

**PART 1 GENERAL****1.01 DESCRIPTION**

- A. Provide Fans as specified herein and shown on the Drawings.
- B. Equipment capacity and size as indicated in the equipment lists on the Drawings.
- C. Related Work: The requirements of Section 23 0500, Common HVAC Materials and Methods, also apply to this section.

**1.02 QUALITY ASSURANCE**

- A. Air Handling Equipment: Rated in accordance with AMCA certified rating procedures and AMCA labeled.

**1.03 SUBMITTALS**

- A. Submit catalog data, construction details and performance characteristics for each fan.
- B. Submit operating and maintenance data.

**PART 2 PRODUCTS****2.01 EXHAUST FANS AND UNITS**

- A. Roof Mounted Exhaust Fan (Direct Drive): Curb mounted on roof; vertical shaft, direct driven, open BI wheel as shown on Drawings with permanently lubricated sealed ball bearings; fan duty motor; bird screen; weatherproof aluminum housing for mounting on square base; capacity as indicated on Drawings. Motor located outside the air stream. Casing to be easily removed for service. Motor and fan assembly to be mounted on rubber vibration isolators. Where indicated on the Drawings, provide backdraft damper in curb. Provide switch with pilot light for each fan so indicated. Provide factory mounted disconnect. Greenheck G, Soler & Palau RED, Jen Fan RED, Carnes VEDK, Acme PRN, PennBarry DOMEX, Cook ACE-D, Twin City DCRD or approved. All motors shall be ECM with manual speed adjustment.
- B. Inline Cabinet Exhaust Fan: Belt or direct drive (see drawings), forward curved centrifugal wheel, sleeve bearings, motor and wheel and external spring vibration isolators; provide duct connection and backdraft dampers or motorized damper on discharge of exhaust fan. Size and capacity as indicated on Drawings. Provide neoprene flexible connections on intake and discharge. For Direct Drive Fans, provide with E.C. motor with integral speed control device. Carnes, Greenheck, Cook, Twin City, or approved.

**PART 3 EXECUTION****3.01 INSTALLATION**

- A. Install and arrange equipment as shown on the Drawings and as recommended by the equipment manufacturer.

**3.02 ROOF MOUNTED EQUIPMENT INSTALLATION**

- A. All roof mounted mechanical equipment shall be supported and seismically anchored on leveled, flashed and counterflashed curbs anchored to resist seismic forces and suitable for the roof construction. Minimum curb height shall be 12" above the roof unless indicated otherwise on the Drawings. Flashing into the roof is specified in another Section.
- B. Make all piping, electrical and duct penetrations for each equipment within the curb unless shown otherwise on the Drawings. Piping and electrical conduit routed above and across the roof shall be supported on flashed and counterflashed curbs with pipe guides anchored to the curbs in "pitch pockets." Submit shop drawings on other arrangements for approval.

**3.03 CONTROLS**

- A. Wiring: All wiring shall be in accordance with the National Electrical Code and local electrical codes.

**END OF SECTION**