

ASHRAE STANDARD

Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings

Approved by the ASHRAE Standards Committee on January 27, 2007; by the ASHRAE Board of Directors on March 2, 2007; and by the American National Standards Institute on March 27, 2007.

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SPECIAL NOTE

This American National Standard (ANS) is a national voluntary consensus standard developed under the auspices of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). Consensus is defined by the American National Standards Institute (ANSI), of which ASHRAE is a member and which has approved this standard as an ANS, as "substantial agreement reached by directly and materially affected interest categories. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution." Compliance with this standard is voluntary until and unless a legal jurisdiction makes compliance mandatory through legislation.

ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

ASHRAE Standards are prepared by a Project Committee appointed specifically for the purpose of writing the Standard. The Project Committee Chair and Vice-Chair must be members of ASHRAE; while other committee members may or may not be ASHRAE members, all must be technically qualified in the subject area of the Standard. Every effort is made to balance the concerned interests on all Project Committees

The Manager of Standards of ASHRAE should be contacted for:

- a. interpretation of the contents of this Standard,
- b. participation in the next review of the Standard,
- c. offering constructive criticism for improving the Standard,
- d. permission to reprint portions of the Standard.

DISCLAIMER

ASHRAE uses its best efforts to promulgate Standards and Guidelines for the benefit of the public in light of available information and accepted industry practices. However, ASHRAE does not guarantee, certify, or assure the safety or performance of any products, components, or systems tested, installed, or operated in accordance with ASHRAE's Standards or Guidelines or that any tests conducted under its Standards or Guidelines will be nonhazardous or free from risk.

ASHRAE INDUSTRIAL ADVERTISING POLICY ON STANDARDS

ASHRAE Standards and Guidelines are established to assist industry and the public by offering a uniform method of testing for rating purposes, by suggesting safe practices in designing and installing equipment, by providing proper definitions of this equipment, and by providing other information that may serve to guide the industry. The creation of ASHRAE Standards and Guidelines is determined by the need for them, and conformance to them is completely voluntary.

In referring to this Standard or Guideline and in marking of equipment and in advertising, no claim shall be made, either stated or implied, that the product has been approved by ASHRAE.

^{*} Denotes members of voting status when the document was approved for publication.

(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

This addendum modifies the requirements for the selection of air-moving equipment in Section 7.1 of ASHRAE Standard 62.2-2004. It is a modification of the proposed changes 05-01 (certification requirements) and 05-02 (zone rating standard) submitted in 2005 by Mr. Larry Wethje of AHAM. The Systems Subcommittee of SSPC 62.2 worked with Mr. Wethje and Ms. Shannon Pipik of Whirlpool Corp. to reach this compromise position at its meeting in Chicago in January 2006.

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

Addendum h to 62.2-2004

Revise Section 7.1 as follows:

7.1

Ventilation devices and equipment shall be selected using tested and certified ratings of performance, such as those provided by the Home Ventilating Institute Division of Air Movement and Control Association International (airflow testing in accordance with ANSI/ASHRAE Standard 51 1999/AMCA 210 99, Laboratory Methods of Testing Fans for Aero-

dynamic Performance Rating, sound testing in accordance with AMCA 300-96, Reverberant Room Method for Sound Testing of Fans, and product certification procedure in accordance with HVI 920-01, Product Performance Certification Procedure 10) or other widely recognized testing and certification organizations.

Ventilation devices and equipment shall be tested and rated in accordance with the airflow and sound rating procedures of the Home Ventilating Institute (HVI 915, HVI Loudness Testing and Rating Procedure, HVI 916, HVI Airflow Test Procedure, and HVI 920, HVI Product Performance Certification Procedure 10). Installations of systems or equipment shall be carried out in accordance with manufacturers' design requirements and installation instructions.

Revise the references in Section 8 as follows:

8. REFERENCES AND CLIMATE DATA

- 8. ANSI/ASHRAE Standard 51 1999/AMCA Standard 21099, Laboratory Methods of Testing Fans for Aerodynamic Performance Rating. American Air Movement
 and Control Associating International, Inc., Arlington
 Heights, IL., HVI 915-06, Loudness Testing and Rating
 Procedure. Home Ventilating Institute, Arlington
 Heights, IL.
- AMCA Standard 300 96, Reverberant Room Method of Sound Testing of Fans. American Air Movement and Control Associating International, Inc., Arlington Heights, IL. HVI 916-05, Airflow Test Procedure. Home Ventilating Institute, Arlington Heights, IL.
- 10. HVI 920-0105, Product Performance Certification Procedure. Home Ventilating Institute, Arlington Heights, IL.

POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

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.