



2820 S. English Station Road - Louisville, KY 40299  
 Tel: (502) 357-0132 Fax (502) 267-8379

Date: 13-Dec-12 TEST NO. 12-1810Rev1

## ASHRAE Standard 52.2-2007 TEST REPORT Initial Efficiency / Resistance / Dust Holding Arrestance

### Filter Description

Manufacturer	AAF International
Filter Model	VariCel VXLS MERV 11
Part Number	3081858-009
Generic Filter Type	V-Bank
Nominal Dimensions (H x W x D)	24"x24"x12"
Pocket / Pleat Quantity	8 Panel (4V)
Media Type	Synthetic
Est. Gross Media Area	Standard
Adhesive Type	N/A



### Test Conditions

Loading Dust Type	ASHRAE	Test Air Temp (degrees F.)	75
Barometric Pressure (In. Hg.)	29.74	Relative Humidity (%)	22

### Test Results

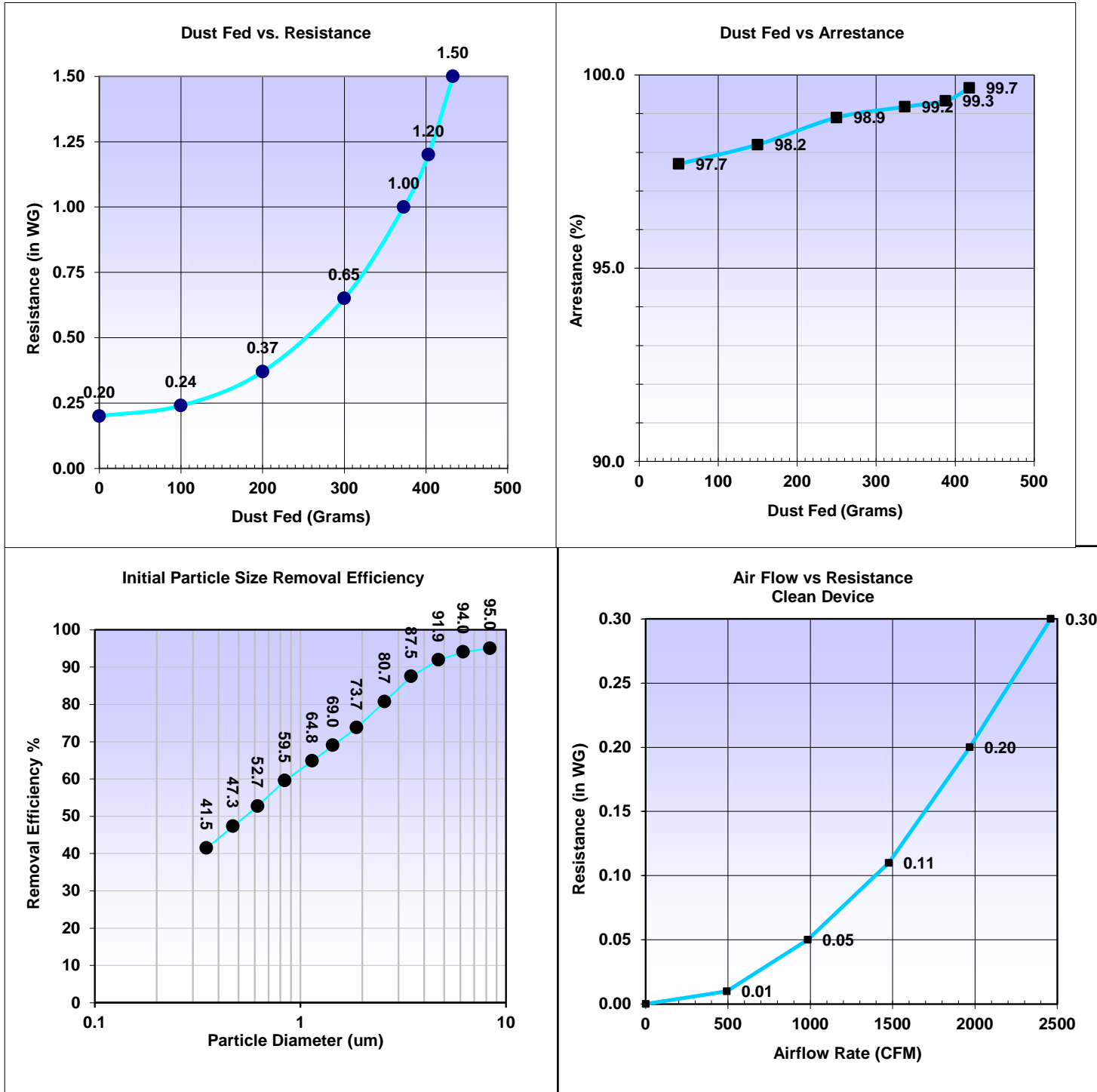
<b>Airflow Rate (CFM)</b>	<b>1968</b>
<b>Nominal Face Velocity (fpm)</b>	<b>492</b>
<b>Initial Resistance (in WG)</b>	<b>0.20</b>
<b>Final Resistance (in WG)</b>	<b>1.50</b>
<b>Dust Fed (gms) to Final Resistance</b>	<b>433</b>
<b>E1 (%) Initial Efficiency 0.30 - 1.0 um</b>	<b>50</b>
<b>E2 (%) Initial Efficiency 1.0 - 3.0 um</b>	<b>72</b>
<b>E3 (%) Initial Efficiency 3.0 - 10.0 um</b>	<b>92</b>
<b>Estimated * Minimum Efficiency Reporting Value (MERV)</b>	<b>MERV 11 @ 1968 CFM</b>
* If initial data is minimum	

**Comments** Tested For: AAF International

	<u>1.5"w.c.</u>	<u>1.2"w.c.</u>	<u>1.0"w.c.</u>
<b>Dust Holding Capacity (gms)</b>	<b>427</b>	<b>397</b>	<b>367</b>
<b>Average Arrestance (%)</b>	<b>98.6</b>	<b>98.5</b>	<b>98.4</b>

Approval:

Test No. 12-1810Rev1  
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**Blue Heaven Technologies**

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**Test Report**

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**Data - Dust Fed / Arrestance**

Dust Fed Increment (gms)	Total Dust Fed (gms)	Resistance (in WG)
0	0	0.20
100	100	0.24
100	200	0.37
100	300	0.65
73	373	1.00
30	403	1.20
30	433	1.50

Arrestance (%)	Dust Fed Plot Point (gms)
97.7	50
98.2	150
98.9	250
99.2	337
99.3	388
99.7	418

**Data - Particle Removal Efficiency**

Particle Size Range (um)	Geometric Mean Diam (um)	Initial Particle Removal Efficiency (%)
0.30 - 0.40	0.35	41.5
0.40 - 0.55	0.47	47.3
0.55 - 0.70	0.62	52.7
0.70 - 1.00	0.84	59.5
1.00 - 1.30	1.14	64.8
1.30 - 1.60	1.44	69.0
1.60 - 2.20	1.88	73.7
2.20 - 3.00	2.57	80.7
3.00 - 4.00	3.46	87.5
4.00 - 5.50	4.69	91.9
5.50 - 7.00	6.20	94.0
7.00 - 10.00	8.37	95.0

**Data - Initial Resistance**

Airflow (CFM)	Resistance (in WG)
0	0.00
492	0.01
984	0.05
1476	0.11
1968	0.20
2460	0.30