

Filtrete

Commercial Performance Ring Panel HVAC Filter

Physical Characteristics

- Fits into 1" filter tracks
- 100% synthetic media
- Self-gasketing perimeter
- High durability internal wire frame
- Separated or linked panels

Performance Notes

- Initial resistance: 0.53 inches of water (131 Pa) @ 492 fpm
- UL 900, Class 2 flammability rating (US)
- Operating temperature (maximum): 150°F (65°C)



Performance Data

IMPORTANT NOTICE:

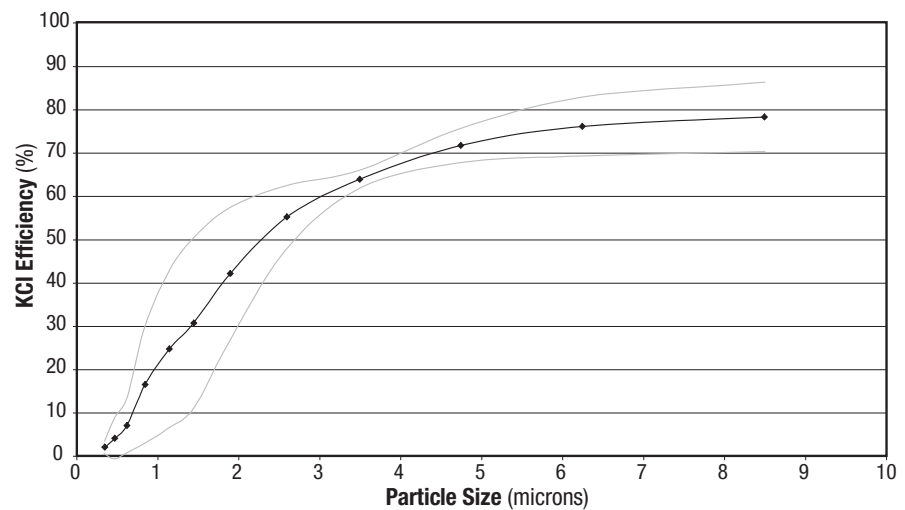
Service Life: Filter should be replaced before reaching a final resistance of 1.4 inches (3.6 cm) of water (350 Pa) to maintain design performance of the filter. Certain system designs may require filter replacement at lower resistances.

Independent Laboratory Testing: Filtrete™ Commercial Performance Ring Panel HVAC Filters have been tested by an independent laboratory in accordance with ASHRAE or EN779-2002 standards. Performance ratings are based on testing of new filters with a +/- 95% confidence interval of the average.

Filtrete™ Commercial Performance Dust Ring Panel HVAC Filter

Air Velocity for ASHRAE Testing	492 fpm (1968 cfm for 24" x 24" filter)
Air Velocity for EN779 Testing	2.5 m/s (3400 m ³ /hr for 0.6m x 0.6m filter)
Initial Resistance	0.53 ± 0.03 inches of water (131 ± 8 Pa)
Recommended Final Resistance	1.0 inches of water (250 Pa)
Average Dust Spot Efficiency per ASHRAE 52.1-1992	14.1 ± 0.09%
Initial Efficiency Rating per ASHRAE 52.2-1999	MERV-7
Filter Class per EN779-2002	G3
Average Arrestance to 1.0 inches water (250 Pa)	90.5 ± 1.1%
Average Dust Holding Capacity at 1.0 inches water (250 Pa)	99 ± 11 g

Filter Efficiency vs. Particle Size at 492 fpm (2.5 m/s) per ASHRAE

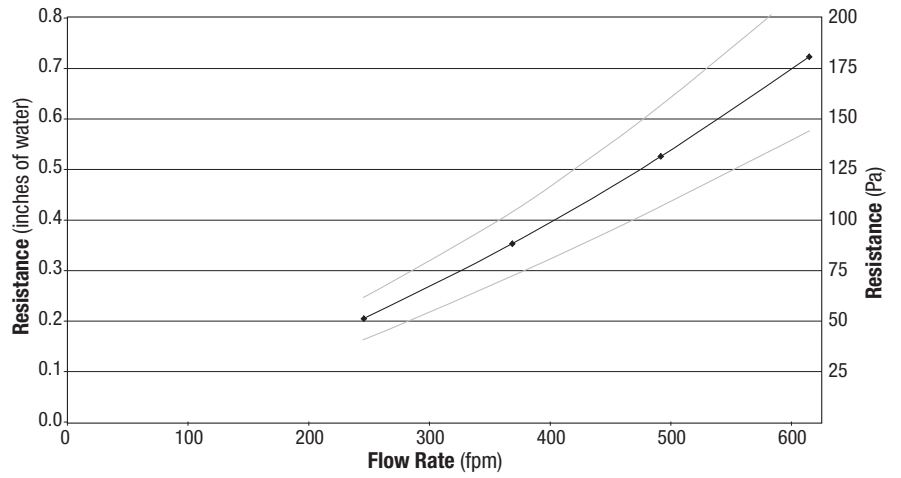


Average Particle Efficiencies (492 fpm)

