cook
- C. Penn/Barry
- D. Twin City

2.2 COMPONENTS

- A. Centrifugal Roof Ventilators
 - 1. Drive: Direct
 - 2. Housing: Spun aluminum.
 - 3. Fan Wheel: Aluminum hub and wheel, backward-inclined blades.
 - 4. Belt Drive Assembly: Steel shaft, permanently lubricated ball bearings, cast iron adjustable pitch pulley, and fan motor isolated from airstream.

5. Motor: Heavy duty, ball bearing type with overload protection.
6. Accessories:
 - a. Disconnect switch
 - b. Bird screens
 - c. Motor Operated Backdraft dampers
7. Roof Curb Configuration: Self-flashing without cant strip and with mounting flange.
8. Roof Curb Height: 12 inches standard above finished roof.

B. Centrifugal Square In-line Fan

1. Drive: Direct
2. Housing: Galvanized sheet metal.
3. Fan Wheel: Centrifugal, aluminum.
4. Belt Drive Assembly: Steel shaft, permanently lubricated ball bearings, adjustable pitch motor pulleys, motor insulated from airstream, belt guards.
5. Motors: Heavy duty, ball bearing type with overload protection.
6. Accessories:
 - a. Variable speed controller
 - b. Disconnect switch
 - c. Motorized backdraft dampers
 - d. Spring vibration isolators

PART 3-EXECUTION

3.1 INSTALLATION

- A. Install per manufacturers requirements.
- B. Mount units on roof curbs to be furnished and set by mechanical contractor. Cutting of opening is by mechanical contractor. Flashing is by the general contractor.

3.2 TRAINING

- A. Startup and training to be provided by a factory-trained service technician for a total of two (2) hours. These hours of training are to be "bankable hours" used

within one full warranty year.

- B. All training and start-up shall be videotaped with a professional videographer and present two (2) copies of the training on DVD format to the Construction Manager within one (1) week of the training session. This DVD will be provided to the owner.

END OF SECTION 233416

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