

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Gravity ventilators.
 - 1. Louvered Penthouse

1.02 REFERENCE STANDARDS

- A. AMCA 511 – Certified Ratings Program for Air Control Devices.
- B. AMCA 550 – Test Method for High Velocity Wind riven Rain Resistant Louvers.
- C. ASHRAE 70 - Method of Testing for Rating the Air Flow Performance of Outlets and Inlets,
- D. NFPA 90A - Standard for the Installation of Air Conditioning and Ventilating Systems

1.03 SUBMITTALS

- A. Product Data: Submit manufacturer's technical product data for HVAC gravity ventilators including the following:
 - 1. Schedule of HVAC gravity ventilators indicating drawing designation, number furnished, model number, size, and accessories furnished.
 - 2. Data sheet for each type of HVAC gravity ventilator, and accessory furnished; indicating construction, finish, and mounting details.
 - 3. Performance data for each type of HVAC gravity ventilator furnished, including pressure loss and noise criteria ratings at specified airflows. Indicate selections on data.
 - 4. Shop Drawings: Submit manufacturer's assembly-type shop drawing for each type of HVAC gravity ventilator, indicating materials and methods of assembly of components.
 - 5. 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.

- B. Coordination Drawings: Roof plans drawn to scale to show locations and coordination of HVAC gravity ventilators with other items installed on roof.

1.04 QUALITY ASSURANCE

- A. ASHRAE Compliance: Test and rate HVAC gravity ventilators in accordance with ASHRAE 70.
- B. AMCA Compliance: Performance ratings and factory testing of gravity ventilators to be in accordance with AMCA 511 and AMCA 550.
- C. NFPA Compliance: Install HVAC gravity ventilators in accordance with NFPA 90A.

PART 2 - PRODUCTS

2.01 GRAVITY VENTILATORS

- A. Manufacturers:
 - 1. Acme.
 - 2. Carnes Company, Inc.
 - 3. Cesco.
 - 4. Cook (Loren) Co.
 - 5. Greenheck Fan Corp.
 - 6. Nailor Industries, Inc.
 - 7. PennBarry.
 - 8. RuppAir Management Systems.
 - 9. Vent Products.
- B. Extruded Aluminum Louvered Ventilator:
 - 1. Construction:
 - a) Extruded aluminum louvers, minimum 0.081 inch thick, mitered at corners and welded for maximum strength.
 - b) Removable Hood: Minimum 0.05 inch, reinforced and braced for extra strength.
 - c) Base: 0.08 inch aluminum with mitered corners and seams with continuous weld for strength and tightness.
 - 2. Options/Accessories:

- a) Roof Curb: Prefabricated, heavy-gage, galvanized steel or aluminum roof curb with mitered and welded corners and 2-inch treated wood nailer.
 - 1) Provide 1-1/2-inch-thick, 3 pound density, rigid, fiberglass insulation adhered to inside walls.
 - 2) Welded, straight side curb with mounting flange.
- b) Dampers:
 - 1) Type: Backdraft or motorized damper as scheduled on the drawings.
 - 2) Balanced for minimal resistance to flow.
 - 3) Galvanized frames with pre-punched mounting holes.
- c) Screens:
 - 1) Fabricate in accordance with ASTM B221.
 - 2) Birdscreen: Construct of 1/2 inch galvanized steel or aluminum mesh.
 - 3) Insect Screen: Construct of fine mesh aluminum.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Examine areas and conditions under which HVAC gravity ventilators are to be installed for compliance with installation tolerances and conditions that would affect the performance of the equipment. Do not proceed with work until unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. General: Install HVAC gravity ventilators in accordance with manufacturer's written instructions, design drawings, referenced standards, and in accordance with recognized industry practices to insure that products serve intended function.
- B. Coordinate with other work, including ductwork and duct accessories, to interface installation of HVAC gravity ventilators with other work.
- C. Locate HVAC gravity ventilators and goosenecks as indicated on the drawings. Adjust location to suit structural conditions.

3.03 CLEANING

- A. After installation of HVAC gravity ventilators, inspect exposed finish. Clean exposed surfaces to remove dirt and smudges. Replace any HVAC gravity ventilator that has damaged finishes.

END OF SECTION