



ASHRAE® 52.2-2012 Test Results w/Appendix J Results

Filter Description							
Manufacturer		Filter Model			Filter Part Number		
Camfil		30/30 Dual 9			406331-005		
Filter Type		Media Type		Media Color		Media Area (ft ²)	
PleatedPanel		Dual Layer Polyester		Green/White		17	
Nominal Size		Actual Size					
HxWxD		Hgt (in)	Wid (in)	Dep (in)	Pleats/Pockets	UL Rating	LabFile
24x24x2		23 3/8	23 3/8	1 3/4	29	Yes	1481

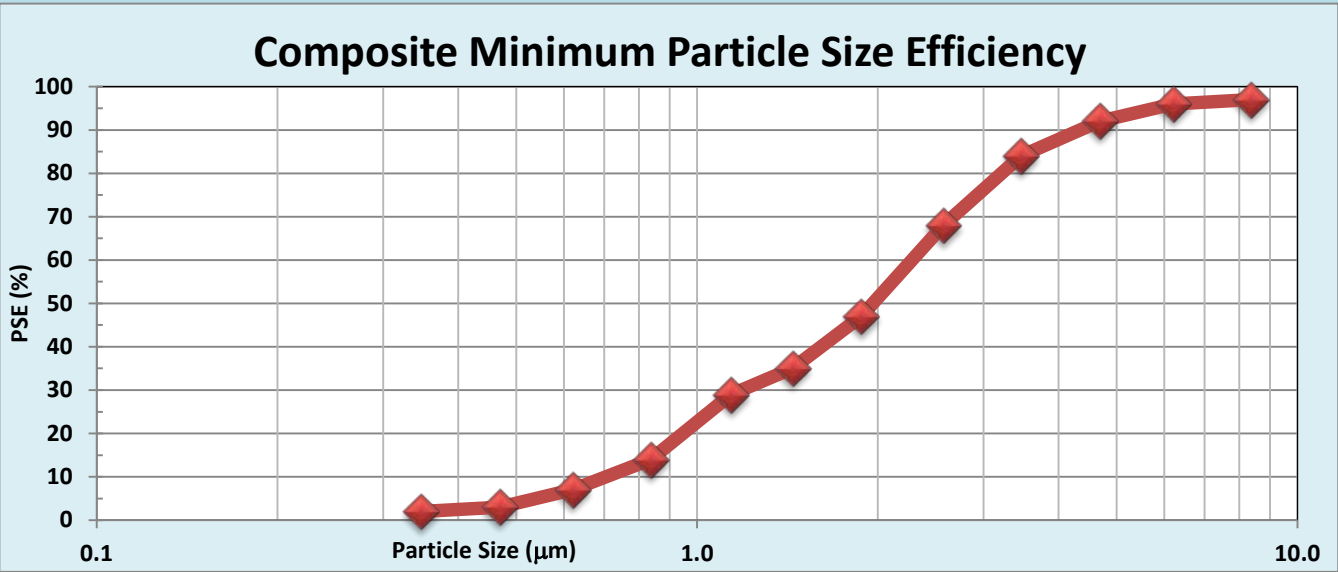
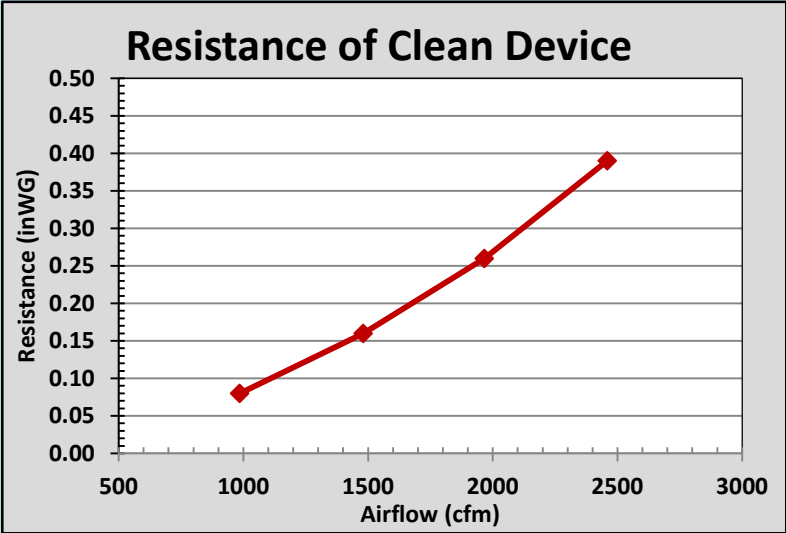
ASHRAE® 52.2-2012				ASHRAE® 52.2-2012 w/App J			
Time:	9:56:23	Date:	Jan 17, 2017	Time:	14:51:01	Date:	Jan 19, 2017
Test Number:	16206-007_00004487.047.aec			Test Number:	16206-012-KCL_00004507.047.aec		
Test Data	Test Results	Rated Values		Test Data	Test Results	Rated Values	
AirFlow (cfm)	1969	1970		AirFlow (cfm)	1969	1970	
Nominal Vel (fpm)	492	493		Nominal Vel (fpm)	492	493	
Initial ΔP (inWG)	0.26	0.30		Initial ΔP (inWG)	0.26	0.30	
MERV	9	9	@1969cfm	MERV-A	9A	9A	@1969cfm
E ₁ (0.3-1.0μm), (%)	7	n/a		E _{1-A} (0.3-1.0μm), (%)	6	n/a	
E ₂ (1.0-3.0μm), (%)	45	≥ 35		E _{2-A} (1.0-3.0μm), (%)	41	≥ 35	
E ₃ (3.0-10μm), (%)	92	≥ 75		E _{3-A} (3.0-10μm), (%)	87	≥ 75	
Final DP, (inWG)	1.0	1.0		Final DP, (inWG)	1.0	1.0	
Arrestance, (%)	93	8		Arrestance-A, (%)	93	8	
DHC, (g)	187			DHC-A, (g)	199		
Temp, (F)	75	Test Aerosol	KCI	Temp, (F)	75	Test Aerosol	KCI
RH, (%)	49	Loading Dust	ASHRAE	RH, (%)	48	Loading Dust	ASHRAE
Comments				Comments			

