Residential Air Filter Performance Rating Data

The data in this table have been provided by air filter manufacturers in order to support Heating, Ventilating, and Air Conditioning (HVAC) system designers who must comply with requirements in ASHRAE 62.2-2007 that was adopted by reference in the 2008 California Building Energy Efficiency Standards effective on January 01, 2010.

From ASHRAE 62.2-2007 section 6.7 Minimum Filtration:
Mechanical systems that supply air to an occupiable space through ductwork exceeding 10 ft (3 m) in length and through a thermal conditioning component, except evaporative coolers, shall be provided with a filter having a designated minimum efficiency of MERV 6 or better when tested in accordance with ANSI/ASHRAE Standard 52.2, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size. The system shall be designed such that all recirculated and mechanically supplied outdoor air is filtered before passing through the thermal conditioning components. The filter shall be located and installed in such a manner as to facilitate access and regular service by the owner. The filter shall be selected and sized to operate at a clean pressure drop no greater than 0.1 in. w.c. (25 Pa) unless the equipment is designed or selected to accommodate any additional pressure drop imposed by the filter selection (i.e., greater than 0.1 in. w.c. [25 Pa]).

Manufacturer	Product Name	Filter Model	Part Number	Generic Filter Type	Filter Height (inch)	Filter width (inch)	Filter Depth (inch)	Effective Filter Face Area (ft^2)	50% test airflow rate (cfm)	75% test airflow rate (cfm)	@ 295 ft/min face velociy 100% test airflow rate[1] (cfm)	125% test airflow rate (cfm)	@ 50% test airflow rate pressure drop (inch w.c.)	@ 75% test airflow rate pressure drop (inch w.c.)	@ 100% test airflow rate pressure drop (inch w.c.)	@ 125% test airflow rate pressure drop (inch w.c.)	@ 0.1 inch w.c. pressure drop across filter airflow rate (cfm)	manufacturer published maximum filter airflow airflow rate (cfm)	@ manufacturer published maximum filter airflow pressure drop (inch w.c)	Partical Size Efficiency E1 (%)	Partical Size Efficiency E2 (%)	Partical Size Efficiency E3 (%)	MERV
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-002	pleated	24	12	1	2.00	295.0	442.5	590.0	737.5	0.08	0.12	0.16	0.23	514.0	1000.0	0.34	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-006	pleated	20	16	1	2.22	328.0	491.0	655.0	819.0	0.08	0.11	0.15	0.19	488.0	1115.0	0.34	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-007	pleated	25	16	1	2.77	409.0	613.0	817.0	1021.0	0.08	0.12	0.15	0.19	488.0	1400.0	0.34	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-008	pleated	20	20	1	2.77	409.0	613.0	817.0	1021.0	0.08	0.12	0.15	0.19	488.0	1400.0	0.34	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-009	pleated	25	20	1	3.47	512.0	768.0	1024.0	1280.0	0.08	0.12	0.16	0.20	485.0	1740.0	0.34	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-010	pleated	24	24	1	4.00	590.0	885.0	1180.0	1475.0	0.08	0.12	0.16	0.20	485.0	2000.0	0.34	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-012	pleated	24	12	2	2.00	295.0	442.5	590.0	737.5	0.06	0.09	0.12	0.15	490.0	1200.0	0.32	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-016	pleated	20	16	2	2.22	328.0	491.0	655.0	819.0	0.06	0.09	0.12	0.15	490.0	1400.0	0.32	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-017	pleated	25	16	2	2.77	409.0	613.0	817.0	1021.0	0.08	0.12	0.16	0.20	488.0	1740.0	0.32	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-019	pleated	20	20	2	2.77	409.0	613.0	817.0	1021.0	0.08	0.12	0.16	0.20	488.0	1740.0	0.32	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-021	pleated	25	20	2	3.47	512.0	768.0	1024.0	1280.0	0.08	0.12	0.16	0.20	488.0	1740.0	0.32	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-8	102-700-022	pleated	24	24	2	4.00	590.0	885.0	1180.0	1475.0	0.08	0.12	0.16	0.20	485.0	2000.0	0.27	26.0	74.0	77.0	8
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-002	pleated	24	12	1	2.00	295.0	442.5	590.0	737.5	0.08	0.12	0.16	0.20	514.0	1000.0	0.34	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-006	pleated	20	16	1	2.22	328.0	491.0	655.0	819.0	0.08	0.12	0.16	0.20	420.0	1400.0	0.37	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-007	pleated	25	16	1	2.77	409.0	613.0	817.0	1021.0	0.08	0.12	0.16	0.20	420.0	1400.0	0.37	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-008	pleated	20	20	1	2.77	409.0	613.0	817.0	1021.0	0.08	0.12	0.16	0.20	420.0	1400.0	0.40	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-009	pleated	25	20	1	3.47	512.0	768.0	1024.0	1280.0	0.08	0.12	0.16	0.20	524.0	1740.0	0.40	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-010	pleated	24	24	1	4.00	590.0	885.0	1180.0	1475.0	0.08	0.12	0.16	0.20	615.0	2000.0	0.40	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-012	pleated	24	12	2	2.00	295.0	442.5	590.0	737.5	0.07	0.10	0.13	0.16	442.5	1000.0	0.31	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-016	pleated	20	16	2	2.22	328.0	491.0	655.0	819.0	0.07	0.10	0.13	0.16	491.0	1115.0	0.31	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-017	pleated	25	16	2	2.77	420.0	630.0	840.0	1050.0	0.08	0.12	0.16	0.20	412.0	1400.0	0.31	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-019	pleated	20	20	2	2.77	420.0	630.0	840.0	1050.0	0.08	0.12	0.16	0.20	412.0	1400.0	0.30	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-021	pleated	25	20	2	3.47	512.0	768.0	1024.0	1280.0	0.08	0.11	0.14	0.18	524.0	1740.0	0.31	29.5	75.7	92.1	11
Koch Filter Corporation	Synthetic Pleat	XL-11	102-499-022	pleated	24	24	2	4.00	590.0	885.0	1180.0	1475.0	0.07	0.11	0.14	0.18	615.0	2000.0	0.30	29.5	75.7	92.1	11
Freudenberg Filtration Technologies	VitalAir	ULTRA 1500	VitalAir SKU No. 0059	Pleated	20	20	1	2.78	410.0	614.0	819.0	1024.0	0.07	0.12	0.17	0.22	525.0	1024.0	0.28	44.0	74.0	93.0	11
Freudenberg Filtration Technologies	VitalAir	MAXX 2000	VitalAir SKU No. 0025	Pleated	20	20	1	2.78	410.0	614.0	819.0	1024.0	0.10	0.15	0.21	0.28	410.0	1024.0	0.22	58.0	86.0	97.0	12

Note:
1) The test airflow rate in cubic feet per minute (cfm) shall be calculated by multiplying the test face velocity (295 fpm) by the air filter's face area (ft2).