**Eq. 6.14**

$$q_{\text{inf}} = \rho\, c\, n\, V\,(T_i - T_a)$$

where $q_{\text{inf}}$ = heat loss due to infiltration (Btu/hr)
$\rho$ = density of air (0.075 lb/ft$^3$)
c = specific heat of air (0.24 Btu/lb-°F)
n = number of air changes per hour (ach)
V = volume of air per air change (ft$^3$/ac)

The product of density and specific heat given above is 0.018 Btu/ft$^3$-°F, resulting in

**Eq. 6.15**

$$q_{\text{inf}} = 0.018\, n\, \text{V}(T_i - T_a)$$