Certified Test Per ASHRAE 52.2-2012		Operator	Particle Counter	Model
Approval:	<i>Don Thornburg</i> Electronic Signature, Original on file	AA	TSI	OPS 3330
Camfil Permission Required for Distribution				

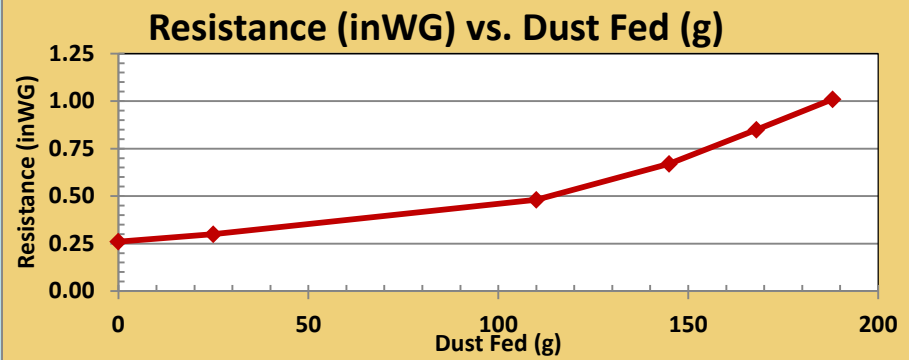
ASHRAE® 52.2-2012 Test Results

Date:	Jan 17, 2017	Test Number:	16206-007_00004487.047.aec
Manufacturer	Filter Model	Filter Part Number	
Camfil	30/30 Dual 9	406331-005	

Clean Resistance Table			
cfm	m ³ /s	inWG	Pa
986	0.47	0.08	20
1481	0.70	0.16	40
1966	0.93	0.26	65
2459	1.16	0.39	97



