

# ADDENDA

**ANSI/ASHRAE/ASHE Addendum m to  
ANSI/ASHRAE/ASHE Standard 189.3-2021**

# Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities

Approved by ASHRAE and the American National Standards Institute on January 31, 2025, and by the American Society for Healthcare Engineering on January 6, 2025.

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. Instructions for how to submit a change can be found on the ASHRAE® website ([www.ashrae.org/continuous-maintenance](http://www.ashrae.org/continuous-maintenance)).

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, 180 Technology Parkway, Peachtree Corners, GA 30092. E-mail: [orders@ashrae.org](mailto:orders@ashrae.org). Fax: 678-539-2129. 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).

© 2024 ASHRAE

ISSN 1041-2336



**ASHRAE Standing Standard Project Committee 189.3**

**Cognizant TC: 9.6, Healthcare Facilities**

**Supporting TC: 2.8, Building Environmental Impacts and Sustainability**

**SPLS Liaison: Satish Iyengar**

**ASHRAE Staff Liaison: Thomas Loxley**

**ASHE Liaison: Chad Beebe**

Douglas Fick,\* *Chair*

Brittany Carl Moser,\* *Vice Chair*

Jeremy Fauber\*

Mikhail Fuks\*

Melvin G. Glass\*

Weston Hockaday

Leah Hummel

Kevin Hutton\*

James Keyzer\*

Jason Lea

Pavel Likhonin

Ashley Mulhall\*

Donnley R. Phillips\*

David Rivas\*

Jane Rohde\*

Brent Rutherford

Michael P. Sheerin

David Thomsen\*

Walter Vernon\*

Austin Wallace\*

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

---

**ASHRAE STANDARDS COMMITTEE 2024–2025**

Douglas D. Fick\*, *Chair*

Adrienne G. Thomle, *Vice Chair*

Hoy R. Bohanon, Jr.

Kelley P. Cramm

Abdel K. Darwich

Drake H. Erbe

Patricia Graef

William M. Healy

Jaap Hogeling

Jennifer A. Isenbeck

Satish N. Iyengar

Phillip A. Johnson

Paul A. Lindahl, Jr.

Julie Majurin

Lawrence C. Markel

Margaret M. Mathison

Kenneth A. Monroe

Daniel H. Nall

Philip J. Naughton

Kathleen Owen

Gwelen Paliaga

Karl L. Peterman

Justin M. Prosser

Christopher J. Seeton

Paolo M. Tronville

Douglas K. Tucker

William F. Walter

David P. Yuill

Susanna S. Hanson, *BOD ExO*

Wade H. Conlan, *CO*

Ryan Shanley, *Senior 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 Senior 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

*Addendum m updates the normative and informative references.*

**Informative 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 189.3-2021

*Modify Section 12, “[189.3] Normative References,” as shown.*

Reference	Title	Section
<b>Advancing Safety in Medical Technology (AAMI)</b> 4301 N. Fairfax Drive, Suite 301 Arlington, VA 22203-1633, United States 1-703-525-4890 <a href="http://www.aami.org">http://www.aami.org</a>		
ANSI/AAMI ST58:2013 <u>(R2018)</u>	Chemical Sterilization and High-Level Disinfection in Health Care Facilities	11.3.3.3
<b>American Conference of Governmental Industrial Hygienists (ACGIH)</b> 1330 Kemper Meadow Drive Cincinnati, OH 45240, United States 1-513-742-2020 <a href="http://www.acgih.org">http://www.acgih.org</a>		
<del>2024</del> 2014 TLVs® and BEIs	Threshold Limit Values for Chemical Substances and Physical Agents (TLV)	11.3.3.3, 11.4.2.4
<b>American Society of Mechanical Engineers (ASME)</b> Three Park Avenue New York, NY 10016-5990, United States 1-800-843-2763 and 1-973-882-1170 <a href="http://www.asme.org">http://www.asme.org</a>		
ASME A112.18.1- <u>2018</u> <del>2005</del> /CSA B125.1-05	Plumbing Supply Fittings	6.3.2.1
ASME A112.19.2- <u>2018</u> <del>2008</del> /CSA B45.1-08	Vitreous China Plumbing Fixtures and Hydraulic Requirements for Water Closets and Urinals	6.3.2.1
ASME A112.19.14- <u>2013 (R2018)</u> - <del>2006</del>	Six Liter Water Closets Equipped With a Dual Flushing Device	6.3.2.1
ASME A112.19.19- <u>2016 (R2021)</u> - <del>2006</del>	Vitreous China Nonwater Urinals	6.3.2.1
<del><b>Antelope Valley Air Quality Management District (AVAQMD)</b>                      43301 Division Street, Suite 206 Lancaster, CA 93535, United States                      1-661-723-8070  <a href="https://avaqmd.ca.gov/">https://avaqmd.ca.gov/</a></del> <b>South Coast Air Quality Management District</b> 21865 Copley Drive Diamond Bar, CA 91765, United States <a href="https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1406.pdf">https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1406.pdf</a>		
Rule 1406-1994	Control of Dioxin Emissions from Medical Waste Incinerators	11.3.1.3

