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Date: 16-Nov-17 TEST NO.17-621-3C

Test Report ANSI/ASHRAE Standard 52.2-2017

Filter Description

Manufacturer	Viskon-Aire Corp.
Filter Model	4 V-Cell MERV 14
Part Number	4VB14242412
Generic Filter Type	12" V Cell
Nominal Dimensions (H x W x D)	24" x 24" x 12"
Pocket / Pleat Quantity	8 Packs
Media Type	Microglass Media
Est. Gross Media Area	200 Ft ²
Adhesive Type	Polyurethane




Test Conditions

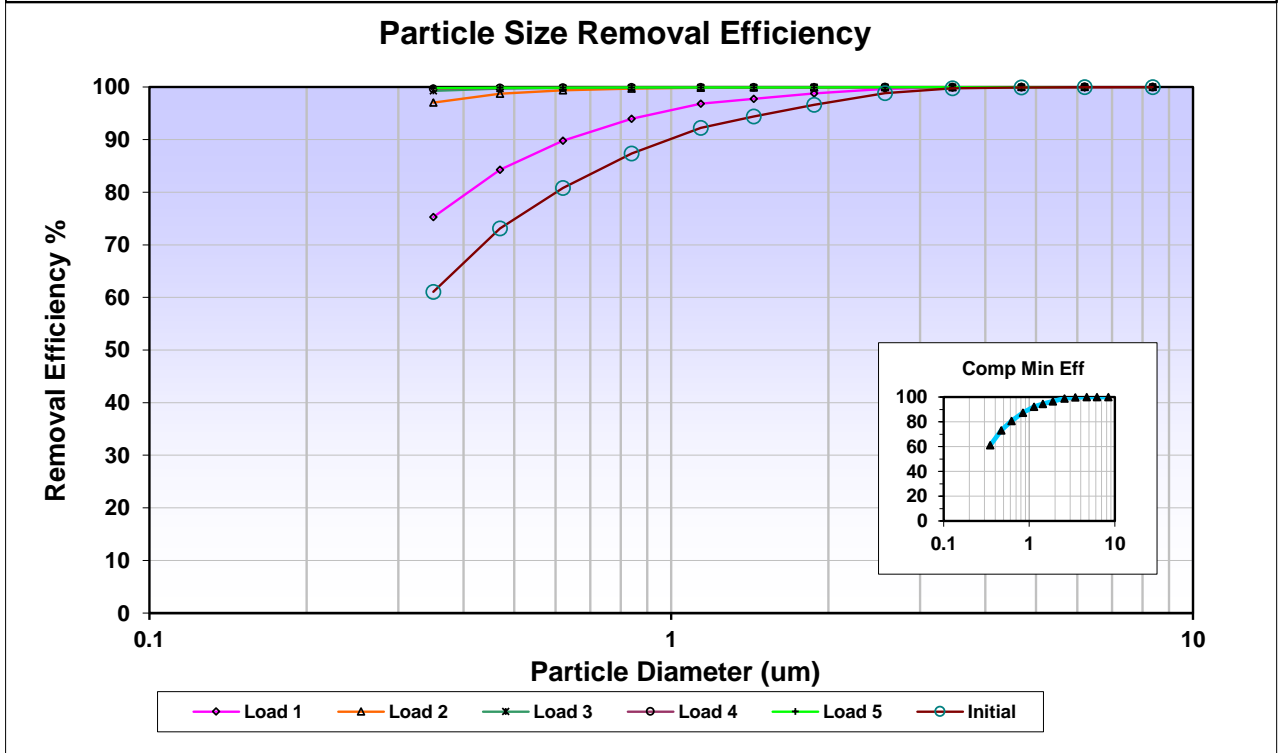
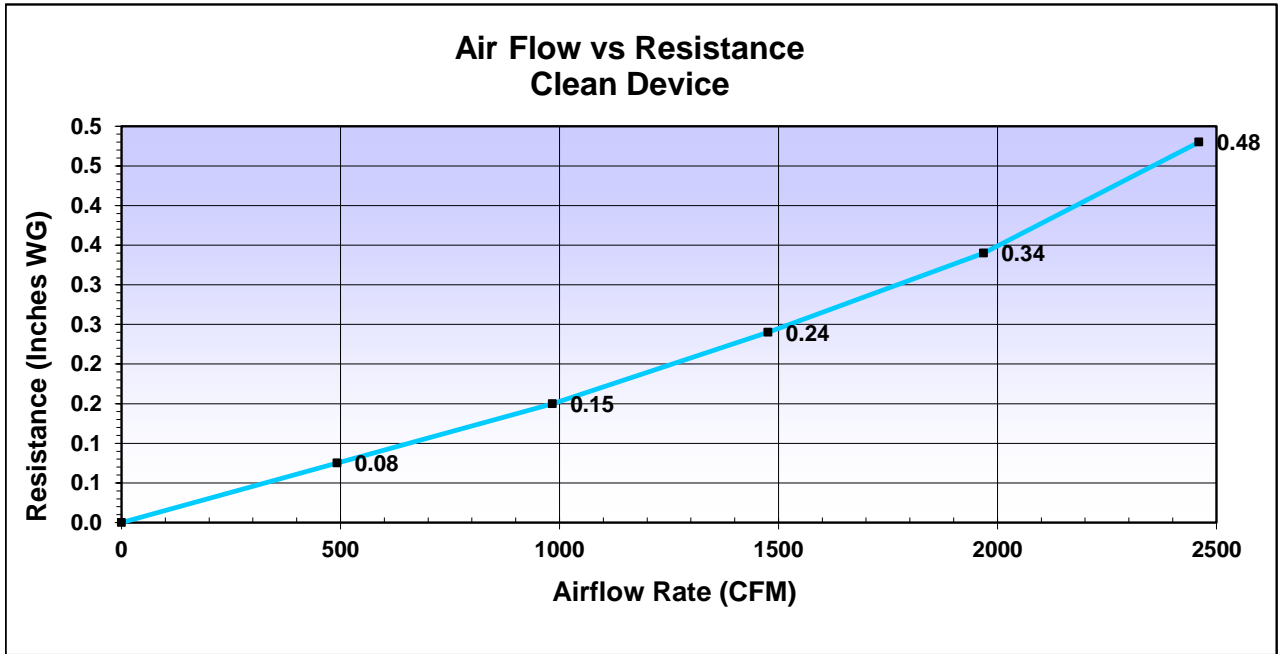
Loading Dust Type	ASHRAE	Test Air Temp (degrees F.)	70
Barometric Pressure (In. Hg.)	29.56	Relative Humidity (%)	39

