ADDENDA

ANSI/ASHRAE/ASHE Addendum p to
ANSI/ASHRAE/ASHE Standard 170-2021

Ventilation of Health Care Facilities

Approved by ASHRAE and the American National Standards Institute on August 30, 2024, and by the American Society for Health Care Engineering on August 14, 2024.

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).

The latest edition of an ASHRAE Standard may be purchased on the ASHRAE website (www.ashrae.org) or from ASHRAE Customer Service, 180 Technology Parkway, Peachtree Corners, GA 30092. E-mail: 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.

 ISSN 1041-2336

ASHRAE®

ASHE™
Optimizing health care facilities

Approved American National Standard
ANSI
www.ansi.org

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

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

The committee evaluated the functional spaces across all tables in ANSI/ASHRAE/ASHE Standard 170-2021 to verify what differences existed and what evidential support was behind the differences. Several differences were verified by the working group, yet the only documented evidential support the work group could find for any of these differences was for certain resident spaces within Table 9-1, Design Parameters for Residential Health, Care, and Support-Specific Spaces. Therefore, Addendum p coordinates the necessary changes to align the requirements for similar functional spaces across the tables.

Informative 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 p to Standard 170-2021

Modify Table 7-1 as shown. The remainder of Table 7-1 is unchanged.

Table 7-1 Design Parameters—Inpatient Spaces

Function of Space (ee)	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)	Unoccupied Turndown	Minimum Filter Efficiencies (cc)	Design Relative Humidity (k), %	Design Temperature (l), °F/°C
NURSING UNITS AND OTHER PATIENT CARE AREAS									
Phase I PACU and Phase II recovery (FGI 2.1–3.4.4 & 2.1–3.4.5)	NR	2	6	NR	No	Yes	MERV-14	~~20–60~~ Max 60	70–75/21–24
BEHAVIORAL AND MENTAL HEALTH FACILITIES (k)									
Patient bedroom, resident room *(FGI 2.2–2.12.2 & 2.5–2.2.2)*	NR	2	2	NR	NR	Yes	MERV-8	~~NR~~ Max 60	~~NR~~ 70–75/21–24
Seclusion room *(FGI 2.1–2.4.3 & 2.2–2.12.4.3)*	NR	2	4	NR	NR	Yes	MERV-8	~~NR~~ Max 60	~~NR~~ 70–75/21–24
DIAGNOSTIC AND TREATMENT									
ECT procedure room *(FGI 2.2–2.12.4.1 & 2.5–3.4)*	NR	2	4	NR	NR	Yes	MERV-8	Max 60	~~72–78/22–26~~ 70–75/21–24
Gastrointestinal endoscopy procedure room *(FGI 2.2–3.11.2 & Table 2.2-1)* (x)	NR	2	6	NR	No	Yes	MERV-8	~~20–60~~ Max 60	68–73/20–23
General examination room *(FGI 2.1–3.2)*	NR	2	4	NR	NR	Yes	MERV-8	~~Max 60~~ NR	70–75/21–24
Physical therapy *(FGI 2.2–2.13.8.16 & 2.6–3.1)*	Negative	2	6	NR	NR	Yes	MERV-8	~~Max 65~~ NR	72–80/22–27
PATIENT SUPPORT FACILITIES									
Toilet room *(FGI 2.1–2.9.2)*	Negative	NR	10	Yes	No	Yes	MERV-8	NR	~~72–78/22–26~~ NR

Modify Table 8-1 as shown. The remainder of Table 8-1 is unchanged.

