



Comparison of Filter Standards

ASHRAE Standard 52.2-2017. ASHRAE 52.1 EN. EN779:2012. EN 1822. ISO 16890. ISO 29463

Minimum Eff Reporting Value Composite Average Particle Size Efficiency % in Size Range, μm Average Arrestance Average Dust Spot Efficiency Filter.... Mass Eff fractional

Recopilación y aproximación: C4 Carlos M Florez. 2024

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ASHRAE Standard 52.2-2017				ASHRAE 52.1		EN	EN779:2012			EN 1822	ISO 16890			
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	Av. Eff at 0.4 μm	Min Eff. at 0.4 μm	Average Eff at MPPS μm	Mass particles (fraccional) Un Método bastante distinto no muy comparable			
	Range 1	Range 2	Range 3	NB. This standard is obsolete and here for reference only. Performances are not equivalent to ASHREA 52.2 or EN779.			Test Final DP 250Pa	Test Final Dp 450Pa			ePM-1	ePM2,5	ePM-10. 3-10 μm	Coarse (ISO fine dust)
(MERV)	0.30 – 1.0	1.0 – 3.0	3.0 – 10.0	%	%		%	%	%	%	Average eff (E+E)/2		Initial eff (E1)	Initial Eff (A1)
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							30%-50%
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							45%-65%
6	n/a	n/a	E3≥35	85	20-25									
7	n/a	n/a	E3≥50	90	25-30	G4	90Am≤							60%-85%
8	n/a	E2≥20	E3≥70	92	30-35									
9	n/a	E2≥35	E3≥75	95	40-45	M5		40≤Em≤60			5%-35%	10%-45%	40%-70%	80%-95%
10	n/a	E2≥50	E3≥80	92	50-55									
11	E1≥20	E2≥65	E3≥85	97	60-65	M6		60≤Em≤80			10%-40%	20%-50%	60%-80%	>90%
12	E1≥35	E2≥80	E3≥90	98	70-75									
13	E1≥50	E2≥85	E2≥90	98	80-85	F7		80≤Em≤90	35		40%-65%	65%-75%	80%-90%	>95%
14	E1≥75	E2≥90	E2≥95	99	90-95	F8		90≤Em≤95	55		65%-90%	75%-95%	90%-100%	>95%
15	E1≥85	E2≥90	E2≥95	99	95	F9		95≤Em	70		80%-90%	85%-95%	90%-100%	>95%
16	E1≥95	E2≥95	E2≥95	100	99	E10				<85	>95%			ISO 29463
N/A	N/A	N/A	N/A	N/A	N/A	E11				<95				ISO 15
						E12				<99.5				ISO 25
						H13				<99.95				ISO 35
						H14				<99.995				ISO 45
						U15				<99.9995				ISO 55
						U16				<99.99995				ISO 65
						U17				<99.999995				ISO 75

Note: The final MERV value is the highest MERV where the filter data meets all requirements of that MERV.

Nota 1: Las comparaciones de filtros no son del todo confiables, cada norma ha definido una forma de medir y clasificar con principios distintos, estas son equivalencias bastante cercanas, pero no existe un documento oficial con esta información

Nota 2: Las únicas normas válidas para utilizar para efectos de GMP son la EN 779 y la EN 1822 según el informe 45 de la OMS

VER 3