

Table on Minimum Efficiency Rating Value (MERV)

Source: Air Conditioning, Heating & Refrigeration News, June 21, 1999
 article by Don Thornburg, FARR Co.

Particle Size Efficiency (PSE), %

MERV	ASHRAE 52.1 Dust Spot Efficiency	Range 1 0.3 1.0 microns	Range 2 1.0 3.0 microns	Range 3 3.0 10.0 microns	Min. Final Resistance (in. w.g.)	Typical Controlled Contaminants	Filter Type
1	N/A	N/A	N/A	$E_3 < 20$	0.3	Pollen, moss	Throwaway
2	N/A	N/A	N/A	$E_3 < 20$	0.3	Dust mites, sanding dust	Washable
3	N/A	N/A	N/A	$E_3 < 20$	0.3	Paint dust, textile fibers	Electrostatic
4	N/A	N/A	N/A	$E_3 < 20$	0.3	Carpet Fibers	1 to 3 in. electronic air cleaners
5	N/A	N/A	N/A	$20 \leq E_3 < 35$	0.6	Snuff, powdered milk	Electroinc Air Cleaners
6	N/A	N/A	N/A	$35 \leq E_3 < 50$	0.6	Dusting, cement dust	Electroinc Panel
7	N/A	N/A	N/A	$50 \leq E_3 < 70$	0.6	Hair Spray, fabric protection	Electrostatic Cartridge
8	N/A	N/A	N/A	$70 \leq E_3$	0.6	Mold Spores	Pleated
9	40-45%	N/A	$E_2 < 50$	$85 \leq E_3$	1.0	Nebulizer drops, welding fumes	Box Filters
10	50-55%	N/A	$50 \leq E_2 < 65$	$85 \leq E_3$	1.0	Coal dust, auto emissions	Residential EACs
11	60-65%	N/A	$65 \leq E_2 < 80$	$85 \leq E_3$	1.0	Lead dust, milled flour	Box Filters
12	70-75%	N/A	$80 \leq E_2$	$90 \leq E_3$	1.0	Legionella, humidifier dust	Bag Filters
13	80-90%	$E_1 < 75$	$90 \leq E_2$	$90 \leq E_3$	1.4	Copier Toner, face powder	Industrial EACs
14	90-95%	$75 \leq E_1 < 85$	$90 \leq E_2$	$90 \leq E_3$	1.4	Insecticide dust, most smoke	Box Filters
15	>95%	$85 \leq E_1 < 95$	$90 \leq E_2$	$90 \leq E_3$	1.4	Droplet nuclei (sneezing), cooking oil	Box Filters
16	N/A	$95 \leq E_1$	$95 \leq E_2$	$95 \leq E_3$	1.4	All bacteria, most tobacco smoke	Box Filters