ADDENDA

ANSI/ASHRAE/ASHE Addendum j 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 April 30, 2025, and by the American Society for Healthcare Engineering on March 27, 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).

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FOREWORD

Material and product resilience is important in all types of buildings. However, the cleaning, sanitizing, and disinfecting requirements of health care spaces place additional strain on selection of components due to the risk associated with premature failure or inappropriate specifications. The goal of the green cleaning and disinfecting plan is to identify disinfection products that are considered safer for use and address the plan for use of disinfectants and cleaners. This change to the Materials section also adds clarifying language in subsequent sections and addresses Scope 3 emissions. New references are added for the user to comply with specifically rated cleaning products.

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 j to Standard 189.3-2021

Modify Section 3 as shown. The remainder of Section 3 remains unchanged.

high-touch surfaces: a frequently touched surface within a health care setting. (Source: Centers for Disease Control and Prevention. See Section 12.)

fomite: a high-touch surface (e.g., door levers, chair arm, cubicle curtain, bedrail, light switch, etc.) that may be contaminated with infectious pathogens and serve as a means for transmission.

owner's project requirements (OPR): see ANSI/ASHRAE/ICC/USGBC/IES Standard189.1.

Modify Section 8 as shown. The remainder of Section 8 remains unchanged.

8.6.2 [189.3] Exposure and Care Population. For sensitive and/or vulnerable care populations being treated in health care settings, comply with products to be certified under Asthma and Allergy Friendly Certified® or equivalent standards for products specified.

Modify Section 9 as shown. The remainder of Section 9 remains unchanged.

~~**9.3.4.2 Reusable Goods.** No requirement.~~

9.7.2 Reusable Goods. For building projects, there shall be an area that serves the entire building and is designed for the collection and storage of discarded but clean items in good condition for materials and products that have not been breached or considered infectious or hazardous waste. If periodic pickups by charitable organizations or others are arranged, notices shall be posted.

Informative Note: **[189.3]** ~~See Appendix B Section B2 for advisory information.~~ Products that do not have a breached surface should be evaluated for reuse and/or refurbishment for landfill avoidance. Reuse and refurbishment of stored materials and products, including those that are componentized, should be inventoried within dedicated storage areas for future use (e.g. furniture, casework, and durable medical equipment).

[. . .]

9.9 [189.3] Material Resilience

9.9.1 High-Touch Surfaces, Fomites, Floors, and Wall Finish Selection. High-touch surfaces, fomites, floors, wall finishes, and other surface and material selection for health care environments shall be based on anticipated product service life and durability, as well as cleaning, sanitizing, and disinfecting methods and their application conforming to the owner's project requirements (OPR).

9.9.1.1 Performance Metric. Surfaces and materials shall meet OPR performance characteristics and criteria that address risks identified in the safety risk assessment completed as part of the functional programming process. The assessment includes material selection criteria and product service life completed in accordance with the Facility Guidelines Institute's *Guidelines for Design and Construction of Hospitals*, *Guidelines for Design and Construction of Outpatient Facilities*, and *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*.

9.9.1.2 Documentation. Product specifications and finish schedules shall be provided in construction/contract documentation, based on the documented requirements in the OPR from the completed safety risk assessment, and shall include the manufacturer's cleaning, sanitizing, and/or disinfecting recommendations

Informative Note: The colors, textures, and patterns of surface materials should be evaluated according to patient/resident, staff, and visitor safety based on demographic and diagnosis of patients or residents. The impact of the Centers for Disease Control and Prevention (CDC) required frequency methods and chemicals used for cleaning, sanitizing, and disinfecting surfaces in health care environments should be evaluated in the planning and design of health care settings to enhance maintenance and meet product life-cycle performance. Use of minimum performance testing standards (e.g., ASTM standards) can verify if a product meets specific performance criteria. When selecting surfaces, materials, and products, third-party independent testing can ensure that they meet necessary code and anticipated product service life requirements.

Modify Section 10 as shown. The remainder of Section 10 remains unchanged.

~~**10.9.5**~~**10.9.4** ~~**Building**~~**Green Cleaning Plan.** A green cleaning and disinfecting plan shall be developed for the *building project* in compliance with Green Seal Standard GS-4 ~~Section 2.2 and include the use of bathroom cleaners, degreasers, general purpose cleaners, and glass cleaners that comply with the appropriate standards set forth by EcoLogo, Green Seal, or USEPA's Safer Choice Program, specifically GS-34, GS-37, GS-40, EcoLogo CCD-148, UL EcoLogo 2759, UL EcoLogo 2777, UL EcoLogo 2792, UL EcoLogo 2794, and UL EcoLogo 2795, as applicable~~.

Follow Centers for Disease Control and Prevention (CDC) requirements "Recommendations for Disinfection and Sterilization in Healthcare Facilities—Cleaning and Disinfecting Environmental Surfaces in Healthcare Facilities." Select and then cross reference a disinfectant that meets the efficacy requirements from the EPA registered disinfectants for specific pathogens, from one or more of the following:

- US Environmental Protection Agency (EPA) Design for the Environment (DfE) Certified Disinfectants including EPA's Safer Choice Chemicals
- UL Ecologo (i.e., UL 2700 or UL 2794)
- Green Seal (i.e., GS-37 or GS-40)

Informative Notes:

1. EPA Registration Numbers are used to identify active ingredients for disinfection.
2. Use Selected EPA-Registered Disinfectants "Antimicrobial Products Registered with EPA for Claims Against Common Pathogens" (e.g., List N for SARS- CoV-2 disinfectants).
3. The disinfection process includes: clean surface first and then disinfect the cleaned surface.

