



ONE TWIN PINES LANE,
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Community Development Permit Center REQUIRED COMBUSTION AIR (M16)

LAST REVISED:
2022 CA MECHANICAL CODE 701.4
STANDARD METHOD EQUATIONS:
701.4.1 & 701.4.2

BUILDING OFFICIAL:
DINO FRANCESCONI

COMBUSTION AIR

701.4.1 Standard Method. The required volume shall be not less than fifty (50) cubic feet per 1,000 Btu/hour ($4.8\text{m}^3 / \text{kW}$) [NFPA 54: 9.3.2.1].

701.4.2 Known Air Infiltration Rate Method. Where the air infiltration rate of a structure is known, the required volume shall be not less than the following [NFPA 54: 9.3.2.2]:

- (1) For appliances other than fan-assisted, calculate using Equation 701.4.2(1).
- (2) For fan-assisted appliances, calculate using Equation 701.4.2(2).
- (3) For purposes of these calculations, an infiltration rate greater than 0.60 ACH shall not be used in the equations.

Equation 701.4.2(1):

Required Volume $_{other} \geq (21 \text{ ft.}^3 / \text{ACH}) \times (I_{other} / 1,000 \text{ Btu/h})$

Equation 701.4.2(2):

Required Volume $_{fan} \geq (15 \text{ ft.}^3 / \text{ACH}) \times (I_{fan} / 1,000 \text{ Btu/h})$

WHERE:

I_{other} = Appliances other than fan-assisted input in Btu per hour

I_{fan} = Fan-assisted appliance input in Btu per hour

ACH = Air change per hour (percent of volume of space exchanged per hour, expressed as a decimal)