Table 8-1 Design Parameters—Specialized Outpatient Spaces

Function of Space (f)	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)	Unoccupied Turndown	Minimum Filter Efficiencies (c)	Design Relative Humidity (k), %	Design Temperature (l), °F/°C
SURGERY AND EMERGENCY DEPARTMENT (ED)									
~~Phase I recovery (PACU) *(FGI 2.1–3.7.4)*~~	~~NR~~	~~2~~	~~6~~	~~NR~~	~~No~~	~~Yes~~	~~MERV-8~~	~~Max 60~~	~~70–75/21–24~~
~~Phase II recovery *(FGI 2.1–3.7.5)* (u)~~	~~NR~~	~~2~~	~~2~~	~~NR~~	~~NR~~	~~Yes~~	~~MERV-8~~	~~Max 60~~	~~70–75/21–24~~
Phase I PACU and Phase II recovery (FGI 2.1–3.4.4 & 2.1–3.4.5)	NR	2	6	NR	No	Yes	MERV-14	Max 60	70–75/21–24
DIAGNOSTIC AND TREATMENT									
Examination/observation *(FGI 2.1–3.2.1)*	NR	2	4	NR	NR	Yes	MERV-8	~~Max 60~~ NR	70–75/21–24
Pharmacy/med prep *(FGI 2.1–3.8.8.2 & 2.1–4.2.2)* (b)	Positive	2	4	NR	NR	Yes	MERV-8	~~NR~~ Max 60	~~NR~~ 70–75/21–24
Laser eye room *(FGI 2.1–3.2.2)*	NR	2	6	NR	No	Yes	MERV-8	~~Max~~ 20–60	~~68–73/20–23~~ 70–75/21–24
STERILE PROCESSING (aa)									
Clean workroom *(FGI 2.1–4.3.2.2.3)*	Positive	2	4	NR	No	No	MERV-14 (ee)	Max 60	~~60–73/16–23~~ 68–73/20–23
Clean supply storage *(FGI 2.1–4.3.2.2.4)*	Positive	2	4	NR	NR	No	MERV-14 (ee)	Max 60	~~72–78/22–26~~ Max 75
Soiled workroom or soiled holding *(FGI 2.1–3.8.12)*	Negative	2	6	Yes	No	No	MERV-8	NR	~~72–78/22–26~~ NR

Modify Table 9-1 as shown. The remainder of Table 9-1 is unchanged.

Table 9-1 Design Parameters for Residential Health, Care, and Support-Specific Spaces

Function of Space (l)	Pressure Relationship to Adjacent Areas (d)	Minimum Outdoor ach	Minimum Total ach	All Room Air Exhausted Directly to Outdoors (f)	Air Recirculated by Means of Room Units (a)	Unoccupied Turndown	Minimum Filter Efficiencies (i)	Design Relative Humidity (g), %	Design Temperature (h), °F/°C
RESIDENTIAL HEALTH									
NURSING HOMES									
AII room *(FGI 3.1–2.2.4.1)* (b)	Negative	2	12	Yes	No	Yes	MERV-13	~~Max~~ 30–60	70–78/21–29
AII anteroom *(FGI 3.1–2.2.4.1)* (b)	Negative	NR	10	Yes	No	Yes	MERV-13	~~Max 60~~ NR	~~70–78/21–29~~ NR
Occupational therapy *(FGI 3.1–3.3.3)*	NR	2	6	NR	NR	Yes	MERV-14	NR	~~70-78/21-29~~ 70–75/21–24
Physical therapy *(FGI 3.1–3.3.2)*	Negative	2	6	NR	NR	Yes	MERV-13	NR	~~70–78/21–29~~ 72–80/22–27
Toilet/bathing room *(FGI 3.1–2.2.2.6)*	Negative	NR	10	Yes	No	No	MERV-13	NR	~~70–78/21–29~~ NR
HOSPICE FACILITIES									
Toilet/bathing room *(FGI 3.2–2.2.2.6)*	Negative	NR	10	Yes	No	Yes	MERV-13	NR	~~70–75/21–24~~ NR
Resident room *(FGI 3.2–2.2.2)*	NR	2	2	NR	NR	Yes	MERV-8	Max 60	~~70–75/21–24~~ 70–78/21–29
RESIDENTIAL CARE AND SUPPORT									
SUPPORT SPACE									
Nonrefrigerated body holding room	Negative	NR	10	Yes	No	No	MERV-8	NR	~~68–75/20–24~~ 70–75/21–24

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

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, 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.

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.

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 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.

8/24