

# ADDENDA

**ANSI/ASHRAE/ASHE Addenda u and w to  
ANSI/ASHRAE/ASHE Standard 170-2008**

# Ventilation of Health Care Facilities

Approved by the ASHRAE Standards Committee on June 22, 2013; by the ASHRAE Board of Directors on June 26, 2013; by the ASHE Board of Directors on July 3, 2013; and by the American National Standards Institute on July 4, 2013.

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](http://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](http://www.ashrae.org)) or from ASHRAE Customer Service, 1791 Tullie Circle, NE, Atlanta, GA 30329-2305. E-mail: [orders@ashrae.org](mailto: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](http://www.ashrae.org/permissions).

© 2013 ASHRAE

ISSN 1041-2336



**ASHRAE Standing Standard Project Committee 170**  
**Cognizant TC: TC 9.6, Health Care Facilities**  
**SPLS Liaison: Douglass S. Abramson**

Paul T. Ninomura, <i>Chair*</i>	Hamid Habibi	Tyler Ninomura
Chris P. Rousseau, <i>Co-Vice Chair and Secretary*</i>	Richard D. Hermans*	Russell N. Olmsted
Michael Patrick Sheerin, <i>Co-Vice Chair*</i>	Marvin L. Kloostra*	Heather L. Platt*
John M. Dombrowski	Peter Hogan Langowski*	Anand K. Seth*
Douglas S. Erickson*	Michael F. Mamayek*	Gordon P. Sharp*
James (Skip) Gregory*	Farhad Memarzadeh*	Andrew J. Streifel*
	Richard D. Moeller*	

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

---

**ASHRAE STANDARDS COMMITTEE 2012–2013**

Kenneth W. Cooper, <i>Chair</i>	Julie M. Ferguson	Janice C. Peterson
William F. Walter, <i>Vice-Chair</i>	Krishnan Gowri	Heather L. Platt
Douglass S. Abramson	Cecily M. Grzywacz	Ira G. Poston
Karim Amrane	Richard L. Hall	Douglas T. Reindl
Charles S. Barnaby	Rita M. Harrold	James R. Tauby
Hoy R. Bohanon, Jr.	Adam W. Hinge	James K. Vallort
Steven F. Bruning	Debra H. Kennoy	Craig P. Wray
David R. Conover	Jay A. Kohler	Charles H. Culp, III, <i>BOD ExO</i>
Steven J. Emmerich	Rick A. Larson	Constantinos A. Balaras, <i>CO</i>
	Mark P. Modera	

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:

- interpretation of the contents of this Standard,
- participation in the next review of the Standard,
- offering constructive criticism for improving the Standard, or
- 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

*This addendum clarifies note w to Table 7-1, Design Parameters.*

**Note:** This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes.

### Addendum u to Standard 170-2008

*Revise Table 7-1 and note w as shown below. Table 7-1 and the notes were modified by Addenda b and h to Standard 170-2008 currently published for free on the ASHRAE website at [www.ashrae.org/standards-research--technology/standards-addenda](http://www.ashrae.org/standards-research--technology/standards-addenda). The rest of Table 7-1 remains unchanged.*

**TABLE 7-1 Design Parameters**

Function of Space	Pressure Relationship to Adjacent Areas (n)	Minimum Outdoor ach	Minimum Total ach	All Room Air Exhausted Directly to Outdoors (j)	Air Recirculated by Means of Room Units (a)	RH (k), (%)	Design Temperature (l), (°F/°C)
<b>SURGERY AND CRITICAL CARE</b>							
ER waiting rooms (q)	Negative	2	12	Yes (q)	N/R	max 65	70–75/21–24
Triage (q)	Negative	2	12	Yes (q)	N/R	max 60	70–75/21–24
Radiology waiting rooms (q), (w)	Negative	2	12	Yes (q), (w)	N/R	max 60	70–75/21–24
<b>SKILLED-NURSING FACILITY</b>							
Bathing room	Negative	N/R	10	Yes	N/R No	N/R	70–75/21–24

w. This requirement applies. The requirement that all room air is exhausted directly to outdoors applies only to radiology waiting rooms programmed to hold patients who are waiting for chest x-rays for diagnosis of respiratory disease.

**(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 clarifies the Table 7-1 (Design Parameters) minimum requirements for gastrointestinal endoscopy procedure rooms. The design relative humidity for this short-term stay space has been lowered similar to that which occurred for surgeries (Addendum d) and recovery rooms (Addendum v). The lower design humidity limit has changed from 30% to 20% RH. This addendum provides clarification concerning the pressure relationship to adjacent area*

*requirements for spaces in which gastrointestinal endoscopy procedures are performed. The pressurization requirement has been revised to “No Requirement” such that gastrointestinal endoscopy procedures may occur within positive pressure rooms, negative pressure rooms, or rooms with no controlled pressure.*

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

**Addendum w to Standard 170-2008**

*Revise Table 7-1 and its notes as shown. (Table 7-1 and the notes were previously modified by Addendum b, which is currently available for free from the ASHRAE website at [www.ashrae.org/standards-research--technology/standards-addenda](http://www.ashrae.org/standards-research--technology/standards-addenda).) The remainder of Table 7-1 is unchanged.*

**TABLE 7-1 Design Parameters**

Function of Space	Pressure Relationship to Adjacent Areas (n)	Minimum Outdoor ach	Minimum Total ach	All Room Air Exhausted Directly to Outdoors (j)	Air Recirculated by Means of Room Units (a)	RH (k), %	Design Temperature (l), °F/°C
<b>DIAGNOSTIC AND TREATMENT</b>							
Gastrointestinal endoscopy procedure room (x)	<del>Positive</del> -N/R	2	6	N/R	No	<del>20-30</del> -60	68-73/20-23

*x. If the planned space is designated in the organization's operational plan to be utilized for both bronchoscopy and gastrointestinal endoscopy, the design parameters for “bronchoscopy, sputum collection, and pentamidine administration” shall be used.*

## **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.

