

RESNET STANDARDS INTERPRETATION

Mechanical Ventilation and Infiltration Rates in Rated Homes

February 21, 2006

The RESNET Board of Directors has adopted the following RESNET Standards Interpretation, pertaining to the mechanical ventilation and infiltration specifications of Section 303.4.1 of the *2006 Mortgage Industry National Standards for Home Energy Rating Systems*, on February 21, 2006.

"As to those sections of Table 303.4.1(1) covering Air Exchange Rate and Mechanical Ventilation, including footnotes (d), (e) and (f), it shall be the Interpretation of RESNET that air infiltration in Rated Homes may not be used to substitute for any part of the mechanical ventilation requirements set forth in these Standards. In other words, the minimum requirement for mechanical ventilation as set forth in Table 303.4.1(1) under Air Exchange Rate [i.e. minimum ventilation cfm = $0.01 * CFA + 7.5 * (Nbr+1)$] must be met in full by the Rated Home's mechanical ventilation system, exclusive of any envelope air infiltration. In addition to this minimum mechanical ventilation requirement, the Rated Home's air exchange rate, as measured in accordance with footnote (e) of Table 303.4.1(1) shall be added to the Rated Home's mechanical ventilation rate in quadrature, in accordance with footnote (f) of Table 303.4.1(1), to determine the total air exchange rate of the Rated Home. Rated Homes with mechanical ventilation systems shall be configured in the rating analysis so as to meet or exceed these minimum mechanical ventilation requirements during periods when open windows do not naturally ventilate the Rated Home.

Exceptions:

1. 50% of the measured envelope infiltration rate in excess of 2 cfm per 100 ft² of conditioned floor area may be subtracted from the minimum required mechanical ventilation rate specified herein.
2. 50% of the measured envelope infiltration rate that is less than 2 cfm per 100 ft² of conditioned floor area shall be added to the minimum required mechanical ventilation rate specified herein."