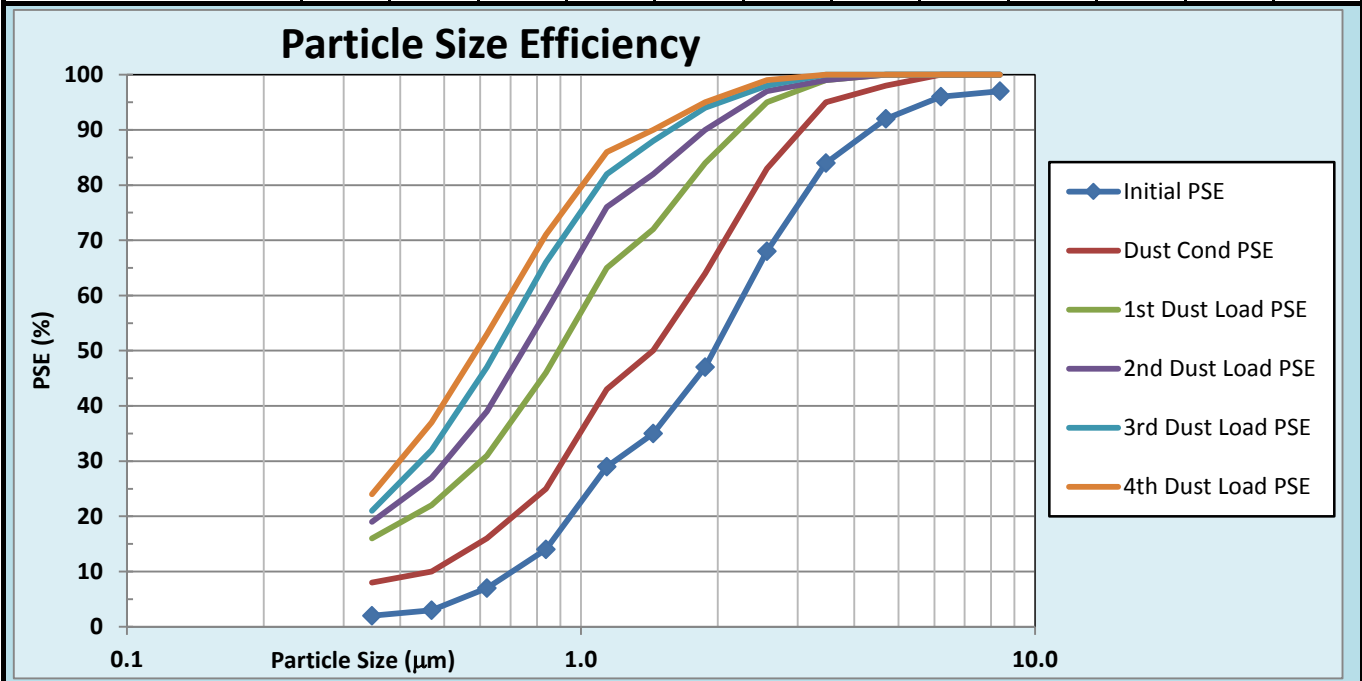
ΔP (inWG)	Dust Fed (g)
0.26	0
0.30	25
0.48	110
0.67	145
0.85	168
1.01	188





ASHRAE® 52.2-2012 Test Results

Date:	Jan 17, 2017	Test Number:	16206-007_00004487.047.aec									
Manufacturer				Filter Model				Filter Part Number				
Camfil				30/30 Dual 9				406331-005				
Efficiency Data Table												
	1	2	3	4	5	6	7	8	9	10	11	12
Minimum Dia (µm)	0.3	0.4	0.55	0.7	1.0	1.3	1.6	2.2	3.0	4.0	5.5	7.0
Maximum Dia (µm)	0.4	0.55	0.7	1.0	1.3	1.6	2.2	3.0	4.0	5.5	7.0	10.0
Geometric Mean (µm)	0.35	0.47	0.62	0.84	1.14	1.44	1.88	2.57	3.46	4.69	6.20	8.37
Initial PSE	2	3	7	14	29	35	47	68	84	92	96	97
Dust Cond PSE	8	10	16	25	43	50	64	83	95	98	100	100
1st Dust Load PSE	16	22	31	46	65	72	84	95	99	100	100	100
2nd Dust Load PSE	19	27	39	57	76	82	90	97	99	100	100	100
3rd Dust Load PSE	21	32	47	66	82	88	94	98	100	100	100	100
4th Dust Load PSE	24	37	53	71	86	90	95	99	100	100	100	100
Composite Min PSE	2	3	7	14	29	35	47	68	84	92	96	97



