

Infiltration Rules of Thumb

8.01 Heating Infiltration (15 mph wind)

A. Air Change Rate Method:

1. Range 0–10 AC/Hr.
2. Commercial Buildings
 - a. 1.0 AC/Hr. 1 Exterior Wall
 - b. 1.5 AC/Hr. 2 Exterior Walls
 - c. 2.0 AC/Hr. 3 or 4 Exterior Walls
3. Vestibules 3.0 AC/Hr.

B. CFM/Sq.Ft. of Wall Method:

1. Range 0–1.0 CFM/Sq.Ft.
2. Tight Buildings 0.1 CFM/Sq.Ft.
3. Average Buildings 0.3 CFM/Sq.Ft.
4. Leaky Building 0.6 CFM/Sq.Ft.

C. Crack Method:

1. Range 0.12–2.8 CFM/Ft. of Crack
2. Average 1.0 CFM/Ft. of Crack

8.02 Cooling Infiltration (7.5 mph wind)

A. Cooling load infiltration is generally ignored unless close tolerances in temperature and humidity control are required. Cooling infiltration values are generally taken as ½ of the values listed above for heating infiltration.

8.03 No Infiltration Losses or Gains for Rooms Below Grade or Interior Spaces

8.04 Buildings Which Are Not Humidified Have No Latent Infiltration Heating Load

8.05 Winter Sensible Infiltration Loads Will Generally Be 1/2 to 3 Times the Conduction Heat Losses (Average 1.0–2.0 Times)