



SERIES 28 GUIDE SPECIFICATION

FIBERGLASS DIRECT DRIVE DUCT FAN

The Fiberglass Direct Drive Duct Fan shall be manufactured by Hartzell Air Movement, Series 28. Standard sizes are 12" through 60". The fan shall be packaged, completely assembled and ready to install.

The resin used on fiberglass axial flow fans is Ashland Hetron 693 which is a polyester resin with 3% antimony oxide added to achieve a Class I flame spread rate of below 25 per ASTM E84 tunnel test standards and NFPA Code 91 for blower and exhaust systems, which is OSHA approved. Fan construction shall conform to ASTM Standard D4167 for fiber reinforced plastic fans and blowers. The propeller shall be airfoil design, 6 bladed one piece construction, with the exception of the 54" and 60" which are either 2 or 4 bladed. The propeller shall be die formed of cloth mat plus woven roving construction of solid fiberglass with an aluminum insert molded into the hub for secure attachment to the shaft. Propellers shall be given two coats of resin before final assembly. The airfoil propeller shall not have an aerodynamic stall characteristic.

Fan housings shall be rugged and shall be constructed of solid fiberglass including the flanges which have drilled mounting holes. Motor mountings shall be solid fiberglass. Interior and exterior surfaces of the housing shall have one coat of heavy resin applied. Motors shall be totally enclosed air over type. Standard internal hardware shall be austenitic stainless steel. Fiberglass fan housings and components shall be capable of being used in temperatures up to 200° F.

Extended lube tubes and grease fittings shall be standard when relubricable motors are specified. Blowers shall be designed for mounting in any position from horizontal to vertical.

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 Performance Rating Seal.

ACCESSORIES:

- Motors - Explosion proof, mil & chem. duty, high temperature, and other special motors can be furnished upon request.
- Steel Inlet Bell - Minimizes inlet pressure losses, thus optimizing airflow, epoxy coated.
- Inlet/Outlet Guard - Prevents access to rotating propeller, steel, epoxy coated, or stainless steel.
- Companion Flanges - Mating flanges for fan, solid fiberglass.
- Mounting Feet - To facilitate floor, ceiling, or wall mounting, steel, epoxy coated.
- Vibration Isolators (Horizontal or Vertical Mount) - Rubber-in-shear or spring type available.
- Fiberglass Reversible Hoods - With or without damper lids.
- Stack Cap and Panel - Converts fiberglass duct axial fan to upblast roof ventilator with backdraft dampers, solid fiberglass, and stainless steel hardware.

- Motor Covers - May be fiberglass, steel, or epoxy coated steel.
- Extended Electrical Leads - Motors can be pre-wired with electrical leads extended to a watertight conduit box located on the exterior of the fan housing.
- Special Hardware - 316 stainless steel or Monel hardware.
- Abrasive/Erosive 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 air stream.
- 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.
- Inspection Door - Allows periodic visual inspection of wheel, fastened with stainless steel bolts and gasketed for tight seal.
- Alternative Resins - Dow Derakane 510-A vinylester, brush coating of Reichhold Dion 6694.