

SERIES 40 GUIDE SPECIFICATION

FIBERGLASS IN-LINE CENTRIFUGAL FAN

The belt drive Fiberglass In-Line Centrifugal Fan shall be manufactured by Hartzell Air Movement, Series 40. Standard sizes are 15" through 49". The fan shall be completely assembled, packaged and ready to install.

The resin used on the solid fiberglass wheel shall be Dow Derakane 510-A vinyl ester. Backward curved blades offer non-overloading, highly efficient operation. The wheel shall have a totally encapsulated aluminum core insert for secure attachment to the shaft.

Fan housing shall be constructed of Ashland Hetron 693 polyester resin and glass fiber with 3% antimony trioxide added to achieve Class I flame spread rate below 25. Fan construction shall conform to ASTM Standard D4167 for fiber reinforced plastic fans and blowers. All fiberglass surfaces shall be protected with a minimum 10 mil thickness of chemical, flame and ultraviolet resistant resin. Motor mounting plates are steel and mounted on the housing, covered with resin, mat and cloth. The inlet cone and airflow straightening guide vanes shall be solid fiberglass. The entire housing shall have a finish coat of resin to provide superior protection and smooth air flow. All airstream hardware shall be 304 stainless steel.

Fan shaft shall be ground and polished 304 stainless steel. Bearings shall be located in an enclosed drive compartment and shall be heavy duty, self-aligning, with extended lube tubes for continuous service, with a minimum of 50,000 hours L10 life. A neoprene shaft seal shall be located where the shaft enters the inner bearing housing with a neoprene shaft slinger between the seal and wheel. V-belt drives shall be sized for continuous service.

The fan assembly shall be dynamically balanced at the Hartzell factory prior to shipping. Fans shall be balanced to the American National Standards Institute, Std. S2.19-1989 "Balance Quality of Rotating Rigid Bodies", and Grade G6.3. Fans shall be manufactured in accordance with Hartzell's standard quality assurance procedures. Fan performance shall be based on tests conducted in Hartzell's AMCA accredited test laboratory and in accordance with AMCA Standard 210 for air performance and AMCA Standard 300 for sound.

ACCESSORIES:

- Combination Motor Cover and Belt Guard - Solid fiberglass with ventilation louvers. Available in epoxy coated steel.
- Belt Guard - Epoxy coated steel, covers belts and motor sheave.
- Safety Guard - Fits on inlet or outlet of fan. Made of epoxy coated steel.
- Mounting Feet - For mounting fan on floor, platform wall, or ceiling. Available in rubber-in-shear or springs.
- Vibration Isolators - For horizontal floor mount or ceiling suspension. Available in rubber-in-shear or springs.
- Drain - PVC pipe assembled in housing, 1" female fitting.
- Inlet Dampers - Standard construction in available through 7" SP and 3000 FPM, and is epoxy coated steel.

- Hi-Cor Construction - Extra Flange mounting holes. All air stream surfaces have a surfacing veil and an additional coat of resin.
- Electrical Grounding - Air stream surfaces are coated with a "carbon rich" coating with grounding straps to the motor frame. User must properly ground the equipment at the time of installation.
- Motors - OEDP standard. TEFC and other special motors are available upon request.
- Abrasion/Erosion Resistant Coating (HartKoate) - Particularly useful when water mist and/or abrasive particles exist in the air stream.
- Special Hardware - 316 stainless steel or Monel for special chemical environments.