



## **SERIES 38 GUIDE SPECIFICATION**

### **DIRECT DRIVE DUCT FAN, STEEL**

The Direct Drive Duct Fan, Steel shall be manufactured by Hartzell Air Movement, Series 38. Standard sizes are 12" through 48". The fan shall be packaged, completely assembled and ready to install.

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

All sizes through 48" with a 215T frame motor or smaller shall have self-formed flanges. All others have rolled steel flanges continuously welded to the steel drum. All flanges have slotted mounting holes. Rigid motor mounts provide support for the motor. Motors shall be totally enclosed air over type. All fractional motors shall be permanently lubricated, non-regreasable. Integral horsepower motors shall be supplied with regreasable bearings and extended lubrication tubes and grease fittings. Fans shall be designed for mounting in any position from horizontal to vertical. The fan shall be capable of being used in temperatures up to 104° F.

Fan housings shall be minimum 12 gauge rolled commercial quality, carbon steel and continuously welded in compliance with AWS D1.1 standards. Standard surface coating system shall be industrial grade air dry enamel paint.

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 - Explosion proof, extra tough, high temperature, and other special motors can be furnished upon request.
- Inlet Bell - Minimizes inlet 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 fan.
- Access Door - For inspection of the propeller and motor.
- Bomb Bay Doors - Provides easy access to propeller and motor and facilitates maintenance. (Increases length of fan.)
- Mounting Feet - To facilitate floor, ceiling or wall mounting.

- Isolator Brackets (Horizontal or Vertical Mount) - Used with supporting vibration isolators.
- 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.
- Lifting Lugs - Provides means to lift and handle fans.
- Extended Electrical Leads - Motor shall be pre-wired with electrical leads extended to a watertight conduit box located on the exterior of the fan housing.