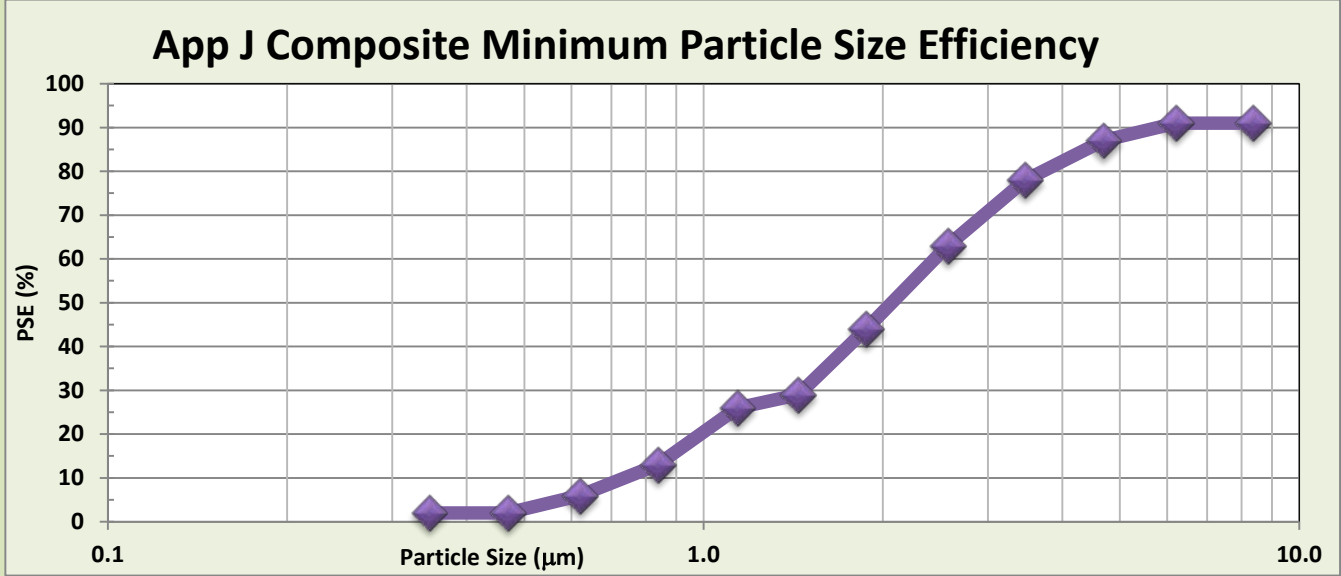
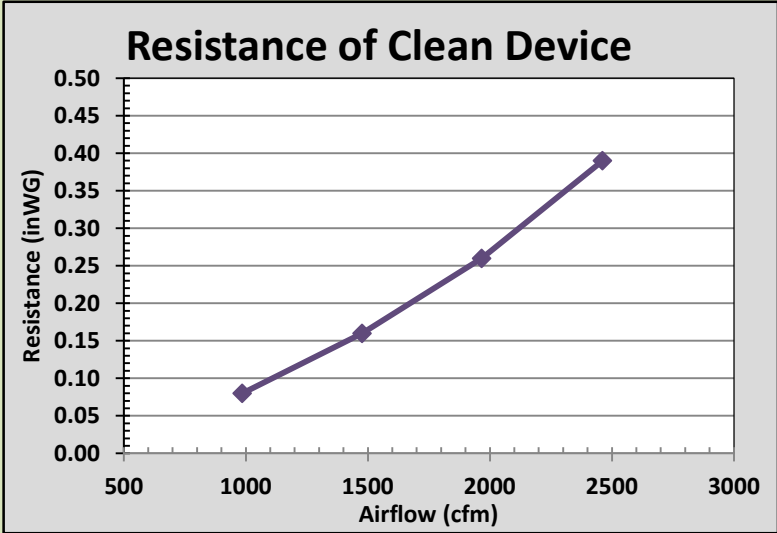
All testing is performed in compliance with the latest revision of ASHRAE Standard 52.2 in a state-of-the-art laboratory facility located at the Camfil USA headquarters in Riverdale, NJ. Test Reports without DHC values show efficiency only and the associated MERV value is a estimated value based on the single efficiency data shown. For more information, contact your local Camfil representative or distributor.

