



**BSR/ASHRAE/ASHE Addendum j  
to ANSI/ASHRAE/ASHE Standard 189.3-2021**

**Public Review Draft**

# **Proposed Addendum j to Standard 189.3-2021, Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities**

**(Draft shows Proposed Changes to Current Standard)**

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at [www.ashrae.org/standards-research--technology/public-review-drafts](http://www.ashrae.org/standards-research--technology/public-review-drafts) and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore) or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, [www.ashrae.org](http://www.ashrae.org).

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## FOREWORD

Material and product resilience is important in all types of healthcare facilities, because of infection risk based on pre-mature failure or inappropriate specification for the application based on the cleaning, sanitizing, and disinfecting requirements of healthcare spaces. This change requires the Materials section with subsequent recommendations to the Operations and Indoor Environmental Quality sections. New references are added for the user to comply with specifically rated cleaning products.

*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. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.

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### **Addendum j to Standard 189.3-2021**

***Modify Section 3 as follows. The remainder of Section 3 remains unchanged.***

#### **Definitions**

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***High Touch Surfaces:*** a frequently touched surface within a healthcare setting. Reference: Centers for Disease Control and Prevention: <https://www.cdc.gov/hai/prevent/resource-limited/high-touch-surfaces.html>

***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.

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***Modify Section 8 as follows. The remainder of Section 8 remains unchanged.***

***8.4.2.7 [JO] Exposure and care population.*** For sensitive and/or vulnerable care populations being treated in healthcare settings, comply with the Allergy Standards Ltd (ASL) or equivalent standards for products specified.

***Modify Section 9 as follows. The remainder of Section 9 remains unchanged.***

#### **9.6 Material Resilience**

***9.6.1 High Touch Surfaces (Fomites), Floors, and Wall Finish Selection.*** Surface and material selection for healthcare environments shall be based on anticipated product service life, durability, cleaning, sanitizing, and disinfecting methods, and application conforming to the *owner's project requirements (OPR)*.

***9.6.1.1 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*.

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

***Informative Note:*** The colors, textures, and patterns of surface materials should be evaluated according to patient and resident, staff, and visitor safety based on demographic and diagnosis of patient or resident. The impact of the Centers for Disease Control and Prevention (CDC) required frequency methods and chemicals used for cleaning, sanitizing, and disinfecting surfaces in healthcare environments should be evaluated in the planning and design of healthcare 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 assure that they meet necessary code and anticipated product service life requirements.

**9.7.2 Reusable Goods.** For building projects with residential spaces, 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 nor considered infectious or hazardous waste. If periodic pickups by charitable organizations or others to be arranged, for periodic pickups notices shall be identified and posted.

***Informative Note:*** Products that do not have a breached surface should be evaluated for re-use and/or refurbishment for landfill avoidance. Re-use and refurbishment of stored materials and products, including those that are componentized, should be inventoried within dedicated storage areas for future use.

***Modify Section 10 as follows. The remainder of Section 10 remains unchanged.***

**10.9.5 Building Green Cleaning Plan.** A green cleaning plan shall be developed for the building project in compliance with Green Seal Standard GS-42 and Centers for Disease Control and Prevention requirements to maintain infection control. US Environmental Protection Agency (EPA) Design for the Environment (DfE) Certified Disinfectants and EPA's Safer Choice Chemicals (or equivalent jurisdiction) to be utilized if they meet the efficacy requirements for disinfection based on pathogen. Note: EPA Registration Numbers are used to identify active ingredients for disinfection.

**Exception to 10.9.5:** *Dwelling units of a building project.*

**10.9.5.1 Chemical Storage.** Based on care population, chemical storage to be secured.

**10.9.5.2 Environmental services processes and procedures.** Evaluate cleaning methods to reduce chemical exposure to building occupants (e.g., reduction or elimination of stripping and waxing flooring, products that are the least caustic for disinfection efficacy based on pathogen, etc.)

**10.9.5.3 [JO] Scope 3 emissions.** Identify and evaluate operational Scope 3 emissions to reduce operational carbon and improve overall environmental impacts.

***Modify Section 10 as follows. The remainder of Section 10 remains unchanged.***

## **10.11[JO] Service Life Plan**

**10.11.1 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 operation and maintenance (O&M) documentation based on specifications completed in the OPR and finish documentation required in Section 9.6.1.2.

**11.11.2 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 to be evaluated for re-use and/or refurbishment for landfill avoidance.

***Modify Section 11 as follows. 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, HIPPA 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 A2.1-5.4.4; *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 2.1-3.83-4.8; ~~the sustainability white paper available at <https://www.fgiguideines.org>; and FGI *Materials and Resources in the Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*, Section 2.1-7.2-2.5.~~

**11.3.4.2 Breached surfaces, materials, and products.** Re-used items shall not include materials and products that have been breached or considered infectious or hazardous waste.

***Modify Section 11 as follows. The remainder of Section 11 remains unchanged.***

**11.4.2.6 Chemical sensitivities.** For sensitive and/or vulnerable care populations being treated in healthcare settings, comply with the Allergy Standards Ltd (ASL) or equivalent standards for products specified.

***Modify Section 12 with new references as follows:***

### Resources

<u>Allergy Standards Ltd (ASL)</u> <u>Trinity Enterprise Campus,</u> <u>Grand Canal Quay,</u> <u>D02 RP44, Ireland</u> <u>+353-1-675-5678</u> <u>+1-212-252-2109</u> <u><a href="http://www.allergystandards.com">www.allergystandards.com</a></u>	<u>Allergy Standards</u>	<u>11.4.2.6</u>
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<u>U.S. Environmental Protection Agency</u> <u>(USEPA)</u> <u>Office of Pesticide Programs (Mail Code</u> <u>7506C)</u> <u>1200 Pennsylvania Ave., NW Washington DC</u> <u>20460</u>	<u>DfE- Certified Disinfectants</u> <u>: <a href="https://www.epa.gov/pesticide-labels/dfecertified-disinfectants">https://www.epa.gov/pesticide-labels/dfecertified-disinfectants</a></u>	<u>10.9.5</u>
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<u>Office of Pollution Prevention &amp; Toxics</u> <u>(Mail Code 7406-M)</u>	<u>SaferChoice:</u> <u><a href="https://www.epa.gov/saferchoice/products">https://www.epa.gov/saferchoice/products</a></u>	<u>10.9.5</u>
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First Public Review Draft

U.S. Department of Health and Human Services

Centers for Disease Control and Prevention (CDC)

Healthcare Infection Control Practices Advisory Committee

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Atlanta, GA 30033, United States

1800 CDC INFO 800-232-4636

<http://www.cdc.gov>

[Appendix C – Example of high-touch 3.1 surfaces in a specialized patient area](#)

<https://www.cdc.gov/infectioncontrol/guidelines/disinfection/index.html>

<https://www.cdc.gov/hai/prevent/resource-limited/high-touch-surfaces.html>