

# ADDENDA

ANSI/ASHRAE Addendum h to ANSI/ASHRAE Standard 62.1-2016

# Ventilation for Acceptable Indoor Air Quality

Approved by the ASHRAE Standards Committee on June 23, 2018; by the ASHRAE Technology Council on June 27, 2018; and by the American National Standards Institute on June 28, 2018.

This addendum was approved 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 website (www.ashrae.org) or in paper form from the Senior Manager of Standards.

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

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- b. participation in the next review of the Standard,
- c. offering constructive criticism for improving the Standard, or
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#### **FOREWORD**

Addendum h modifies Informative Appendix G to add informative text that is contained in the current scope.

*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 Standard 62.1-2016

Revise Informative Appendix G as shown.

## INFORMATIVE APPENDIX G APPLICATION AND COMPLIANCE

This appendix contains application and compliance suggestions that are intended to assist users and enforcement agencies in applying this standard.

Although the standard may be applied to both new and existing buildings, the provisions of this standard are not intended to be applied retroactively when the standard is used as a mandatory regulation or code.

For the most part, ANSI/ASHRAE Standard 62.1-2016 is specifically written for new buildings because some of its requirements assume that other requirements within the standard have been met. In the case of existing buildings, retroactive application and compliance with all the requirements of this standard may not be practical. However, the principles established in this standard may be applied to most existing commercial and institutional buildings. Some existing buildings may achieve acceptable IAQ despite not meeting the requirements of Standard 62.1-2016 due to, for example, good maintenance and capital improvement procedures, building materials that, by virtue of their age, have very low contaminant emission rates, and many other factors.

#### **G1. APPLICATION**

- **G1.1** New Buildings. All sections and normative appendices should apply to new buildings falling within the scope of this standard.
- **G1.2 Existing Buildings.** The standard should be applied to existing buildings at least in the circumstances described in the following subsections.
- G1.2.1 Additions to Existing Buildings. All additions to existing buildings should meet the requirements of this standard as if the addition were a new building. An exception may be made when an existing ventilation system is extended to serve the addition. In this case, the existing system components, such as fans and cooling and heating equipment, need not meet the requirements of this standard. However, the

extended existing system should remain in compliance with ventilation codes and standards that were in effect at the time it was permitted for construction.

- **G1.2.2 Repairs.** Repairing (making operational) existing equipment or other building components does not require the building or any of its components to retroactively comply with this standard.
- G1.2.3 Replacement. Any component of a building that is removed and replaced should meet the applicable requirements of Section 5, "Systems and Equipment," of this standard for that component. An exception may be made in cases when replacing a component of like size and kind, provided all requirements of codes and standards used at the time of original system design and installation are met. For example, replacement of an air-conditioning unit with one of similar capacity would not require retroactive compliance with ventilation rates and other requirements of this standard. Unaltered components do not need to be retroactively brought into compliance except when there are substantial alterations (as defined below).
- **G1.2.4 Substantial Alterations.** If a building is substantially altered, the requirements of this standard should be met as if the building were new. A building would be considered substantially altered if the cost of the revisions exceeds 50% of the building's fair market value, excluding the cost of compliance with this standard.
- **G1.2.5** Change in Use. If the space application category as listed in Table 6.2.2.1 changes, such as from office to retail, the minimum ventilation rates required by Section 6, "Procedures," should be met for that space.
- G1.2.6 Contaminants. Ventilation requirements of this standard are based on chemical, physical, and biological contaminants that can affect air quality.
- G1.2.7 Thermal Comfort. Control of thermal comfort is not required by this standard. Requirements for thermal comfort are contained in ANSI/ASHRAE Standard 55-2017. Note that there are strong correlations between peoples' perception of indoor air quality and their perception of thermal comfort.
- G1.2.8 Limitations. Acceptable indoor air quality might not be achieved in all buildings meeting the requirements of this standard for one or more of the following reasons:
- a. Because of the diversity of sources and contaminants in indoor air
- b. Because of the many other factors that might affect occupant perception and acceptance of indoor air quality, such as air temperature, humidity, noise, lighting, and psychological stress
- c. Because of the range of susceptibility in the population
- d. Because outdoor air brought into the building might be unacceptable or might not be adequately cleaned

#### **G2. COMPLIANCE**

Demonstrating that acceptable IAQ has been achieved, such as by measuring contaminant concentrations or surveying occupants, would not be required by this standard except where required by the IAQ Procedure.

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The following section provides suggested model code language.

#### APPLICATION AND COMPLIANCE

#### Application

**New Buildings.** All sections and normative appendices apply to new buildings falling within the scope of this standard.

#### **Existing Buildings**

Additions to Existing Buildings. All additions to existing buildings within the scope of this standard shall meet the requirements of all sections and normative appendices.

Exception: When an existing ventilation system is extended to serve an addition, the existing system components, such as fans and cooling and heating equipment, need not meet the requirements of this standard. However, the extended existing system must remain in compliance with ventilation codes and standards that were in effect at the time it was permitted for construction.

**Repairs.** Repairing (making operational) existing equipment or other building components shall be allowed without requiring the building or any of its components to comply with this standard.

**Replacement.** Any component of a building that is removed and replaced shall meet the applicable requirements of Section 5, "Systems and Equipment," of this standard for

that component. Unaltered components are not required to be brought into compliance except as required due to a change in use

Exception: Replacement of a building component or individual piece of equipment with a component of like size and kind, provided that all requirements of codes effective at the time of original system design and installation are met. For example, replacement of an air-conditioning unit with one of similar capacity would not require that the ventilation rate requirements and other requirements of this standard be met.

Substantial Alterations. If a building is substantially altered, all sections and normative appendices of this standard shall be met as if the building were new. A building shall be considered substantially altered if the cost of the revisions exceeds 50% of the building's fair market value, excluding the cost of compliance with all sections and normative appendices of this standard.

Change in Use. If the space application category as listed in Table 2 changes, such as from office to retail, the minimum ventilation rates required by Section 6, "Procedures," shall be met for that space.

#### Compliance

Demonstrating that acceptable IAQ has been achieved, such as by measuring contaminant concentrations or surveying occupants, is not required by this standard except where required by the IAQ Procedure.

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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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