

Classification of Course, Medium and Fine Filters and Efficiencies

CLASSIFICATION	Arrestance or Dust Spot Efficiency	US ASHRAE 52.2	European Union EN779 Class		Typical Controlled Contaminant	Application		
PRE Filter (G Class)	AFI <65 %	MERV 1	G1	Am<65%	Particle bigger than 10.0µm (Pollen) (Spanish moss) (Dust mites) (Sanding dust) (Spray paint dust) (Textile fibers)	Gross filter, domestic and commercial		
	AFI 65%-70%	MERV 2	G2	≅ Am < 80%				
	AFI 70%-75%	MERV 3						
	AFI 75%-80%	MERV 4						
	AFI 80%-85%	MERV 5	G3	80% ≅ Am < 90%	Particle size within 3.0µm-10.0µm (Mold) (Spores) (Hair spray) (Cement dust) (Snuff) (Powdered milk)	Commercial, industrial, paint shop		
	AFI 85%-90%	MERV 6						
	NBS 25%-30%	MERV 7	G4	90% ≅ Am				
	NBS 30%-35%	MERV 8						
MEDIUM Filter (F Class)	NBS 40%-45%	MERV 9	F5	40% ≅ Em < 60%			Particle Size within 1.0µm-3.0µm (Lead dust) (Milled flour) (Coal dust) (Auto emissions) (Nebulizer drop) (Welding fumes)	IAQ concerned commercial & industrial, medical
	NBS 50%-55%	MERV 10						
	NBS 60%-65%	MERV 11	F6	60% ≅ Em < 80%				
	NBS 70%-75%	MERV 12						
	NBS 80%-85%	MERV 13	F7	80% ≅ Em < 90%	Particle size within 0.3µm-1.0µm (All bacteria) (cooking oil) (Most smoke) (Copier toner) (Most face powder) (Most paint pigments)	IAQ concerned commercial, industrial, medical, food etc		
	NBS 90%-95%	MERV 14	F8	90% ≅ Em < 95%				
	NBS >95%	MERV 15	F9	95% ≅ Em				
MERV 16								