

MERV RATING CHART FILTRATION PERFORMANCE



Standard 52.5 Minimum Efficiency Reporting Value	Dust Spot Efficiency	Arrestance	Typical Controlled Contaminant	Typical Applications and Limitations	Typical Air Filter/Cleaner Type
20	n/a	n/a	< 0.30 pm particle size	Cleanrooms	>99.999% eff. On .10-.20 pm Particles
19	n/a	n/a	Virus (unattached)	Radioactive Materials	Particles
18	n/a	n/a	Carbon Dust	Pharmaceutical Man.	Particulates
17	n/a	n/a	All Combustion smoke	Carcinogenetic Materials	>99.97% eff. On .30 pm Particles
16	n/a	n/a	.30-1.0 pm Particle Size	General Surgery	Bag Filter- Nonsupported microfine fiberglass or synthetic media, 12-36 in. deep, 6-12 pockets Box Filter- Rigid Style Cartridge Filters 6 to 12" deep may use lofted or paper media.
15	>95%	n/a	All Bacteria	Hospital Inpatient Care	
14	90-95%	>98%	Most Tobacco Smoke	Smoking Lounges	
13	89-90%	>98%	Proplet Nuceli (Sneeze)	Superior Commercial Buildings	
12	70-75%	>95%	1.0-3.0 pm Particle Size Legionella	Superior Residential	Bag Filter- Nonsupported microfine fiberglass or synthetic media, 12-36 in. deep, 6-12 pockets Box Filter- Rigid Style Cartridge Filters 6 to 12" deep may use lofted or paper media.
11	60-65%	>95%	Humidifier Dust Lead Dust	Better Commercial Buildings	
10	50-55%	>95%	Milled Flour Auto Emissions	Hospital Laboratories	
9	40-45%	>90%	Welding Fumes		
8	30-35%	>90%	3.0-10.0 pm Particle Size	Commercial Buildings	Pleated Filters- Disposable, extended surface area, thick with cotton-polyester blend media, cardboard frame
7	25-30%	>90%	Mold Spores Hair Spray	Better Residential	
6	<20%	85-90%	Fabric Protector Dusting Aids	Industrial Workplace	Cartridge Filters- Graded density viscous coated cube or pocket filters, synthetic media Throwaway- Disposable synthetic panel filter.
5	<20%	80-85%	Cement Dust Pudding Mix	Paint Booth Inlet	
4	<20%	75-80%	>10.0 pm Particle Size	Minimal Filtration	Throwaway- Disposable fiberglass or synthetic panel filter.
3	<20%	70-75%	Pollen Dust Mites	Residential	
2	<20%	65-70%	Sanding Dust Spray Paint Dust	Window A/C Units	Washable- Aluminum Mesh Electrostatic- Self charging woven panel filter.
1	<20%	<65%	Textile Fibers Carpet Fibers		

A **MERV rating chart** shows a numerical value. The range is from 1 (lowest efficiency) to 20 (highest efficiency). **MERV** stands for Minimum Efficiency Reporting Value. This is an industry standard **rating** system.