



3040 E. Cornwallis Road • PO Box 12194 • Research Triangle Park, NC 27709-2194 • USA
Telephone +1.919.541.6941 • Fax +1.919.541.6936 • mko@rti.org • www.rti.org

ASHRAE 52.2 DUST ARRESTANCE TEST REPORT

Manufacturer:	Filter Manufacturer
Product Name:	Air Cleaner 1
RTI Report No.	A04261601

**Test Laboratory:
RTI
3040 Cornwallis Road
Research Triangle Park, NC 27709
919-541-6941
mko@rti.org**

ASHRAE Std. 52.2 Arrestance Only Test Report Summary

This report applies to the tested device only.

Laboratory Data

RTI Report No.	<u>A04261601</u>	Date	<u>26-Apr-16</u>
Test Laboratory	<u>RTI International</u>		
Operator	<u>Pope</u>	Supervisor	<u>Owen/Hanley</u>
Particle Counter(s):	Brand <u>NA</u>	Model	<u>NA</u>

Device Manufacturer's Data

Manufacturer	<u>Filter Manufacturer</u>		
Product Name	<u>Air Cleaner 1</u>		
Product Model	<u></u>		
Test requested by	<u>Filter Manufacturer</u>		
Sample obtained from	<u>Filter Manufacturer</u>		
Catalog rating:	Airflow rate <u>NA</u>	Initial dP (in. wg)	<u>NA</u>
Specified test conditions:	Airflow (cfm) <u>1180</u>	Final dP (in. wg)	<u>0.50</u>
	Face Velocity (fpm) <u>295</u>		

Device Description

Nominal Dimensions (in.):	<u>24 x 24 x 1</u>	(height x width x depth)	
Generic name	<u>pleated panel</u>	Media color	<u>white</u>
Amount and type of adhesive	<u>NA</u>		
Other attributes	<u></u>		

Test Conditions

Airflow (cfm)	<u>1180</u>	Temperature (F)	<u>NA</u>	RH (%)	<u>NA</u>
Face Velocity (fpm)	<u>295</u>	Final Pressure Drop (in. wg)	<u>0.50</u>		
Test aerosol type:	<u>NA</u>				
Remarks	<u></u>				

Resistance Test Results

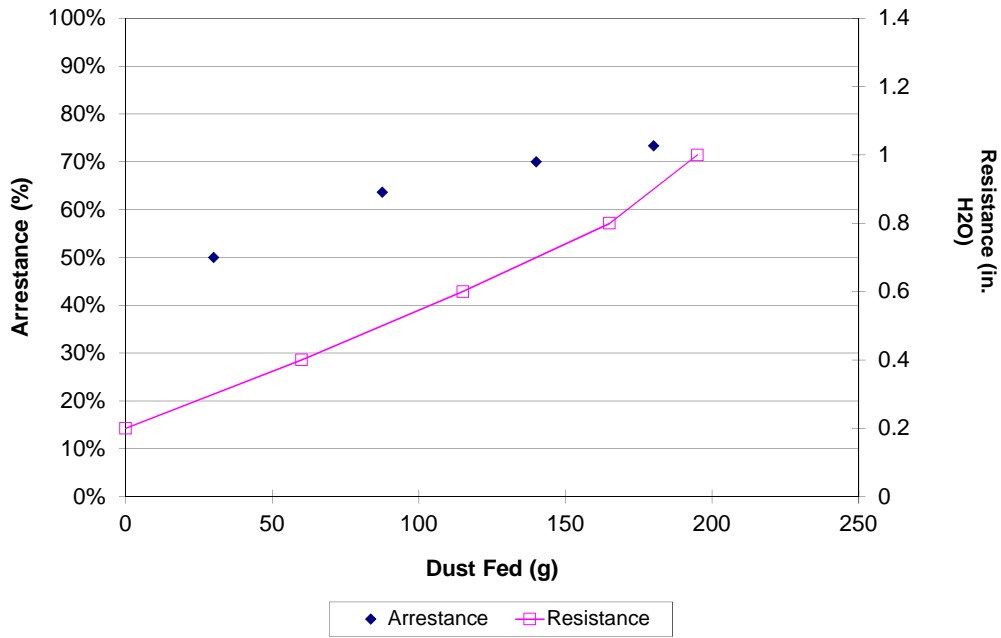
Initial resistance (in. wg)	<u>0.05</u>	Final resistance (in. wg)	<u>0.50</u>
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Minimum Efficiency Reporting Data

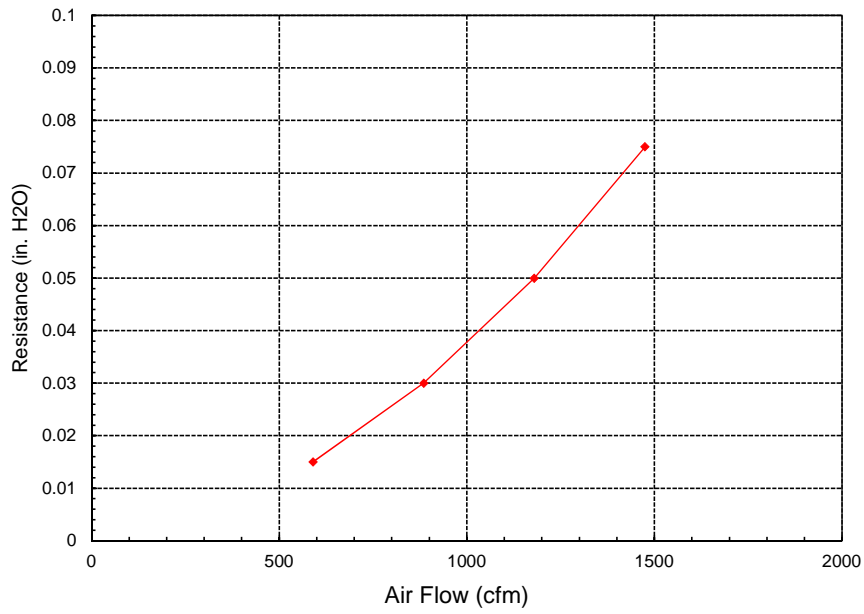
Air cleaner average Arrestance per Std 52.1:	<u>63%</u>
Dust Holding Capacity (g)	<u>122.0</u>

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Resistance and Arrestance
vs. Synthetic Loading Dust Fed



Resistance to Airflow for Clean Filter



TABULATED DATA SUMMARY

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Summary of Test Conditions:

Product Manufacturer	Filter Manufacturer
Product Name	Air Cleaner 1
Nominal Dimensions (in.)	24 x 24 x 1
Airflow (cfm)	1180
Final Resistance (in. H ₂ O)	0.50

Resistance to Airflow:

Airflow (%)	Airflow (m ³ /s)	Airflow (cfm)	Air Velocity (fpm)	Air Velocity (m/s)	Resistance (in. H ₂ O)	Resistance (Pa)
50	0.278	590	148	0.749	0.02	4
75	0.418	885	221	1.124	0.03	7
100	0.557	1180	295	1.499	0.05	12
125	0.696	1475	369	1.873	0.08	19

Resistance to Airflow with Loading at 1180 cfm

	Resistance (in. H ₂ O)	Resistance (Pa)	Dust Fed (g)	Arrestance (%)
Initial	0.05	12		
After first dust load	0.16	40	60	50%
After second dust load	0.28	68	55	64%
After third dust load	0.39	96	50	70%
After fourth dust load	0.50	124	30	73%
				63% Average
Dust Holding Capacity (DHC)	122.0 g			
Arrestance (Avg)	63%			