



SERIES 46 GUIDE SPECIFICATION

BELT DRIVE DUCT AXIAL FAN, STEEL

The Belt Drive Duct Axial Fan, Steel, shall be manufactured by Hartzell Air Movement, Series 46. Standard sizes are 12" through 60". This fan will be supplied without a guide vane section.

The duct axial propeller shall be an airfoil design, 6 bladed, one piece construction cast of 319 aluminum alloy in compliance with Federal Specification QQ-A-601E and ASTM B26. Propellers shall be retained on the motor shaft with a split taper bushing.

Fan housing shall be minimum 12 gauge rolled commercial quality, carbon steel, continuously welded in compliance with AWS D1.1 standard. Standard surface coating system shall be phosphatized surface preparation with industrial grade air dry enamel paint. All flanges have slotted mounting holes. Rigid motor mounts provide support for the motor. Fans are suitable for temperatures up to 200° F.

Fan shafts shall be ground and polished carbon steel. Bearings shall be located in a drive compartment on the negative pressure side of the propeller. Bearings shall be heavy duty, self-aligning, ball or roller type; depending on fan size, motor horsepower and performance. Bearings shall have extended lube tubes and be relubricable for continuous service and have minimum L10 bearing life of 50,000 hours. Variable pitch drive sheaves shall be standard on fans up to and including 10 HP. Belts shall be "V" type, heat, oil, and static resistant and 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 the latest revision of 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:

- Special Construction - Available in stainless steel and aluminum.
- Protective Coatings - Hot dipped galvanized, Nupon epoxy, inorganic zinc, and catalyzed coal tar epoxy are available upon request.
- Motors - OEDP standard. TEFC and other special motors can be furnished upon request.
- Inlet/Outlet Bell - Minimizes inlet and outlet pressure losses, thus optimizing airflow.
- Inlet/Outlet Cone - Available for adapting fans to different size duct diameters.
- Inlet/Outlet Guard - Prevents access to rotating propeller.
- Companion Flanges - Mating flanges for duct fan.
- Access Door - For inspection of the propeller and fan bearings.
- Mounting Feet - To facilitate floor, ceiling or wall mounting.
- Vibration Isolators (Horizontal or Vertical Mount) - Rubber-in-shear or spring type available.

- Stack Cap and Curb Panel - Converts duct fan to upblast roof ventilator with backdraft dampers.
- Sound Muffler - Provides attenuation of excessive noise.
- Shaft Seal and Slinger - Neoprene seal and slinger prevent contaminants from entering bearing compartment.
- Lifting Lugs - Provides means to lift and handle fans.
- Combination Motor Cover and Belt Guard - Covers are vented. Specify horizontal or vertical mounting.