



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

Date: 6-Mar-09 TEST NO. 09-380A

## ASHRAE Standard 52.2-2007 TEST REPORT

### Filter Description

Filter Model	MERV 13
Generic Filter Type	Pleat
Nominal Dimensions (H x W x D)	24"x24"x2"
Pocket / Pleat Quantity	29 Pleats
Media Type	Synthetic
Est. Gross Media Area	16.92 Ft <sup>2</sup>
Adhesive Type	N A



### Test Conditions

Loading Dust Type	ASHRAE	Test Air Temp (degrees F.)	72
Barometric Pressure (In. Hg.)	30.56	Relative Humidity (%)	23

### Test Results

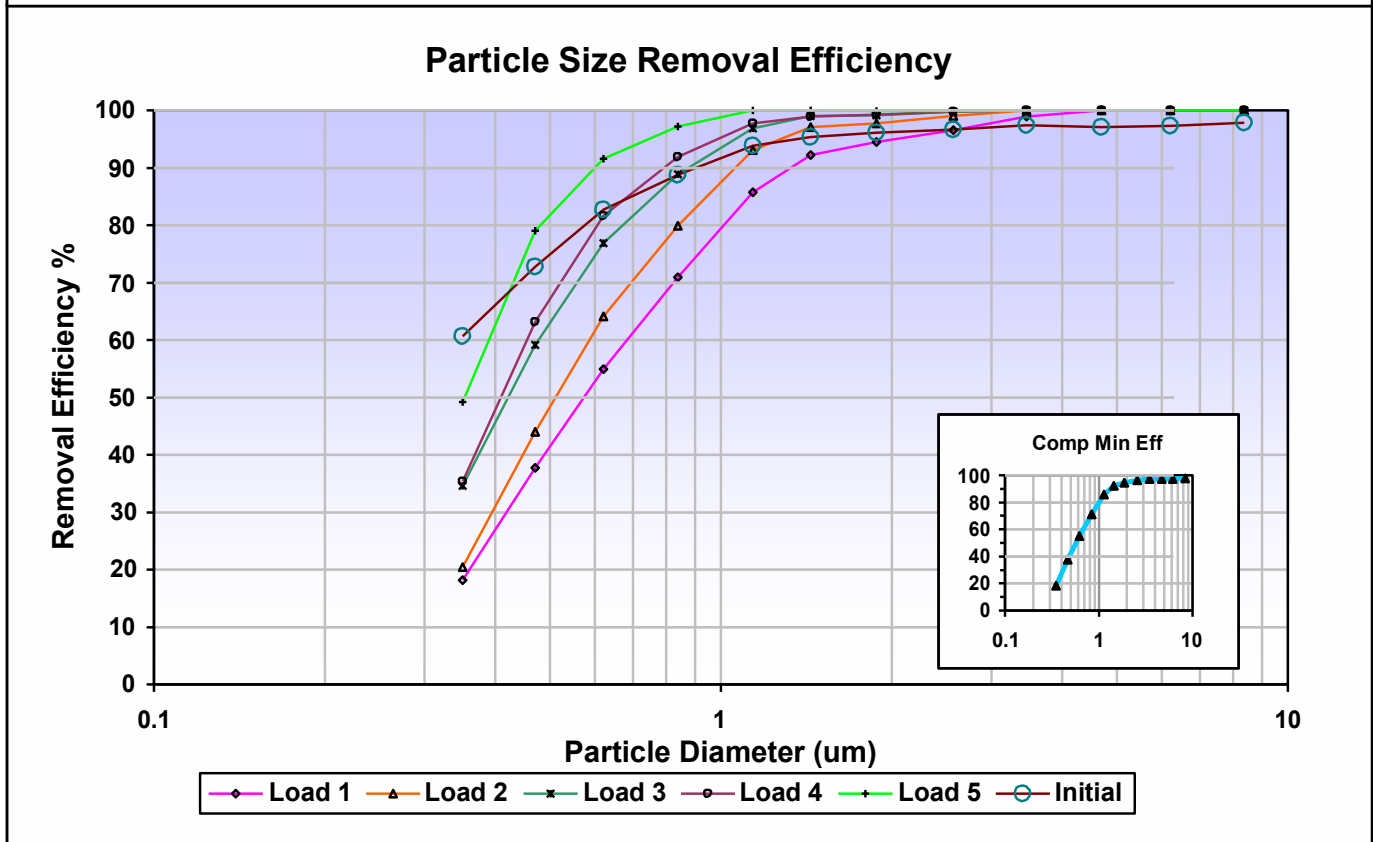
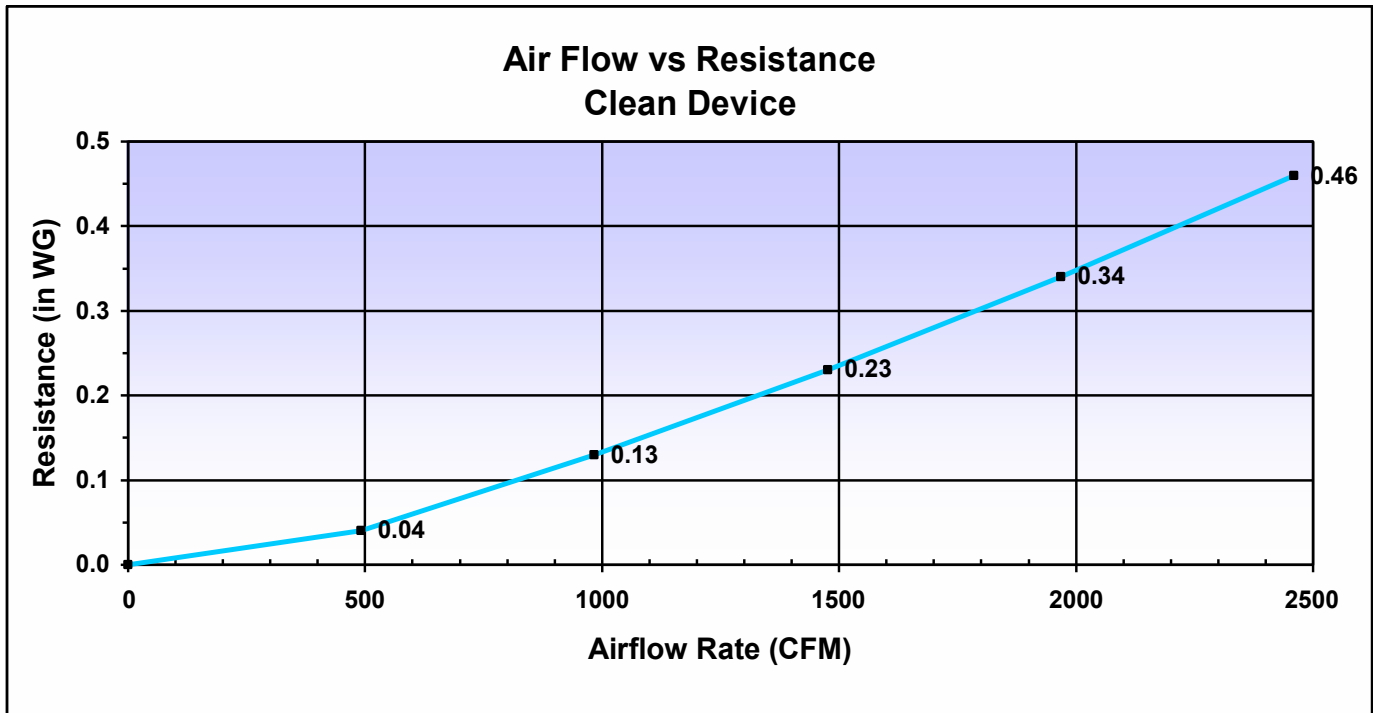
<b>Airflow Rate (CFM)</b>	<b>1968</b>
<b>Nominal Face Velocity (fpm)</b>	<b>492</b>
<b>Initial Resistance (in WG)</b>	<b>0.34</b>
<b>Final Resistance (in WG)</b>	<b>1.50</b>
<b>E1 (%) Composite Minimum Avg. Efficiency 0.30 - 1.0 um</b>	<b>45</b>
<b>E2 (%) Composite Minimum Avg. Efficiency 1.0 - 3.0 um</b>	<b>92</b>
<b>E3 (%) Composite Minimum Avg. Efficiency 3.0 - 10.0 um</b>	<b>97</b>
<b>Minimum Efficiency Reporting Value (MERV)</b>	<b>MERV 13 @ 1968 CFM</b>

