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GUIDE SPEC
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SPECIFYING PRESSURE BLOWERS

GENERAL

The fans shall be size _____ single-width single-inlet as designed and manufactured by The New York Blower Company. Fan wheels shall utilize a tapered frontplate design for optimum efficiency. Unless otherwise directed, fans shall be in compliance with the layout shown on the drawings.

PERFORMANCE

Fan ratings shall be based on tests made in accordance with AMCA Standard 210 and licensed to bear the AMCA Certified Ratings Seal for Air Performance. Fans not licensed to bear the AMCA Seal for Air Performance shall be tested, at supplier's expense, in an accredited AMCA laboratory. (Option: Only AMCA certified fans will be accepted.) Fans shall have a flat, relatively constant pressure characteristic for stable operation from wide open to closed off. Fan brake horsepower shall be equal to or less than _____ BHP at _____ inches static pressure and _____ CFM at _____ density.

SOUND

Fan manufacturers shall provide sound power level ratings for fans tested and rated in accordance with AMCA Standards 300 and 301. Tests shall be performed in an accredited AMCA laboratory. Sound power ratings shall be in decibels (reference 10⁻¹² watts) in eight octave bands. Sound power levels will be corrected for installation by the specifying engineer...dBA levels only are not acceptable.

CONSTRUCTION

Fan housings are to be heavy gauge, continuously welded construction. Housings with lock seams or partially welded construction are not acceptable. Housings shall feature aerodynamically designed outlet transitions providing a minimum separation of air flow. Wheels shall utilize taper lock hubs for easy wheel removal. Outlets are to be standard pipe sizes with flanges drilled to match ANSI Class 125/1 50 hole patterns.

BEARINGS

Bearings on Arrangement 1, 8 and 10 are to be grease lubricated, precision anti-friction ball or spherical roller, self-aligning, pillow block design. Bearings shall be selected for long life at the fan's maximum cataloged operating speed.

SHAFT

Shafts are to be ASTM A-108 steel, grade 1040/1045, precision turned, ground and polished. Grade 1018 steel is not acceptable. The shaft's first critical speed shall be at least 125% of the fan's maximum operating speed. The drive end of the fan shaft shall be counter-sunk for tachometer readings.

PAINT

All fan surfaces are to be thoroughly prepared prior to painting. After cleaning, all surfaces are to be coated with an industrial grade alkyd enamel. Surfaces of components not accessible after assembly shall be coated and allowed to dry prior to final assembly. Primer only will not be accepted.

BALANCE AND RUN TEST

All wheels are precision balanced prior to assembly. Fans with motors and drives mounted by nyb are final-balanced at the specified running speed.

ACCESSORIES

Accessories shall be provided as called for in the plans and specifications.

Required accessories include:

- Cleanout Door - Flush Bolted
- Spark-Resistant Construction - AMCA A - AMCA B
- Drain
- Drain Plug
- Low Leak Construction
- Flexible Connector - Complete with Companion Flange - Sleeve & Clamps Only - Companion Flange Only
- Shaft Seal (Arrangement 1, 8 or 10) - Ceramic Felt- Buna-N - Viton® - Teflon®
- Silencer - Flanged - Venturi Inlet - Plain Pipe - Support Leg
- Inlet - Flanged - Plain Pipe - Venturi with Wire Guard
- Teflon Shaft Hole Closure
- Arrangement 10 Weather Cover/Belt Guard
- Heat-Fan Construction
- Wafer-Type Outlet Damper - with Bolt Holes - without Bolt Holes
- Safety Equipment - Belt Guard with Tachometer Opening and Plug - Shaft and Bearing Guard with Extended Bearing Lubrication Fittings - Coupling Guard
- Isolation Rails - Rubber-In-Shear
- Unitary Base
- Isolation Bases - Spring - Rubber-In-Shear
- Drive - Variable V-Belt - Constant V-Belt
- Coupling
- Inlet Filter - Oil Wetted - Dry Type - with Hood - with Silencer - Support Leg

FINAL INSPECTION

All fans shall receive a final inspection by a qualified inspector prior to shipment. Inspection to include: fan description and accessories, balance, welding, dimensions, bearings, duct and base connection points, paint finish and overall workmanship.

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