



**Foremost in Air Filtration**

**Std. 52.1 Comparison to Std. 52.2**

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	<b>≤0.30µm Particle Size</b> Virus (unattached) Carbon dust Sea salt All combustion smoke Radon progeny	Cleanrooms Radioactive materials Pharmaceutical mfg. Carcinogenic materials Orthopedic surgery	<b>HEPA/ULPA Filters</b> ≥99.999% efficiency on 0.10-0.20µm particles, IEST Type F ≥99.999% efficiency on 0.30µm particles, IEST Type D ≥ 99.99% efficiency on 0.30µm particles, IEST Type C ≥ 99.97% efficiency on 0.30µm particles, IEST Type A
19	n/a	n/a			
18	n/a	n/a			
17	n/a	n/a			
16	n/a	n/a	<b>0.30-1.0µm Particle Size</b> All bacteria Most tobacco smoke Droplet nuclei (sneeze) Cooking oil Most smoke Insecticide dust Copier toner Most face powder Most paint pigments	Hospital inpatient care General surgery Smoking lounges Superior commercial buildings	<b>Bag Filters</b> Nonsupported (flexible) micorfine fiberglass or synthetic media. 300 to 900 mm (12 to 36 inch) deep , 6 to 12 pockets. <b>Box Filters</b> Rigid style cartridge filters 150 to 300 mm (6 to 12 inch) deep may be use lofted (air laid) or paper (wet laid) media.
15	>95%	n/a			
14	90-95%	>98%			
13	80-90%	>98%			
12	70-75%	>95%	<b>1.0-3.0µm Particle Size</b> Legionella Humidifier dust Lead dust Milled flour Coal dust Auto emissions Nebulizer drops Welding fumes	Residential Better commercial buildings Hospital laboratories	<b>Bag Filters</b> Nonsupported (flexible) micorfine fiberglass or synthetic media. 300 to 900 mm (12 to 36 inch) deep , 6 to 12 pockets. <b>Box Filters</b> Rigid style cartridge filters 150 to 300 mm (6 to 12 inch) deep may be use lofted (air laid) or paper (wet laid) media.
11	60-65%	>95%			
10	50-55%	>95%			
9	40-45%	>90%			
8	30-35%	>90%	<b>3.0-10.0µm Particle Size</b> Mold Spores Hair spray Fabric protector Dusting aids Cement dust Pudding mix Powdered milk	Commercial buildings Better residential Industrial workplaces Paint booth inlet air	<b>Pleated Filters</b> Disposable, extended surface, 25 to 100 mm (1 to 4 inch) thick with cotton-polyester blend media, cardboard frame. <b>Cartridge Filters</b> Graded density viscous coated cube or pocket filters, synthetic media. <b>Throwaway</b> Disposable synthetic media panel filter.
7	25-30%	>90%			
6	<20%	85-90%			
5	<20%	80-85%			
4	<20%	70-80%	<b>&gt;10. 0 µm Particle Size</b> Pollen Spanish moss Dust mites Sanding dust Spray paint dust Textile fibers Carpet fibers	Minimum filtration Residential Window air conditioners	<b>Throwaway</b> Disposable fiberglass or synthetic panel filters. <b>Washable</b> Aluminum mesh, latex coated animal hair, or foam rubber panel filter. <b>Electrostatic</b> Self charging (passive) woven polycarbonate panel filter.
3	<20%	70-75%			
2	<20%	65-70%			
1	<20%	<65%			

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