### Comments

Dust Fed (gms) to Final Resistance: 174

Approval:

*Rob B. Bullard*



**Blue Heaven Technologies**

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**ASHRAE Standard 52-2007**

**Test Report**

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**Data - Initial Resistance**

Airflow (CFM)	Resistance (in WG)
0	0.00
492	0.04
984	0.13
1476	0.23
1968	0.34
2460	0.46

**Data - Particle Removal Efficiency**

Particle Size Range (um)	Geometric Mean Diam (um)	Particle Removal Efficiency (%)							
0.30 - 0.40	0.35	18.2	60.7	18.2	20.4	34.6	35.4	49.2	
0.40 - 0.55	0.47	37.7	72.8	37.7	44.0	59.1	63.1	79.1	
0.55 - 0.70	0.62	54.9	82.7	54.9	64.1	76.9	81.7	91.5	
0.70 - 1.00	0.84	70.9	88.8	70.9	79.9	88.9	91.9	97.2	
1.00 - 1.30	1.14	85.7	93.8	85.7	93.1	96.9	97.7	100.0	
1.30 - 1.60	1.44	92.2	95.3	92.2	97.1	99.0	98.9	100.0	
1.60 - 2.20	1.88	94.4	96.1	94.4	97.7	99.1	99.2	99.9	
2.20 - 3.00	2.57	96.6	96.7	96.6	99.0	99.8	99.7	99.9	
3.00 - 4.00	3.46	97.4	97.4	99.0	100.0	100.0	100.0	100.0	
4.00 - 5.50	4.69	97.1	97.1	100.0	100.0	100.0	100.0	100.0	
5.50 - 7.00	6.20	97.3	97.3	100.0	100.0	100.0	100.0	100.0	
7.00 - 10.00	8.37	97.8	97.8	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 WG) ----->		0.38	0.63	0.92	1.21	1.50	
		Dust Load (gms) ----->		11	75	116	146	174	