



SERIES 82 GUIDE SPECIFICATION

FIBERGLASS DIRECT DRIVE DOWNBLAST CENTRIFUGAL ROOF EXHAUSTER

The Fiberglass Direct Drive Downblast Centrifugal Roof Exhauster shall be manufactured by Hartzell Air Movement, Series 82. The exhausters shall use the centrifugal FE wheel to improve performance in an exhauster application. Standard sizes are 12", 15" and 18" and are available as roof mounted or wall mounted units. The fans shall be completely assembled, packaged and ready to install.

The resin used on the solid fiberglass FE wheel shall be Derakane 510-A vinylester. Blades shall be backward curved to provide non-loading, highly efficient operation. The wheel shall have a totally encapsulated aluminum core insert for secure attachment to the shaft. The wheel shall be one-piece, resin transfer molded, without hand lay-up or assembly components. The fan is suitable for temperatures up to 125° F.

Structural parts located in the airstream are either fiberglass resin or epoxy coated stainless steel. All fiberglass surfaces shall be constructed of Ashland Hetron 693 polyester resin and glass fiber with 3% antimony trioxide added to achieve Class I flame spread below 25. All fiberglass surfaces shall be protected with a minimum 10 mil thickness of chemical, flame, and ultraviolet resin. The entire housing shall have a finish coat of resin to provide superior protection and smooth airflow. All airstream hardware shall be 304 stainless steel. All hardware outside the airstream shall be zinc plated.

Standard motors are TEFC mild steel extended shaft motors. Stainless steel shaft motors are available as an option. Motor is protected from the airstream. A neoprene shaft seal is placed where the shaft leaves the housing. A conduit tube between the motor enclosure and the curb panel provides wiring access without an additional roof penetration.

The fan assembly shall be dynamically balanced at the Hartzell factory prior to shipping. Fans shall be balanced in accordance with AMCA Standard 204-96, fan application category BV-3 (comparable to 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 the latest revision of AMCA Standard 210 for air performance and AMCA Standard 300 for sound. AMCA certification for sound and air performance is pending.

ACCESSORIES:

- Motors - Explosion proof, chemical duty, and other special motors can be furnished upon request.
- Disconnect Switch – Ships loose for field mounting.
- Bird Screen – 304 Stainless bird screen is available.
- Fiberglass Damper – Hartzell series FEP fiberglass end pivoted automatic or motor driven damper is available. The damper is to be mounted in a roof curb on a damper shelf.
- Hardware - Special corrosive conditions may require Type 316 stainless steel or Monel.
- Pre-Fabricated Curb - For roof top installation of roof ventilators.