



Manufacturers' Representatives of
Engineered HVAC Systems and Equipment
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Warehouse Ventilation Calculations

Although warehouse ventilation can be viewed as somewhat simplistic, it is important to understand how to properly size and select your equipment. Given the recent pandemic, it is important to provide the best indoor air quality (IAQ) to the occupants. Within warehouse applications, well designed spaces will efficiently **remove pollutants, improve productivity and safety, and protect occupants against infectious diseases.**

To calculate warehouse ventilation requirements, reference the following example:

Example:

- CFM = unknown
- ACH = 6 air changes per hour
- Area = 200,000 ft²
- Height = 50 ft
- ASHRAE 62.1 minimum ventilation rate = 0.06 cfm/ft²
- Product Volume = 70% = 0.70
- Postive Pressure = 5% = 1.05



Minimum (Winter) Ventilation Requirements

CFM = Area * min. ventilation rate

CFM = 200,000 ft² * 0.06 cfm/ft²

CFM = 12,000

Exhaust Fans

CFM = ACH * (Area * Height) * Product Volume / (60 minutes/hour)

CFM = 6 * (200,000 ft² * 50 ft) * 0.70 / (60 minutes/hour)

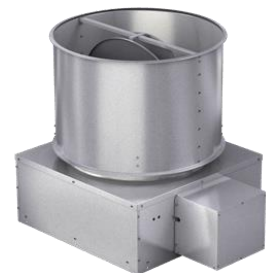
CFM = 700,000

Supply Fans

CFM = Positive Pressure * Exhaust Fan CFM

CFM = 1.05 * 700,000

CFM = 735,000



Brucker provides the complete package for warehouse ventilation through Greenheck products such as supply/exhaust fans, makeup air, louvers, dampers, and high volume low speed fans.

For more information on Greenheck solutions for warehouse applications [CLICK HERE](#) or contact your sales representative or local sales office.

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