# SECTION 233400 - HVAC Fans

## PART 1 - GENERAL

1.1 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 230500, Common HVAC Materials and Methods, also apply to this section.

1.2 QUALITY ASSURANCE

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

1.3 SUBMITTALS

A. Submit catalog data, construction details and performance characteristics for each fan.

B. Submit operating and maintenance data.

## PART 2 - PRODUCTS

2.1 EXHAUST FANS AND UNITS

A. Ceiling Cabinet Exhaust Fan: Direct drive, forward curved centrifugal wheel, sleeve bearings, motor and wheel isolated from unit on vibration isolators; provide grille on inlet and duct connection with backdraft dampers or 2-position control damper on discharge. See plan for damper type. Size and capacity as indicated on Drawings. Carnes VCD, Acme V, Penn Zypher, Jenn-Air J‑Series, Greenheck SP, Soler & Palau SV, Jen Fan FF, Cook Gemini, Twin City T , Panasonic, or approved. See equipment schedule for type of controls required.

B. 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. Provide 2-position control damper per code. Provide switch with pilot light for each fan so indicated. Provide factory mounted disconnect. Greenheck G, Cook ACE-D, Twin City DCRD, Captiveaire DR, or approved.

## PART 3 - EXECUTION

3.1 INSTALLATION

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

3.2 AIR HANDLING INSTALLATION

A. Installation and Arrangement: Air handling equipment shall be instal­led and arranged as shown on the Drawings. Comply with the manufacturer's recommendations for installation connection and start-up.

B. Lubrication: All moving and rotating parts shall be lubricated in accordance with the manufacturer's recommendations prior to start-up.

3.3 CONTROLS

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

END OF SECTION 233400