

**ERRATA SHEET FOR
ASHRAE STANDARD 241-2023
Control of Infectious Aerosols**

September 11, 2024

The corrections listed in this errata sheet apply to ASHRAE Standard 241-2023. The first printing of Standard 241-2023 is identified as “Product Code: 86883 6/23” on the outside back cover. Shaded items have been added since the previously published errata sheet dated July 1, 2024 was distributed.

Page Erratum

- 6** **6.1 Clean Airflow Rate.** In the variables for Equation 6-1 change V_{VMS} to V_{MVS} as shown below. (Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

$$\sum [z_f \times (V_{OT} + V_{MVS})] + \sum V_{ACS} + V_{NV} \geq V_{ECAi} \quad (6-1)$$

where

[...]

V_{MVS} = multizone air cleaning system equivalent clean airflow rate, computed as a V_{ACS} from Section 7 for an air cleaning system whose output is shared amongst zones, cfm (L/s)

- 11** **7.3.3.2 In-Room Air Cleaning Systems Using Only Mechanical Fibrous Filters.** Revise Section 7.3.3.2 as shown below. (Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

7.3.3.2 In-Room Air Cleaning Systems Using Only Mechanical Fibrous Filters. In-room air cleaning systems that use only fibrous filters to clean the air are exempt from all safety testing requirements in Normative Appendix A except the noise testing requirement in Normative Appendix A, Section A1.4.1.2A1.4.1.3.

- 18** **Table 9-1 Minimum Maintenance Activity and Frequency for Ventilation System Equipment and Associated Components.** In the second to last Inspection/Maintenance Task change “i5n” to “in” as shown below. (Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

Verify the accuracy of permanently mounted sensors whose primary function is outdoor air delivery monitoring, outdoor air delivery verification, or dynamic minimum outdoor air control, such as flow stations at an air handler and those used for demand-controlled ventilation, including CO₂ sensors, and handheld CO₂ sensors. A sensor failing to meet the accuracy specified in the O&M manual shall be recalibrated or replaced. Performance verification shall include output comparison to a measurement reference standard consistent with those specified for similar devices in i5n ASHRAE Standard 41.2¹⁹ or ASHRAE Standard 111¹².

- 19** **Table 9-2 Minimum Maintenance Activity and Frequency for Additional Engineering Controls and Associated Components While in Use.** For Ultraviolet (UV) germicidal irradiation in the Inspection/Maintenance Task column change the reference from “ANSI/IES RP-27.1.22²⁰” to “ANSI/IES RP-27.1-22²⁰”

- 25** **A1.3.3.1 Effectiveness of In-Room Air Cleaning Systems.** In Equation A-1 change the first minus sign to an equal sign as shown in the equation below.

$$V_{ACS} = V(k_{td} - k_{nd}) \quad (\text{A-1})$$

- 26** **A1.4.1.2 Noise.** Delete “power” from sound power pressure level in two places in Section A1.4.1.2 as shown below.

(Note: Deletions are shown in ~~strikethrough~~.)

A1.4.1.2 Noise. *Air cleaning* systems that include a fan, blower, or other means to generate air movement shall be tested for sound power level.

An average A-weighted sound power ~~pressure~~ level (unit: dB re ~~1 pW~~ ~~20 μPa~~) shall be determined ~~from sound pressure level measurements~~ at a distance of 3.3 ft (1.0 m) from the *air cleaning* system per ANSI/AHAM AC-2 29 or equivalent method. The ~~measured~~ sound power ~~pressure~~ level shall be included in the ~~safety~~ test report.

Informative Note: Information on acceptable noise levels in occupied building spaces can be found in the 2019 *ASHRAE Handbook—HVAC Applications* 11, Chapter 49, “Noise and Vibration Control.”

- 26** **A1.4.1.3 Ultraviolet Radiation.** In Section A1.4.1.3 update the reference as shown below.

(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

A1.4.1.3 Ultraviolet Radiation. In-room *air cleaning* systems that generate electromagnetic radiation with a wavelength between 100 and 400 nm shall not exceed the threshold limit values (TLVs) in the *2022 Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs)* ³⁰ for the wavelength(s) emitted by the system. The ultraviolet TLVs shall not be exceeded in the space served by the system at a height of 5 ft 11 in (1.8 m) or below. Conformance with the TLV shall be confirmed by measurements as described in ANSI/IES RP-27.1-22 ~~RP-27.1-22~~ ²⁰, ANSI/IES RP-44-21 ¹¹, or equivalent.