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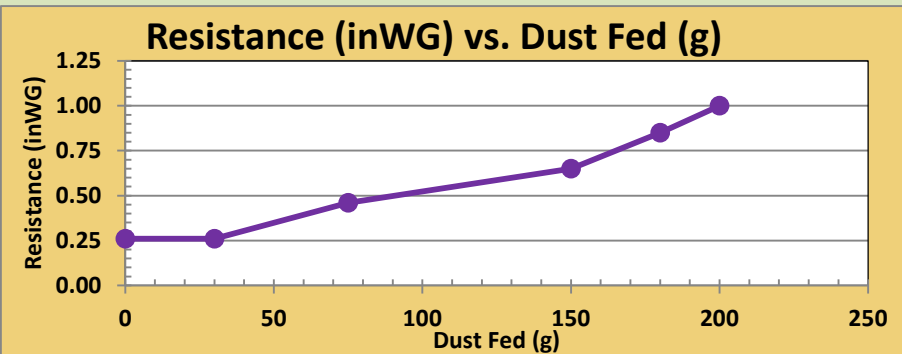
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Date:	01/19/2017	Test Number:	16206-012-KCL_00004507.047.aec
Manufacturer	Filter Model	Filter Part Number	
Camfil	30/30 Dual 9	406331-005	

Clean Resistance Table			
cfm	m ³ /s	inWG	Pa
986	0.47	0.08	20
1476	0.70	0.16	40
1966	0.93	0.26	65
2462	1.16	0.39	97



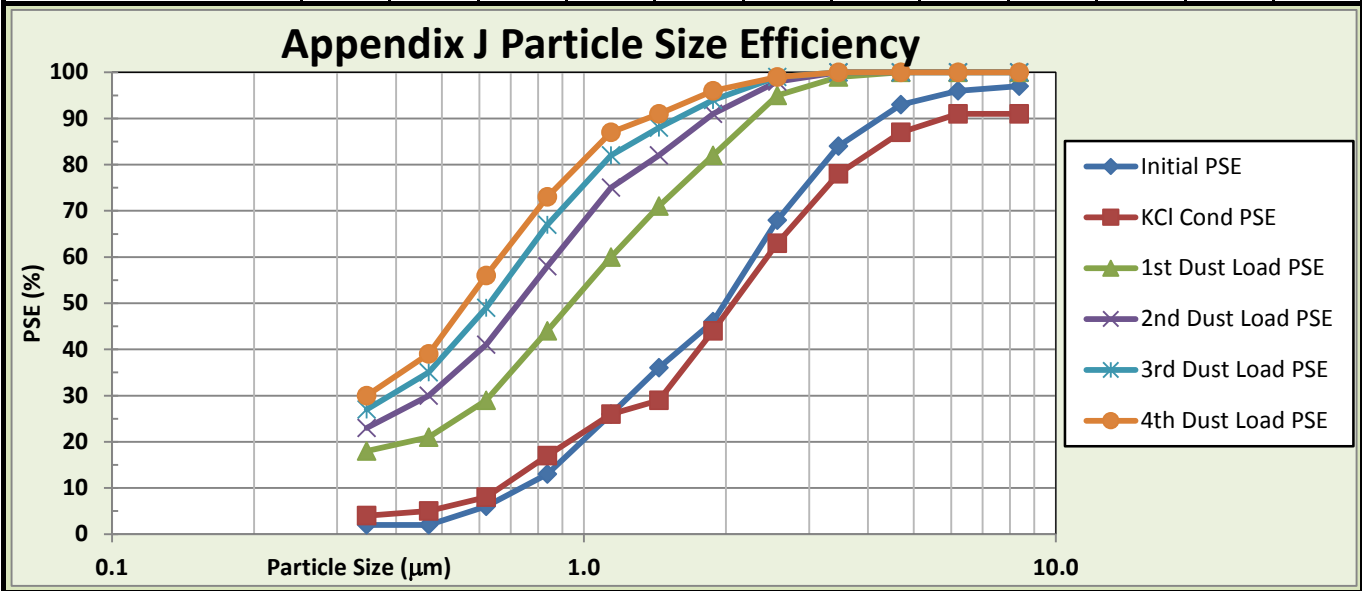
ΔP (inWG)	Dust Fed (g)
0.26	0
0.26	30
0.46	75
0.65	150
0.85	180
1.00	200