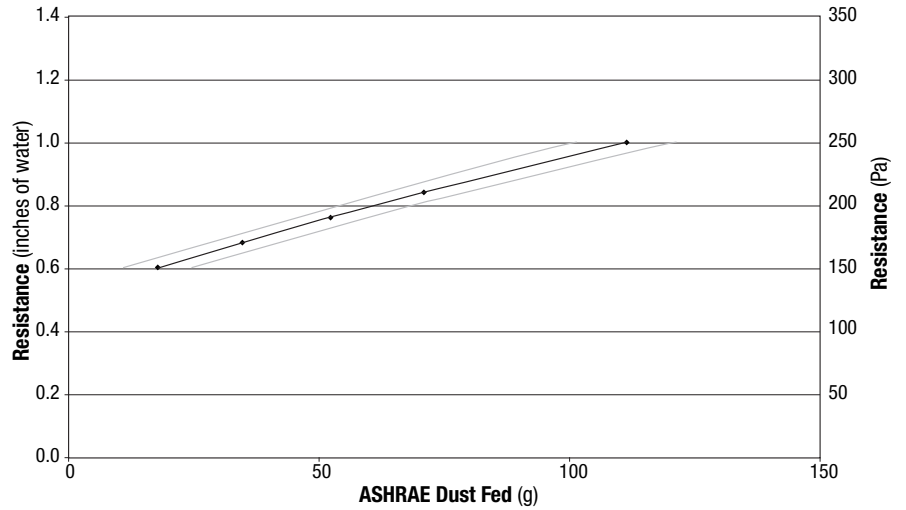
Particle Size Range	Minimum efficiency per ASHRAE 52.2-1999
0.3-1.0 µm	7 ± 5%
1.0-3.0 µm	38 ± 15%
3.0-10 µm	72 ± 4%

Performance Data (continued)

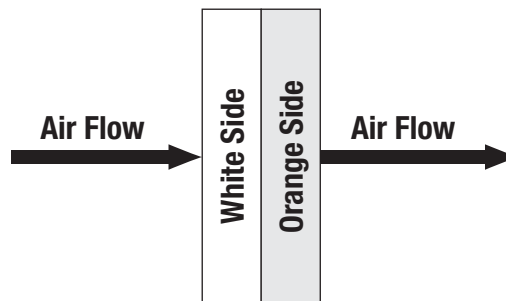
Initial Resistance vs. Air Velocity



Resistance vs. Dust Loading @ 492 fpm (2.5 m/s)



Panel Filter Installation



Filter Measurements

Product Number	Stock Number	Nominal dimensions inches (mm)	Units
E453	70-0712-4639-4	24 x 24 (610 x 610)	24/case, separated
E454	70-0712-4640-2	20 x 20 (508 x 508)	EA
E455	70-0712-4641-0	24 x 12 (610 x 305)	EA
E456	70-0712-4642-8	20 x 16 (508 x 406)	EA
E457	70-0712-4643-6	16 x 25 (406 x 635)	EA
E458	70-0714-6900-4	20 x 25 (508 x 635)	EA
E471	70-0714-6913-7	24 x 24 (610 x 610) linked	24/case, unseparated
E472	70-0714-6914-5	20 x 20 (508 x 508) linked	24/case, unseparated
E473	70-0714-6915-2	24 x 12 (610 x 305) linked	24/case, unseparated
E474	70-0714-6916-0	20 x 16 (508 x 406) linked	24/case, unseparated
E475	70-0714-6917-8	16 x 25 (406 x 635) linked	24/case, unseparated
E476	70-0714-6918-6	20 x 25 (508 x 635) linked	24/case, unseparated

Additional Information

For questions or to place an order in the U.S., contact your local 3M Filtration distributor or 3M Customer Service at 1-800-648-3550.

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