ANSI/ASHRAE Addenda b and m to ANSI/ASHRAE Standard 62.1-2010

Ventilation for Acceptable Indoor Air Quality

Approved by the ASHRAE Standards Committee on June 22, 2013; by the ASHRAE Board of Directors on June 26, 2013; and by the American National Standards Institute on June 27, 2013.

These addenda were 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 Manager of Standards.

The latest edition of an ASHRAE Standard may be purchased on the ASHRAE website (www.ashrae.org) or 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 US and Canada). For reprint permission, go to www.ashrae.org/permissions.

© 2013 ASHRAE        ISSN 1041-2336
ASHRAE Standing Standard Project Committee 62.1
Cognizant TC: TC 4.3, Ventilation Requirements and Infiltration
SPLS Liaison: Steven J. Emmerich

Roger L. Hedrick, Chair*
Wayne Thomann, Vice-Chair*
Hugo Aguilar*
Gary L. Berlin
Hoy R. Bohanan, Jr.
Gregory Brunner
Mark P. Buttnert*
Gustavo Gusmão Chaves
Eric Chen
James K. Chisholm
Wallace S. Clements
Leonard A. Damiano*

Abdel Kader H. Darwich
Francis J. Fisher, Jr.*
Kevin B. Galen
Hamid Habibi*
Donald C. Herrmann*
Nathan Lewis Ho
Tianzhen Hong
Eli P. Howard, III*
Bashar Madani
Stephanie I. Mason
Molly E. McGuire
Adam S. Muliawan

Jianlei Niu
Laura Gardner Petroillo
Duane P. Rothstein*
Chandra Sekhar*
Charles J. Seyffer
Harris M. Sheinman
Jeffrey K. Smith*
Kirk J. Stache*
W. Brad M. Stanley
Paweł Wargocki*
Josiah Wiley
Scott D. Williams*

*Denotes members of voting status when the document was approved for publication

ASHRAE STANDARDS COMMITTEE 2012–2013

Kenneth W. Cooper, Chair
William F. Walter, Vice-Chair
Douglass S. Abramson
Karim Amrane
Charles S. Barnaby
Hoy R. Bohanan, Jr.
Steven F. Bruning
David R. Conover
Steven J. Emmerich

Julie M. Ferguson
Krishnan Gowri
Cecily M. Grzywacz
Richard L. Hall
Rita M. Harrold
Adam W. Hinge
Debra H. Kennoy
Jay A. Kohler
Rick A. Larson

Janice C. Peterson
Heather L. Platt
Ira G. Poston
Douglas T. Reindl
James R. Tauby
James K. Vallort
Craig P. Wray
Charles H. Culp, III, BOD ExO
Constantinos A. Balaras, CO

Stephanie C. Reiniche, Manager of Standards

SPECIAL NOTE

This American National Standard (ANS) is a national voluntary consensus standard developed under the auspices of 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, or
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.
(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

A change proposal submitted to ASHRAE pointed out to the SSPC that the requirements for the quality of water used in humidifiers and water-spray systems could potentially be misinterpreted. In response, changes to the wording of Sections 5.12 and 5.12.1 are being incorporated that are intended to clarify the requirements. Water that is used must meet or exceed potable water quality standards, and no chemicals may be added other than those specified. In addition, use of certain chemicals is limited to systems using automated dosing equipment. Requirements for maintenance of the automated dosing equipment are added to Section 8. These requirements exist to reduce the risk of water treatment chemicals creating poor IAQ.

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 b to Standard 62.1-2010

Revise Sections 5.12 and 5.12.1 as follows.

5.12 Humidifiers and Water-Spray Systems. Steam and direct evaporation humidifiers, air washers, direct-evaporative coolers, and other water-spray systems shall be designed in accordance with this section.

5.12.1 Water Quality. Water purity shall originate directly from a source or meet or exceed potable water quality standards at the point where it enters the ventilation system, space, or water vapor generator. Water vapor generated shall contain no chemical additives other than those chemicals in a potable water system.

Exception:

1. Water-spray systems that utilize chemical additives that meet NSF/ANSI Standard 60, Drinking Water Treatment Chemicals – Health Effects.

2. Boiler water additives that meet the requirements of 21 CFR 173.310, Secondary Direct Food Additives Permitted In Food For Human Consumption, and include automated dosing devices.

Revise Section 8.4.1.3 as follows.

8.4.1.3 Humidifiers. Humidifiers shall be cleaned and maintained to limit fouling and microbial growth. Any automatic chemical dosing equipment shall be calibrated and maintained in accordance with the O&M Manual to maintain additive concentrations to comply with Section 5.12.1. These systems shall be inspected at a minimum of once every three months of operation and/or treated as specified in accordance with the O&M Manual.


X1: NSF/ANSI 60-2012, Drinking Water Treatment Chemicals—Health Effects. NSF International, Ann Arbor, MI.

FOREWORD

This addendum results from a change proposal that recommended adding the National Standards for Total System Balance issued by the Associated Air Balance Council (AABC) as an equivalent method of balancing ventilation systems in Section 7.2.2 (Air Balancing) of Standard 62.1. This would be in addition to ASHRAE Standard 111 and the SMACNA standard. Public review comments argued that it was inappropriate to include a list of equivalent standards and that it was difficult for enforcement personnel to determine if other standards were “equivalent.” The SSPC decided to restrict the list to ASHRAE Standard 111 and revise the language to “national standard” to make it clear that standards by SMACNA, AABC, and others are acceptable without requiring evaluation of their different requirements.

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

Addendum m to Standard 62.1-2010

Modify Section 7.2.2 as shown.

7.2.2 Air Balancing. Ventilation systems shall be balanced in accordance with ASHRAE Standard 111,16 SMACNA’s HVAC Systems—Testing, Adjusting and Balancing,22 or equivalent at least to the extent necessary to or another applicable national standard for measuring and balancing airflow so as to verify conformance with the total outdoor airflow and space supply airflow requirements of this standard.

Delete Reference 22 from Section 9, References.

9. REFERENCES

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.