---

**ASHRAE**  
**180 Technology Parkway NW**  
**Peachtree Corners, GA 30092, United States**  
**1-404-636-8400**  
**<http://www.ashrae.org>**

ANSI/ASHRAE/IES Standard 90.1- <del>2019</del> <u>2022</u>	Energy Standard for Buildings Except Low-Rise Residential Buildings	7.4.2.1, 7.4.3, 7.4.3.5, 7.4.3.6.1, 7.4.3.7, 7.4.3.10.3, 7.4.6, Exception to 7.5.1
ANSI/ASHRAE/ASHE Standard 170- <del>2017</del> <u>2021</u>	Ventilation of Health Care Facilities	7.4.3, Exceptions to 7.4.3.5 and 7.4.3.7, 8.3.1, Exception to 8.3.1.4.1, 8.4.2.1.1, 8.4.2.2.1, 8.4.2.3.1, 8.4.2.5.2.1, 8.4.2.6.1
ANSI/ASHRAE/USGBC/IES Standard 189.1- <del>2020</del> <u>2023</u>	Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings	4.1, 4.2, 5.2, 6.2, 6.3.4, 7.2, 7.3, 7.3.4, 7.4, 7.4.5.1, 7.4.6.1, 7.4.6.3.1, 7.5.1, 7.5.2, 8.2, Exception to 8.3.1.2.2, Exception to 8.3.1.10, 9.2, 9.3.1.2, 10.2, 10.3.2, 10.10

---

**The Business and Institutional Furniture Manufacturer's Association (BIFMA)**  
**678 Front Avenue NW, Suite 150**  
**Grand Rapids, MI 49504-5368, United States**  
**1-616-285-3963**  
**<http://www.bifma.org> [email@bifma.org](mailto:email@bifma.org)**

ANSI/BIFMA M7.1	Standard Test Method for determining VOC Emissions from Office Furniture Systems, Components and Seating	8.4.2.5.1, 8.4.2.5.2
ANSI/BIFMA e3- <del>2008</del> <u>2019</u>	Furniture Sustainability Standard	8.4.2.5.1

---

**Facility Guidelines Institute (FGI)**  
**350 N. Saint Paul St., Suite 100**  
**Dallas, TX 75201, United States**  
**800-242-2626**  
**<http://www.fgiguideelines.org>**

Version <del>2018</del> <u>2022</u>	Guidelines for the Design and Construction of Hospitals	8.3.3, 8.4.2.1.1, 8.4.2.2.1, 8.4.2.3.1, 8.4.2.5.2.1, 8.4.2.6.1
Version <del>2018</del> <u>2022</u>	Guidelines for the Design and Construction of Outpatient Facilities	8.3.3, 8.4.2.1.1, 8.4.2.2.1, 8.4.2.3.1, 8.4.2.5.2.1, 8.4.2.6.1, 11.3.4.1
Version <del>2018</del> <u>2022</u>	Guidelines for the Design and Construction of Residential Health, Care, and Support Facilities	8.3.3, 8.4.2.1.1, 8.4.2.2.1, 8.4.2.3.1, 8.4.2.5.2.1, 8.4.2.6.1
Version <del>2018</del> <u>2022</u>	Materials and Resources in the Guidelines for Design and Construction of Residential Health, Care, and Support Facilities	11.3.4.1
<a href="https://fgiguideelines.org/resource/sustainable-design-guidelines-for-hospitals-and-outpatient-facilities-a-white-paper">https://fgiguideelines.org/resource/sustainable-design-guidelines-for-hospitals-and-outpatient-facilities-a-white-paper</a> (2014)	Sustainable Design Guidelines for Hospitals and Outpatient Facilities: A White Paper	11.3.4.1

---

**Green Seal (GS)**  
**1001 Connecticut Avenue, NW, Suite 827**  
**Washington, DC 20036-5525, United States**  
**1-202-872-6400**  
**<http://www.greenseal.org>**

