**A Series Specification**

**TYPICAL SPECIFICATIONS**

**Model: A Series**

**Description:**

Fan shall be G90 galvanized steel, roof mounted, belt drive or direct drive, forward curved or backward inclined, filtered supply fan.

**Certifications:**

Fan shall be listed by ETL and conforms to UL705 and CSA Std. C22.2, No. 113 standards.

**Construction:**

**Housing**

The fan shall be constructed of heavy gauge G90 galvanized steel for maximum corrosion resistance. Doors are removable for easy access to interior components for service. Intake hood shall be designed with a large intake area to assure low pressure drop and maximum weather resistance. Weather hood shall include 2" washable filters and inlet screen to prevent large debris from clogging filters.

**Base**

The base shall be constructed of galvanized steel for improved rigidity. Base shall be structurally reinforced to accommodate the blower assembly.

**Blower**

Wheels shall be balanced in two planes and done in accordance with AMCA standard 204-96, *Balance Quality and Vibration Levels for Fans*. The wheel blades shall be aerodynamically designed to minimize turbulence, increase efficiency and reduce noise. The wheel blades shall be securely attached to the wheel inlet ring. The wheel shall be firmly attached to the fan shaft with set screws and keys. The blower assembly shall be isolated from the fan structure with vibration isolators.

 **Belt Drive**

The blower wheel shall be forward curved centrifugal, constructed G-90 galvanized steel.

**Direct Drive**

Direct drive blower assembly shall consist of a centrifugal backward inclined, non-overloading wheel secured directly to a heavy duty, ball bearing type motor via two set screws. The motor and wheel assembly shall be mounted to a heavy gauge galvanized steel frame. The motor shall be controlled by a variable frequency drive, allowing for variable airflow without the need of belts and pulleys.

**Motor & Motor Compartment**

Motors shall be heavy duty ball bearing type and furnished at the specified voltage, phase and enclosure. Motor mounting plate shall be constructed of heavy gauge galvanized steel and shall be designed to provide easy adjustment of belt tension (belt drive units only).

**Shaft & Bearings (Belt Drive Units Only)**

Shafts shall be precision ground and polished. Heavy duty, pre-lubricated bearings shall be selected for a minimum (L50) life in excess of 200,000 hours of operation at maximum cataloged operating speed. They shall be designed for, and individually tested specifically for use in air handling applications.

**Belts & Drives (Belt Drive Units Only)**

Belts shall be oil and heat resistant, non-static type. Drives shall be cast type, precision machined and keyed and secured attached to the fan and motor shafts. Drives shall be sized for a minimum of 150% of the installed motor horsepower. Fan operating speed shall be factory set using adjustable pitch motor pulleys; motors over 3 HP will come standard with double groove pulleys.