

WAREHOUSE VENTILATION CALCULATIONS

PROJECT
BUILDING
DATE
by

INPUT

BUILDING

FLOOR AREA SQ. FT.
BLDG HEIGHT FT.
PRODUCT VOLUME (assumed warehouse volume occupied by product)
FORKLIFTS (number of propane forklifts operating)

VENTILATION

AIR CHANGES PER HOUR
% POSITIVE (percent positive pressure)
CODE CFM/SF (0.05 CFM/SF for IMC & FL; 0.06 CFM/SF for CA & ASHRAE 62)
Note: LEED EQ Pre 1 requires ASHRAE 62 rate 0.06 CFM/SF

CALCULATIONS

EXHAUST FANS

$$\frac{(500,000 \times 40) \times 50\% \times 3}{60}$$

= **500,000 CFM EXHAUST FAN TOTAL**

SUPPLY FANS

$$105\% \times 500,000$$

= **525,000 CFM SUPPLY FAN TOTAL**

MINIMUM (WINTER) VENTILATION REQUIREMENTS

$$500,000 \text{ SQ. FT.} \times 0.05 \text{ CFM/SQ. FT.}$$

= **25,000 CFM MIN VENTILATION REQ'D**