



SERIES 37 GUIDE SPECIFICATION

FIBERGLASS BELT DRIVE UPBLAST ROOF VENTILATOR

The Fiberglass Belt Drive Upblast Roof Ventilator shall be manufactured by Hartzell Air Movement, Series 37. Standard sizes are 12" through 60". Sizes 12" through 40" shall be completely assembled, packaged and ready to install. Sizes 44" through 60" shall be shipped in three parts; curb panel, fan and stack cap each completely assembled, with hardware for installation.

The resin used on the Series 37 roof ventilator shall be Ashland Hetron 693 which is a polyester resin with 3% antimony oxide added to achieve a Class I flame spread rate below 25 per ASTM E84 tunnel test standards and NFPA Code 91 for blower and exhaust systems, which is OSHA approved. Construction shall conform to ASTM Standard D4167 for fiber reinforced plastic fans and blowers.

Fiberglass fan housings and components may be used in temperatures up to 200° F. The propeller shall be airfoil design, 6 bladed one piece construction through the 48" size with an aluminum insert molded into the hub for secure attachment to the shaft. The 54" and 60" sizes shall be composed of either 4 or 6 blades securely clamped in a 2-piece hub. The hub is assembled with Type 304 stainless steel bolts and mounted on the fan shaft with a tapered bushing.

Fan housings, stack cap lids, windband channels, mounting angle, and curb panel are constructed of solid fiberglass including the flanges which have drilled mounting holes. Motor mountings shall be steel plate coated with resin and mounted on the drum exterior with glass mat, cloth, and resin. The encapsulated assembly base, Type 304 stainless steel riser bolts and epoxy coated motor base provide support for the motor. All other hardware, including windband support brackets and lid axles shall be Type 304 stainless steel. Lid bearings shall be nylon.

Fan shafts shall be ground and polished Type 304 stainless steel. Bearings shall be located in a drive compartment sealed to prevent corrosive element entry which shall include a shaft seal and slinger. Bearings shall be heavy duty, self-aligning, and shall have extended lube tubes and be relubricable for continuous service with a minimum L10 life of 50,000 hours. Variable pitch sheaves shall be standard on fans up to and including 10 HP.

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. Fans shall be licensed to bear the AMCA Certified Air and Sound Performance Rating Seal.

ACCESSORIES:

- Motors - OEDP standard. Explosion proof, chemical duty, high temperature, and other special motors can be furnished upon request.

- Inlet/Outlet Guard - Prevents access to rotating propeller, steel, epoxy coated, or stainless steel.
- Abrasion/Erosion Resistant Coating (HartKoate) - Helps prevent premature deterioration of equipment in environments where uncoated fans may fail. Particularly appropriate when water mist and/or abrasive particles exist in the airstream.
- Hi-Cor Construction - Extra flange mounting holes are provided. all airstream surfaces exposed to the corrosive environment will be reinforced with a layer of surfacing veil. An additional final coat of resin will be applied for extra corrosion resistance.
- Electrical Grounding - Interior airstream surfaces can be coated with a "carbon rich" resin coat and grounding straps secured from the side of the housing to the fan motor. All that remains to effectively ground the airstream is to ground the fan motor at the time of installation.
- Hardware - Special corrosive conditions may require Type 316 stainless steel or Monel.
- Alternative Resins - Dow Derakane 510-A vinylester, brush coating of Reichhold Dion 6694.
- Motor Cover - All fiberglass with louvers positioned for horizontal or vertical mounting.
- Lifting Lugs - Stainless steel lifting lugs on curb base.
- Extended Lube Tubes - For more accessible relubrication capability.
- Pre-Fabricated Curb - For roof top installation of roof ventilators.