Wholesale Ventilation Products

...better AIRFLOW by DESIGN!
HOW DO I DETERMINE HOW MANY FANS I NEED?

Air circulation should occur once or twice per hour to maintain a healthy building environment.

Select the fan cfm based on the following ceiling height recommendations:
- 15 ft - 20 ft use 420 cfm fan or model DSF250
- 20 ft - 25 ft use 1055 cfm fan or model DSF300
- 25 ft - up use 1460 cfm fan or model DSF350

To determine the number of DSF fans for a given area, the following information is required:
- \((L \times W \times H) = \text{Size of room}\)
- \(\text{Size of room} / \text{cfm} / 60 = \text{Number of units}\)

Example: a building is 125 ft. long, 75 ft. wide, and 20 ft. high.
- \(125 \times 75 \times 20 = 187,500 \text{ cu. ft.}\)
- \(187,500 \text{ cu. ft.} / 1055 \text{ cfm (DSF300 Fan)} / 60 = 3 \text{ DSF Fans (round to the nearest whole number)}\)
PFA PADDLE FAN ADAPTER
The PFA Paddle Fan Adapter is a cost effective, retrofit product that fits most conventional paddle blade ceiling fans and reduces energy consumption in large spaces. The unique, patented design reduces hot and cold spots by mixing the air and minimizing stratification. In addition to providing energy savings, significantly increased comfort levels can be expected. PFA is available to fit 48 inch and 56 inch ceiling fans.

Many manufacturing and warehouse facilities use ceiling fans to maintain space temperatures. All too often in these environments, warm air will collect near the ceiling in winter and cool, conditioned air will remain near the floor in summer reducing the effectiveness of the ceiling fans.

Applying the PFA directs the airflow to the floor where it will spread and mix with the room. Any stratification layer is minimized and floor to ceiling temperatures become uniform. As a result, occupant comfort is increased and energy savings occur.

FEATURES & BENEFITS
- Ideal for use in high bay manufacturing and warehouse space
- Easily mounts to existing paddle blade ceiling fans
- Significant energy savings
- Increases comfort and productivity
- Flexible design and application, easily re-locate fans as needs change
- 48 and 56 inch kits available
- Patented in US and Canada

APPLICATION CONSIDERATIONS
20-foot ceiling heights
- 48-inch fans are preferred
- One fan per 8,000 sq. ft. of space
- Locate fans in aisles and open spaces

40-foot ceiling heights
- 56-inch fans are preferred
- One fan per 12,000 sq. ft. of space
- Locate fans in aisles and open spaces

CHALLENGES OF HEATING & COOLING
During the heating season, warm, heated air naturally rises to the ceiling posing a challenge for any building with high ceilings. For example, if a ceiling is 20 feet high, there can be a 10 to 20 degree variance in temperature from the floor to the ceiling. On average, a building's temperature increases between .5 and 1 degree F for each elevated foot as heat rises to the ceiling.

During the cooling season, cold air-conditioned air is often exiting through diffusers located at ceiling level. This air is met with resistance by the hot air rising from the floor level, forcing air-conditioning units to work harder, ultimately wasting energy trying to keep up with the cooling demand.

SOLUTION
Installing destratification fans near the ceiling registers helps push that heated or cooled air down to the floor level, ultimately creating a more comfortable environment inside the building. The overall effect is energy savings along with maximized efficiency of the HVAC system.
Industrial Fans & Blowers

OEM Solutions & Custom Fans

Commercial Fans & Dampers

Residential Fans & Air Purifiers

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Distributed by:

Wholesale-CA1-1902