Exception to 10.9.4: Dwelling units of a building project.

10.9.4.1 [189.3] Chemical Storage. Chemical storage shall be secured.

10.9.4.2 [189.3] Environmental Services Processes and Procedures. Evaluate cleaning methods to reduce chemical exposure to building occupants (e.g., reducing or eliminating the stripping and waxing of flooring, using products that are the least caustic for disinfection efficacy based on pathogen, etc.).

10.9.4.3 [189.3] Scope 3 Emissions. Identify and evaluate Scope 3 operational emissions to reduce greenhouse gas (GHG) emissions and reduce overall environmental impacts. Document the relevant categories, measurement process, results, and reduction opportunities.

Informative Note: GHG Scope 3, Category 1 purchased goods and services (e.g., water) and Category 5 waste generated in operations should be included in all evaluations.

Modify Section 10.10 as shown. The remainder of Section 10 remains unchanged.

~~**10.10**~~**10.11 [JO] Service Life Plan** Service life plan shall comply with the provisions of Standard 189.1.

Informative Note: [189.3] See Appendix B, Section B6 for additional information.

10.11.4 [189.3] Minimum Performance Standards. For high-touch surfaces and materials, minimum performance standards (e.g., ASTM, ANSI, etc.) for cleaning, sanitizing, and disinfecting shall be included in the operations and maintenance (O&M) documentation based on specifications completed in the OPR and finish documentation required in Section 9.10.1.2.

10.11.5 [189.3] Waste and End-of-Life Plan. For the service life plan, surfaces, materials, and products that have been breached and considered infectious or hazardous waste must be disposed of according to applicable regulations. Products that do not have a breached surface shall be evaluated for reuse and/or refurbishment for landfill avoidance.

Modify Section 11 as shown. The remainder of Section 11 remains unchanged.

11.3.4 Solid Waste

11.3.4.1 Storage and Collection of Waste Streams—Focus on Segregation and Minimization. New building projects shall be provided with space inside the building dedicated to the collection, separation, and storage of all recycling, HIPAA records, donation and reuse items, and universal waste recycling, including batteries, fluorescent lamps (tube, compact fluorescent, and HID), and electronics in accordance with FGI *Guidelines for Design and Construction of Hospitals*, Section 2.1-5.4~~A2.1-5.4.1~~; *Guidelines for Design and Construction of Outpatient Facilities*, Section 2.1-5.2; *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*, Section 2.1-5.2 ~~2.3-4.8~~; ~~the sustainability white paper available at https://www.fgiguidelines.org;~~ and ~~FGI *Materials and Resources in the Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*, Section 2.2-2.5~~.

11.3.4.2 Breached Surfaces, Materials, and Products. Reused items shall not include materials and products that have been breached or considered infectious or hazardous waste.

Modify Section 11.4.2 as shown. The remainder of Section 11.4.2 remains unchanged.

11.4.2.6 Chemical Sensitivities. For sensitive and/or vulnerable care populations being treated in health care settings, comply with products to be certified under Asthma and Allergy Friendly Certified® or equivalent standards for products specified.

Modify Section 12 as shown.

Reference	Title	Section
[. . .]		
Asthma and Allergy Foundation of America **1235 South Clark Street Suite 305, Arlington, VA 22202** **1-800-7-ASTHMA (1-800-727-8462)** **www.aafa.org**		
Asthma and Allergy Friendly Certification Program		8.6.3, 11.4.2.6
[. . .]		
U.S. Environmental Protection Agency (USEPA) **Office of Pesticide Programs (Mail Code 7506C)** **1200 Pennsylvania Ave., NW Washington DC 20460**		
Design for the Environment Certified Disinfectants: www.epa.gov/pesticide-labels/dfe-certified-disinfectants		10.9.4
[. . .]		
U.S. Environmental Protection Agency (USEPA) **Office of Pollution Prevention and Toxics (Mail Code 7406-M** **1200 Pennsylvania Ave., NW Washington DC 20460**		
Safer Choice: www.epa.gov/saferchoice/products		10.9.4
[. . .]		
U.S. Department of Health and Human Services **Centers for Disease Control and Prevention (CDC)** **Healthcare Infection Control Practices Advisory Committee** **1600 Clifton Rd.** **Atlanta, GA 30033, United States** **1800 CDC INFO 800-232-4636** **www.cdc.gov**		
Appendix C—Example of High-touch Surfaces in a Specialized Patient Area: www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/appendix-c.html		3.1
Recommendations for Disinfection and Sterilization in Healthcare Facilities—Antimicrobial Products Registered with EPA for Claims Against Common Pathogens: www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants		10.9.4.
Guideline for Disinfection and Sterilization in Healthcare Facilities: www.cdc.gov/infection-control/media/pdfs/Guideline-Disinfection-H.pdf		10.9.4
Guideline for Disinfection and Sterilization in Healthcare Facilities—Cleaning and Disinfecting Environmental Surfaces in Healthcare Facilities: www.cdc.gov/infection-control/hcp/disinfection-sterilization/summary-recommendations.html		10.9.4
[. . .]		

Modify Informative Appendix A as shown.

Reference	Title	Section
[. . .]		
U.S. Department of Health and Human Services Centers for Disease Control and Prevention (CDC) Healthcare Infection Control Practices Advisory Committee 1600 Clifton Rd. Atlanta, GA 30033, United States 1800 CDC INFO 800-232-4636 www.cdc.gov		
Recommendations for Disinfection and Sterilization in Healthcare Facilities—Antimicrobial Products Registered with EPA for Claims Against Common Pathogens: www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants		10.9.4.
[. . .]		

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.

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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.

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4/25