

ANSI/ASHRAE Addendum r to
ANSI/ASHRAE Standard 62-2001



ASHRAE[®] STANDARD

Ventilation for Acceptable Indoor Air Quality

Approved by the ASHRAE Standards Committee on January 25, 2003; by the ASHRAE Board of Directors on January 30, 2003; and by the American National Standards Institute on May 27, 2003.

This standard is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. The change submittal form, instructions, and deadlines may be obtained in electronic form from the ASHRAE web site, <http://www.ashrae.org>, or in paper form from the Manager of Standards. The latest edition of an ASHRAE Standard and printed copies of a public review draft may be purchased from ASHRAE Customer Service, 1791 Tullie Circle, NE, Atlanta, GA 30329-2305. E-mail: orders@ashrae.org. Fax: 404-321-5478. Telephone: 404-636-8400 (worldwide), or toll free 1-800-527-4723 (for orders in U.S. and Canada).

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**AMERICAN SOCIETY OF HEATING,
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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.

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- 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.

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(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.)

FOREWORD

This addendum addresses outdoor air quality assessment and air cleaning requirements. The current standard requires outdoor air assessment and recommends outdoor cleaning but does not require it. The section where outdoor air cleaning is currently discussed (Section 5.9) is replaced with a new Section 4, which requires outdoor air quality assessment for all ventilation systems. Documented assessment is expected to lead to informed decisions related to the location of intakes and outdoor air cleaning measures.

Section 6.1.1 is revised to require particle filtration (which is likely to be accomplished by ordinary system filters) when the outdoor air particle concentration is high, but it does not require air cleaning for other gaseous contaminants. Mandatory air cleaning for particles is appropriate because of the large number of people living in non-attainment areas, that is, locations where the outdoor levels exceed the EPA National Ambient Air Quality Standards (NAAQS), and the negative impact of this outdoor contaminant on indoor air quality.

ADDENDUM 62r

Add a new Section 4 as follows and relocate Table 1 from Section 6.1 to this section.

4. OUTDOOR AIR QUALITY

Outdoor air quality shall be investigated in accordance with Sections 4.1 and 4.2 prior to completion of ventilation system design. The results of this investigation shall be documented in accordance with Section 4.3.

4.1 Regional Air Quality. The status of compliance with national ambient air quality standards shall be determined for the geographic area of the building site. In the United States, compliance status shall be either in “attainment” or “non-attainment” with the *National Primary Ambient-Air Quality Standards* (NAAQS) (Ref. 18) for each pollutant shown in Table 1. In the United States, areas with no EPA compliance status designation shall be considered “attainment” areas.

4.2 Local Air Quality. An observational survey of the building site and its immediate surroundings shall be conducted during hours the building is expected to be normally occupied to identify local contaminants from surrounding facilities that may be of concern if allowed to enter the building.

4.3 Documentation. Documentation of the outdoor air quality investigation shall be reviewed with building owners or their representative and shall include the following:

1. Regional air quality compliance status. **Note:** Regional outdoor air quality compliance status for the United States

is available from the U.S. Environmental Protection Agency located under www.epa.gov.

2. Local survey information, which may include the following:
 - (a) Date of observations
 - (b) Time of observations
 - (c) Area surveyed
 - (d) Description of nearby facilities
 - (e) Observation of odors or irritants
 - (f) Description of visible plumes or air contaminants
 - (g) Description of nearby sources of vehicle exhaust
 - (h) Direction of prevailing winds.
3. Conclusions regarding the acceptability of outdoor air quality based on consideration of information from investigation.

Delete Section 5.9 and renumber Sections 5.10 and 5.11 accordingly.

Delete Sections 6.1.1 and 6.1.2 and replace with the following:

6.1.1 Air Treatment. If outdoor air is judged to be unacceptable in accordance with Section 4.1, each ventilation system that provides outdoor air through a supply fan shall comply with the following sections.

Exception: Systems supplying air for enclosed parking garages, warehouses, storage rooms, janitor's closets, trash rooms, recycling areas, shipping/receiving/distribution areas.

Note: Occupied spaces ventilated with outdoor air that is judged to be unacceptable are subject to reduced air quality when outdoor air is not cleaned prior to introduction to the occupied spaces.

6.1.1.1 Particulate Matter. When the building is located in an area where the national standard for PM₁₀ is exceeded, particle filters or air cleaning devices shall be provided to clean the air at any location prior to its introduction to occupied spaces. Particulate matter filters or air cleaners shall have a Minimum Efficiency Reporting Value (MERV) of 6 or higher when rated in accordance with ASHRAE Standard 52.2-2001.³²

6.1.1.2 Other Outdoor Contaminants. When the building is located in an area where the national standard for one or more contaminants not specifically addressed in Section 6.1.1. is exceeded, any design assumptions and/or calculations related to the impact on indoor air quality shall be included in the design documents.

Renumber Section 6.1.3 as Section 6.1.2 and renumber the subsections of Section 6.1.3 accordingly.

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.