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 Efficiency Reporting Value (MERV)	Approx. Std. 52.1 Results		Application Guidelines		
	Dust Spot Efficiency	_ Arrestance _	Typical Controlled Contaminant	Typical Applications and Limitations	Typical Air Filter/Cleaner Type
20	n/a	n/a	<mark>≤0.30 μm Particle Size</mark> 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 All combustion smoke Radon progeny	Pharmaceutical manufacturing Carcinogenic materials Orthopedic surgery	μm particles, IEST Type F ≥99.999% efficiency on 0.30 μm particles, IEST Type D ≥99.99% efficiency on 0.30 μm particles, IEST Type C ≥99.97% efficiency on 0.30 μm particles, IEST Type A
18	n/a	n/a			
17	n/a	n/a			
16	n/a	n/a	0.30–1.0 μ m Particle Size All bacteria	General surgery Smoking lounges Superior commercial buildings B	 Bag Filters Nonsupported (flexible) microfine fiberglass or synthetic media. 300 to 900 mm (12 to 36 in.) deep, 6 to 12 pockets. Box Filters Rigid style cartridge filters 150 to 300 mm (6 to 12 in.) deep may use lofted (air laid) or paper (wet laid) media.
15	>95%	n/a	Most tobacco smoke Droplet nuclei (sneeze)		
14	90%-95%	>98%	Cooking oil Most smoke		
13	80%-90%	>98%	Insecticide dust Copier toner Most face powder Most paint pigments		
12	70%-75%	>95%	LegionellaBetter commercialHumidifier dustbuildingsLead dustHospital laboratories	-	Bag Filters Nonsupported (flexible) microfine fiberglass or syn-
11	60%-65%	>95%		thetic media. 300 to 900 mm (12 t 36 in.) deep, 6 to 12 pockets.	
10	50%-55%	>95%	Milled flour Coal dust	filters 150 to deep may us	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	Commercial buildings Better residential Industrial workplaces Paint booth inlet air	 Pleated Filters Disposable, extended surface, 25 to 125mm (1 to 5 in.) thick with cotton- polyester blend media, cardboard frame. Cartridge Filters Graded density viscous coated cube or pocket fil- ters, synthetic media Throwaway Disposable synthetic media panel filters
7	25% 30%	>90%	Mold Spores Hair spray		
6	<20%	85%-90%	Fabric protector Dusting aids		
5	<20%	80%-85%	Cement dust Pudding mix Snuff Powdered milk		
4	<20%	75%-80%	> 10.0 µ m Particle Size Pollen	Minimum filtration Residential Window air conditioners	Throwaway Disposable fiberglas or synthetic panel filters Washable Aluminum mesh, latex coated animal hair, or foam rubbe
3	<20%	70%-75%	Spanish moss Dust mites		
2	<20%	65%-70%	Sanding dust Spray paint 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.