ANSI/ASHRAE Addendum t to
ANSI/ASHRAE Standard 62.2-2016

Ventilation and Acceptable Indoor Air Quality in Residential Buildings

Approved by the ASHRAE Standards Committee on June 22, 2019; by the ASHRAE Technology Council on June 26, 2019; and by the American National Standards Institute on June 27, 2019.

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FOREWORD

Addendum t removes the potential for people to claim they would have installed a balanced system to avoid installing an unbalanced system. It also aligns the maximum airflow requirement that precludes the need to install a fan between new and existing homes.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum t to Standard 62.2-2016

Revise Section 4.1.2 as shown. Refer to Addenda l and s to 62.2-2016 for published changes to Section 4.1.2. Published addenda are available for free on the ASHRAE website: https://www.ashrae.org/technical-resources/standards-and-guidelines/standards-addenda.

4.1.2 Infiltration Credit. If a blower door test has been performed then a credit for estimated infiltration may be taken for nonattached dwelling units using either the procedure in Section 4.1.2.1 or 4.1.2.2. Horizontally attached single-family dwelling units shall be permitted to utilize a blower door test result that includes common walls to take this credit, subject to the reduction factor \( A_{\text{ext}} \) in Equation 4.2.

If this credit is taken, then the Required Mechanical Ventilation Rate \( Q_{\text{fan}} \) shall be calculated using Equation 4.2

\[
Q_{\text{fan}} = Q_{\text{tot}} - \Phi(Q_{\text{inf}} \times A_{\text{ext}})
\]

where

- \( Q_{\text{fan}} \) = required mechanical ventilation rate, cfm (L/s)
- \( Q_{\text{tot}} \) = total required ventilation rate, cfm (L/s)
- \( Q_{\text{inf}} \) = infiltration, cfm (L/s) (see Normative Appendix A for exceptions for existing buildings)
- \( A_{\text{ext}} \) = 1 for single-family detached homes, or the ratio of exterior envelope surface area that is not attached to garages or other dwelling units to total envelope surface area for single-family attached homes
- \( \Phi \) = 1 for balanced ventilation systems and \( Q_{\text{inf}}/Q_{\text{tot}} \) otherwise

Exception to 4.1.2: A ventilation fan is not required when \( Q_{\text{fan}} \) is less than 10 cfm (5 L/s). Where \( Q_{\text{fan}} \), calculated for unbalanced ventilation, is less than or equal to 15 cfm (7 L/s), a dwelling-unit ventilation system is not required.

Revise Section A2 as shown.

A2. DWELLING-UNIT MECHANICAL VENTILATION RATE

The required mechanical ventilation rate \( Q_{\text{fan}} \) shall be the rate \( Q_{\text{tot}} \) in Section 4.1.1 plus the required additional airflow calculated in accordance with Section A3. If the airtightness of the building envelope has been measured, the required mechanical ventilation rate may be reduced as described in Section 4.1.2. In these cases, Section A3 shall be applied before Section 4.1.2 when determining the final mechanical ventilation rate. For existing buildings, if \( Q_{\text{fan}} \) is less than or equal to 15 cfm (7 L/s), then dwelling-unit mechanical ventilation is not required.
ASHRAE is concerned with the impact of its members’ activities on both the indoor and outdoor environment. ASHRAE’s members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE’s short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its Handbook, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system’s intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE’s primary concern for environmental impact will be at the site where equipment within ASHRAE’s scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.
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