

Air Filter Types and Classifications

ASHRAE STANDARD 52.2				ASHRAE 52.1		EN	EN779			EN 1822	IEST-RP-CC001			
Minimum Eff Reporting Value	Composite Average Particle Size Efficiency % in Size Range µm			Average Arrestance	Average Dust Spot Efficiency	Filter Class	Av. Arrestance of Syn. Dust	Average Eff at 0.4 µm	Min. Eff at 0.4 µm	Average Eff at MPPS	Filter Class	Particle Size for Testing	Collection Efficiency %	
	Range 1	Range 2	Range 3	NB. This standard is obsolete and here for reference only. Performances are not equivalent to ASHREA 52:2			Test Final DP 250Pa	Test Final DP 450Pa						
MERV				%	%		%	%	%	%				
1	N/A	N/A	E3<20	Aavg<65	<20	G1	50≤Am≤65							
2	N/A	N/A	E3<20	Aavg<65	<20	G2	65≤Am≤80							
3	N/A	N/A	E3<20	Aavg<70	<20									
4	N/A	N/A	E3<20	Aavg<75	<20									
5	N/A	N/A	E3≥20	80	20	G3	80≤Am≤90							
6	N/A	N/A	E3≥35	85	20-25									
7	N/A	N/A	E3≥50	90	25-30	G4	90Am≤							
8	N/A	N/A	E3≥70	92	30-35									
9	N/A	N/A	E3≥85	95	40-45	M5		40≤Em≤60						
10	N/A	E2≥50	E3≥85	96	50-55									
11	N/A	E2≥65	E3≥85	97	60-65	M6		60≤Em≤80						
12	N/A	E2≥80	E3≥90	98	70-75									
13	N/A	E2≥90	E3≥90	98	80-85	F7		80≤Em≤90	35					
14	E1≥75	E2≥90	E3≥90	99	90-95	F8		90≤Em≤95	55					
15	E1≥85	E2≥90	E3≥90	99	95	F9		95≤Em	70					
16	E1≥95	E2≥95	E3≥95	100	99	E10				85				
N/A	N/A	N/A	N/A	N/A	N/A	E11				95				
						E12				99.5				
						H13				99.95	A	0.3µm	99.97	
											B	0.3µm	99.97	
											E	0.3µm	99.97	
											H	0.1 - 0.2 or 0.2 - 0.3µm	99.97	
											I	0.1 - 0.2 or 0.2 - 0.3µm	99.97	
						H14				99.995	C	0.3µm	99.99	
											J	0.1 - 0.2 or 0.2 - 0.3µm	99.99	
											K	0.1 - 0.2 or 0.2 - 0.3µm	99.995	
						U15				99.9995	D	0.3µm	99.999	
											F	0.1 - 0.2 or 0.2 - 0.3µm	99.999	
U16				99.99995	G	0.1 - 0.2µm	>99.9999							