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Manufacturer		Filter Model							Filter Part Number			
Camfil		30/30 Dual 9							406331-005			
App J Efficiency Data Table												
	1	2	3	4	5	6	7	8	9	10	11	12
Minimum Dia (µm)	0.3	0.4	0.55	0.7	1.0	1.3	1.6	2.2	3.0	4.0	5.5	7.0
Maximum Dia (µm)	0.4	0.55	0.7	1.0	1.3	1.6	2.2	3.0	4.0	5.5	7.0	10.0
Geometric Mean (µm)	0.35	0.47	0.62	0.84	1.14	1.44	1.88	2.57	3.46	4.69	6.20	8.37
Initial PSE	2	2	6	13	26	36	46	68	84	93	96	97
KCl Cond PSE	4	5	8	17	26	29	44	63	78	87	91	91
1st Dust Load PSE	18	21	29	44	60	71	82	95	99	100	100	100
2nd Dust Load PSE	23	30	41	58	75	82	91	98	100	100	100	100
3rd Dust Load PSE	27	35	49	67	82	88	94	99	100	100	100	100
4th Dust Load PSE	30	39	56	73	87	91	96	99	100	100	100	100
Composite Min PSE	2	2	6	13	26	29	44	63	78	87	91	91



Bkg Concentration (particles/cm ³)	Avg Cond Aerosol Conc (particles/cm ³)	Cumulative Cond Duration (minutes)	Cumulative Cond CT (particles-min/cm ³)		
303.0	1.51E+05	790	1.23E+08		
Large Particle Concentration (Particles ft ³)	Ratio Small to Large (>20,000)	Conditioning ΔP (inWG)	Initial ΔP	Final ΔP	Same duct?
30,000	142,546	0.26	0.26	No	



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Manufacturer					Filter Model					Filter Part Number		
Camfil					30/30 Dual 9					406331-005		
KCI Conditioning Data Table	1	2	3	4	5	6	7	8	9	10	11	12
	Minimum Dia (µm)	0.3	0.4	0.55	0.7	1.0	1.3	1.6	2.2	3.0	4.0	5.5
Maximum Dia (µm)	0.4	0.55	0.7	1.0	1.3	1.6	2.2	3.0	4.0	5.5	7.0	10.0
Geometric Mean (µm)	0.35	0.47	0.62	0.84	1.14	1.44	1.88	2.57	3.46	4.69	6.20	8.37
Initial PSE	2	2	6	13	26	36	46	68	84	93	96	97
1st KCI Cond PSE	2	4	7	15	23	30	44	64	81	88	92	93
2nd KCI Cond PSE	4	5	8	17	26	29	44	63	78	87	91	91
3rd KCI Cond PSE												
4th KCI Cond PSE												
5th KCI Cond PSE												
Final KCI Cond PSE	4	5	8	17	26	29	44	63	78	87	91	91

