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

## March 6, 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 December 13, 2023 was distributed.

## Page Erratum

**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.*)

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

where

 $[\ldots]$ 

 $\underline{V_{MVS}V_{VAMS}}$  = 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)

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 <u>underline</u> and deletions are shown in <u>strikethrough</u>.)

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 CO<sub>2</sub> sensors, and handheld CO<sub>2</sub> 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 isn-ASHRAE Standard 41.2<sup>19</sup> or ASHRAE Standard 111<sup>12</sup>.

- 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-27.1.22 <sup>20</sup>" to "ANSI/IES RP-27.1-22<sup>20</sup>"
- **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.

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

**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) <sup>30</sup> 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.