Test Results

Airflow Rate (CFM)	1968
Nominal Face Velocity (fpm)	492
Initial Resistance (in WG)	0.34
Final Resistance (in WG)	1.50
Dust Fed (gms) to Final Resistance	469
E1 (%) Composite Minimum Avg. Efficiency 0.30 - 1.0 um	76
E2 (%) Composite Minimum Avg. Efficiency 1.0 - 3.0 um	96
E3 (%) Composite Minimum Avg. Efficiency 3.0 - 10.0 um	100
Minimum Efficiency Reporting Value (MERV)	MERV 14 @ 1968 CFM

Comments Tested For: Visikon-Aire Corp.
 Final Pressure Drop ("w.c.) 1.50"w.c.
 Dust Holding Capacity (gms) 469
 Average Arrestance (%) 100.0

Test Performed by: RAS **Approved By:**  **Test Completed:** 16-Nov-17



Data - Initial Resistance

Airflow (CFM)	Resistance (in WG)
0	0.00
492	0.08
984	0.15
1476	0.24
1968	0.34
2460	0.48

Data - Particle Removal Efficiency

Particle Size Range (um)	Geometric Mean Diam (um)	Particle Removal Efficiency (%)							
0.30 - 0.40	0.35	61.1	61.1	75.3	97.0	99.3	99.7	99.8	99.8
0.40 - 0.55	0.47	73.1	73.1	84.2	98.7	99.7	99.8	99.8	99.9
0.55 - 0.70	0.62	80.8	80.8	89.8	99.4	99.8	99.9	99.9	99.9
0.70 - 1.00	0.84	87.3	87.3	94.0	99.7	99.9	99.9	99.9	99.9
1.00 - 1.30	1.14	92.2	92.2	96.8	99.8	99.9	99.9	99.9	99.9
1.30 - 1.60	1.44	94.4	94.4	97.8	99.9	99.9	99.9	99.9	99.9
1.60 - 2.20	1.88	96.6	96.6	98.8	99.9	100.0	99.9	99.9	99.9
2.20 - 3.00	2.57	98.8	98.8	99.6	100.0	100.0	100.0	100.0	100.0
3.00 - 4.00	3.46	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0
4.00 - 5.50	4.69	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
5.50 - 7.00	6.20	99.9	100.0	99.9	100.0	100.0	100.0	100.0	100.0
7.00 - 10.00	8.37	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		CME	Initial	Load 1	Load 2	Load 3	Load 4	Load 5	
	Resistance after Dust Load (in w.c.) ----->			0.37	0.63	0.92	1.21	1.50	
	Dust Load (gms) ----->			30	202	287	376	469	

Test Data for Release Rate (%)						
Size Range	Geometric Mean of Particle Size Range, μm	Release Rate After Loading	Release Rate After Loading	Release Rate After Loading	Release Rate After Loading	Release Rate After Loading
No.		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
1	0.35	0.098	0.019	0.003	0.004	0.004
2	0.47	0.035	0.006	0.003	0.002	0.004
3	0.62	0.007	0.001	0.002	0.003	0.004
4	0.84	0.004	0.002	0.001	0.003	0.004
5	1.14	0.015	0.003	0.003	0.005	0.004
6	1.44	0.008	0.004	0.003	0.017	0.015
7	1.88	0.009	0.005	0.004	0.007	0.007
8	2.57	0.015	0.011	0.002	0.011	0.011
9	3.46	0.038	0.019	0.013	0.025	0.020
10	4.69	0.042	0.032	0.015	0.020	0.027
11	6.2	0.035	0.038	0.029	0.104	0.021
12	8.37	0.199	0.059	0.060	0.073	0.123