

# ADDENDA

**ANSI/ASHRAE/ASHE Addendum n to  
ANSI/ASHRAE/ASHE Standard 170-2021**

# Ventilation of Health Care Facilities

Approved by ASHRAE and the American National Standards Institute on May 31, 2024, and by the American Society for Health Care Engineering on May 20, 2024.

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## FOREWORD

*The current requirements for HEPA filters in the standard are based on a testing protocol common in the United States; however, the availability of HEPA products tested to that standard is limited internationally. Addendum n adds other acceptable testing protocols for determining HEPA filter efficiency to allow for more international application of the standard.*

**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 n to Standard 170-2021

**Add new definition to Section 3 as shown.**

**HEPA filter:** a high-efficiency particulate air (HEPA) filter is a particulate air filter tested to a minimum particle capture efficiency value according to one of the following test methods:

- a. TEST RP-CC001—Minimum efficiency of Type A of 99.97% at 0.3  $\mu\text{m}$  particles
- b. EN-1822—Minimum efficiency of Type H13 of 99.95% at MPPS (most penetrating particle size)
- c. ISO 29463—Minimum efficiency of Class 35H of 99.95% at MPPS (most penetrating particle size)

**Modify Exception 6.3.2.2(a) as shown.**

**Exception to 6.3.2.2(a):** All room exhaust that first passes through a ~~high efficiency particulate air (HEPA)~~ filter.

**Modify Section 6.4(g) as shown.**

- g. Any HEPA filter or filter MERV-14 or higher shall have sealing interface surfaces. ~~(Informative Note: HEPA filters are those filters that remove at least 99.97% of 0.3 micron sized particles at the rated flow in accordance with the testing methods of TEST RP-CC001.3 [2005] in Informative Appendix E).~~

**Modify Note dd in Table 7-1 as shown.**

- dd. As an alternative to the requirement for HEPA filters in Filter Bank No. 2, MERV-14 rated filters may be used in Filter Bank No. 2 if a tertiary terminal HEPA filter is provided for this space. ~~(Informative Note: HEPA filters are those filters that remove at least 99.97% of 0.3 micron sized particles at the rated flow in accordance with the testing methods of TEST RP-CC001.3 [2005] in Informative Appendix E).~~

**Modify Informative Appendix E as shown. The remainder of Informative Appendix E is unchanged.**

## INFORMATIVE APPENDIX E

### INFORMATIVE REFERENCES AND BIBLIOGRAPHY

TEST. 2016. TEST RP-CC001.6, HEPA and ULPA Filters. Arlington Heights, IL: Institute of Environmental Sciences and Technology.

CEN. 2019. 2019. EN 1822-1, High efficiency air filters (EPA, HEPA and ULPA)—Part 1: Classification, performance testing, marking. Brussels: European Committee for Standardization.

TEST. 2022. TEST RP-CC001.7. Recommended Practice (RP), HEPA and ULPA Filters. Schaumburg, IL: Institute of Environmental Sciences and Technology.

ISO. 2022. ISO 29463-5, High-efficiency filters and filter media for removing particles in air—Part 5: Test method for filter elements. Vernier, Geneva: International Organization for Standardization (ISO).

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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.

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