GS-34, <del>September 1, 2011</del> <u>September 8, 2017</u>	Cleaning and Degreasing Agents Edition 2.2	10.9.5
GS-37, <del>July 12, 2012</del> <u>June 23, 2022</u>	Cleaning Products for Industrial and Institutional Use Edition 7.8	10.9.5
GS-40, <del>September 1, 2011</del> <u>July 31, 2020</u>	Floor-Care Products for Industrial and Institutional Use Edition 2.5	10.9.5

GS-42, ~~October 14, 2011~~ July 7, 2015

Commercial and Institutional Cleaning Services 10.9.5  
Edition 2.3

---

**International Association of Plumbing and Mechanical Officials (IAPMO)**

4755 E. Philadelphia Street  
Ontario, CA 91761, United States  
1-909-472-4100  
<http://www.iapmo.org>

IAPMO/ANSI Z124.4.9- ~~2004~~ 2022e1 Plastic Urinal Fixtures 6.3.2.1

---

**The Joint Commission**  
One Renaissance Road  
Oakbrook Terrace, IL 60181, United States  
1-630-792-5000  
<http://www.jointcommission.org>

Standard 3.10 Environment of Care 10.10.3.1

---

**Underwriters Laboratories Inc. (UL)**  
333 Pfingsten Road  
Northbrook, IL 60062, United States  
1-847-272-8800  
<http://www.ul.com>  
[cec.us@us.ul.com](mailto:cec.us@us.ul.com)

UL EcoLogo 2759-~~2016~~ ~~2011~~ Hardsurface Cleaners 10.9.5

UL EcoLogo 2777-~~2016~~ ~~2011~~ Floor Care Products 10.9.5

UL EcoLogo 2792-~~2016~~ ~~2012~~ Cleaning and Degreasing Compounds:  
Biologically-Based 10.9.5

UL EcoLogo 2794-2012 Disinfectants and Disinfectant Cleaners 10.9.5

UL EcoLogo 2795-~~2016~~ ~~2012~~ Carpet and Upholstery Cleaners 10.9.5

---

[ . . . ]

---

***Modify Informative Appendix A, "Informative References," as shown.***

**INFORMATIVE APPENDIX A  
INFORMATIVE REFERENCES**

Reference	Title	Section
-----------	-------	---------

---

[ . . . ]

---

**ASHRAE**  
180 Technology Parkway NW  
Peachtree Corners, GA 30092, United States  
1-404-636-8400  
<http://www.ashrae.org>

ANSI/ASHRAE Standard 62.1-2022 ~~2019~~ Ventilation for Acceptable Indoor Air Quality Foreword

---

[ . . . ]

---

## **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.

**ASHRAE · 180 Technology Parkway · Peachtree Corners, GA 30092 · [www.ashrae.org](http://www.ashrae.org)**

### **About ASHRAE**

Founded in 1894, ASHRAE is a global professional society committed to serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration, and their allied fields.

As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

To stay current with this and other ASHRAE Standards and Guidelines, visit [www.ashrae.org/standards](http://www.ashrae.org/standards), and connect on LinkedIn, Facebook, Twitter, and YouTube.

### **About ASHE**

The American Society for Health Care Engineering (ASHE) of the American Hospital Association is a trusted professional resource that provides education, regulatory guidance, networking, advocacy representation, and professional development for our members. ASHE is committed to our members, the facilities they build and maintain, and the patients they serve.

For more information, visit [ashe.org](http://ashe.org).

### **Visit the ASHRAE Bookstore**

ASHRAE offers its Standards and Guidelines in print, as immediately downloadable PDFs, and via ASHRAE Digital Collections, which provides online access with automatic updates as well as historical versions of publications. Selected Standards and Guidelines are also offered in redline versions that indicate the changes made between the active Standard or Guideline and its previous version. For more information, visit the Standards and Guidelines section of the ASHRAE Bookstore at [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore).

### **IMPORTANT NOTICES ABOUT THIS STANDARD**

**To ensure that you have all of the approved addenda, errata, and interpretations for this Standard, visit [www.ashrae.org/standards](http://www.ashrae.org/standards) to download them free of charge.**

**Addenda, errata, and interpretations for ASHRAE Standards and Guidelines are no longer distributed with copies of the Standards and Guidelines. ASHRAE provides these addenda, errata, and interpretations only in electronic form to promote more sustainable use of resources.**