

Typical Specifications

Model: SDB

Description: The fan shall be a roof mounted, spun aluminum, belt driven, downblast centrifugal exhaust ventilator.

**Standard
Construction:**

The fan shall be of welded and bolted construction utilizing corrosion resistant stainless steel fasteners. The spun aluminum components shall be constructed of heavy-gauge aluminum, bolted to an aluminum support structure for rigidity and strength. The aluminum base shall have continuously welded curb cap corners for added strength and maximum leak protection. The fan base shall have pre-punched mounting holes for ease of installation. The discharge skirt shall have a rolled bead for added strength. The aluminum motor cover cap shall have stainless steel fasteners to provide easy access into the motor compartment. An integral watertight conduit chase shall be provided through the curb cap and into the motor compartment to facilitate wiring connections. The motor, bearings and drives shall be mounted on heavy-gauge steel motor bracket assembly, isolated from the unit structure with neoprene vibration isolators to reduce vibration and sound. The motor base shall be adjustable for maintaining proper belt tension. These components shall be enclosed in a weather-tight compartment, separated from the exhaust airstream and cooled by air isolated from the exhaust. The fan shall include an integral birdscreen and standard disconnect switch (except units with two speed and explosion proof motors). The fan shall bear a permanently attached nameplate displaying model and serial number of unit for future identification. The unit shall be factory run-tested after assembly.

Wheel: Wheel shall be non-overloading backward inclined centrifugal, constructed of heavy-gauge aluminum, including a precision machined cast aluminum or steel hub. Wheel inlet shall overlap an aerodynamic deep spun aluminum inlet cone to provide optimum air and sound performance. Wheel shall be dynamically balanced in accordance with AMCA Standard 204-96, *Balance Quality and Vibration Levels for Fans*.

**Motors
and Electrical:** Motor shall be heavy duty type with permanently lubricated sealed ball bearings and furnished at the specified voltage, phase and enclosure.

**Bearings
and Shaft:** Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed. Fan shafts shall be precision ground and polished.

Drives and**Belts:**

Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower. The variable pitch motor sheave must be factory set to the specified fan RPM range.

Options and**Accessories:**

Optional accessories shall be provided either factory installed or field installed as detailed in the fan schedules.

Certifications:

Fan shall be listed by Underwriters Laboratories (cULus 705) including UL listing for Canada when specified in the fan schedule. Fan shall bear the AMCA certified ratings seal for sound and air performance.

Warranty:

Manufacturer's warranty shall apply for a period of 5 years (housing, bearings, shaft, and wheel) and 1 year (motor). See warranty certificate for details.

Product:

Fan shall be model SDB as manufactured by S&P USA, Jacksonville, FL, a division of Soler & Palau Ventilation Group.