ERRATA SHEET FOR ANSI/ASHRAE STANDARD 52.2-2012 Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size

June 29, 2015

The corrections listed in this errata sheet apply to all copies of ANSI/ASHRAE Standard 52.2-2012. The first printing is identified on the outside back cover as "Product code: 86145 1/13" and the second printing as "Product code: 86145 6/13 *Errata noted in the list dated 5/23/13 have been corrected.*" The shaded items have been added since the previously published errata sheet dated November 12, 2014 was distributed. Items identified with an asterisk "*" apply only to the first printing, they have already been incorporated into the second printing.

Page Erratum

23 **10.7.1.1.** Modify the second sentence in Section 10.7.1.1 as shown below. (*Note: additions are shown in <u>underline</u> and deletions are shown in <u>strikethrough</u>.)*

10.7.1 Test Procedure

10.7.1.1 The test airflow rate shall be selected in accordance with Section 8.1. The final resistance shall be chosen using the Table 12-1 values as minimum, except that the final resistance shall be equal to or greater than twice the initial resistance.

TABLE 12-1 Minimum Efficiency Reporting Value (MERV) Parameters. Delete the note to Table 12-1 as shown below. (*Note: additions are shown in <u>underline</u> and deletions are shown in <u>strikethrough</u>.)*

Note: The minimum final resistance shall be at least twice the initial resistance, or as specified above, whichever is greater. Refer to Section 10.7.1.1.⁴⁵

- **45 TABLE E-1 Application Guidelines.** Delete MERV 20, 19, 18, and 17 from Table E-1 (first four rows) in Informative Appendix E. Also, delete columns 2 and 3 of Table E-1 (under "Approx. Std. 52.1 Results") for the remaining MERV. See attached revisions to Table E-1 highlighted in red text. (*Note: additions are shown in <u>underline</u> and deletions are shown in <u>strikethrough.</u>)*
- 53* J11.3.3. In Section J11.3.3 change the reference to "Table I-2" to "Table J-2".

Std. 52.2 Minimum	Approx. Std. 52.1 Results		Application Guidelines		
Efficiency Reporting Value	Dust Spot Efficiency	Arrestance	Typical Controlled Contaminant	Typical Applications and Limitations	Typical Air Filter/Cleaner Type
(MERV)					
20	n/a	n/a	≤ 0.30 μm Particle Size Virus (unattached)	Cleanrooms Radioactive materials	HEPA/ULPA Filters ≥99.999% efficiency on 0.10-0.20
19	n/a	n/a	Carbon dust Sea salt	Pharmaceutical manufacturing	um particles, IEST Type F
18	n/a	n/a	All combustion smoke Radon progeny	Careinogenie materials	≥99.999% efficiency on 0.30 µm particles, IEST Type D
17	n/a	n/a		Orthopedic surgery	≥99.99% efficiency on 0.30 μm particles, IEST Type C ≥99.97% efficiency on 0.30 μm particles, IEST Type A
16	n/a	n/a	0.30–1.0 μm Particle Size	Hospital inpatient care	Bag Filters Nonsupported (flexi-
15	>95%	n/a	Most tobacco smoke Droplet nuclei (sneeze)	Smoking lounges Superior commercial	thetic media. 300 to 900 mm (12 to 36 in.) deep, 6 to 12 pockets.
14	90%-95%	>98%	Cooking oil Most smoke	buildings	Box Filters Rigid style cartridge filters 150 to 300 mm (6 to 12 in.)
13	80%-90%	>98%	Insecticide dust Copier toner Most face powder Most paint pigments		deep may use lofted (air laid) or paper (wet laid) media.
12	70%-75%	>95%	1.0–3.0 μm Particle Size Legionella	Superior residential Better commercial	Bag Filters Nonsupported (flexible) microfine fiberglass or syn-
11	60%-65%	>95%	Humidifier dust Lead dust	buildings Hospital laboratories	thetic media. 300 to 900 mm (12 to 36 in.) deep, 6 to 12 pockets.
10	50%-55%	>95%	Milled flour Coal dust		Box Filters Rigid style cartridge filters 150 to 300 mm (6 to 12 in.)
9	40% 45%	≻90%	Auto emissions Nebulizer drops Welding fumes		deep may use lofted (air laid) or paper (wet laid) media.
8	30%-35%	>90%	3.0–10.0 μm Particle Size Mold	Commercial buildings Better residential	Pleated Filters Disposable, extended surface. 25 to 125mm
7	25%-30%	≻90%	Spores Hair sprav	Industrial workplaces Paint booth inlet air	(1 to 5 in.) thick with cotton- polyester blend media.
6	<20%	85%-90%	Fabric protector Dusting aids		cardboard frame. Cartridge Filters Graded density
5	<20%	80%-85%	Cement dust Pudding mix Snuff Powdered milk		viscous coated cube or pocket fil- ters, synthetic media Throwaway Disposable synthetic media panel filters
4	<20%	75%-80%	> 10.0 µ m Particle Size Pollen	Minimum filtration Residential	Throwaway Disposable fiberglass or synthetic panel filters
3	<20%	70%-75%	Spanish moss Dust mites	Window air conditioners	Washable Aluminum mesh, latex
2	<20%	65%-70%	Sanding dust		panel filters Electrostatic Self charging
1	<20%	<65%	Textile fibers Carpet fibers		(passive) woven polycarbonate panel filter

Note: A MERV for other than HEPA/ULPA filters also includes a test airflow rate, but it is not shown here because it has no significance for the purposes of this table.