



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

Date: 28-Sep-17 TEST NO. 17-546-2

Test Report ANSI/ASHRAE Standard 52.2-2017

Filter Description

| | |
|--------------------------------|---------------------|
| Manufacturer | Viskon-Aire Corp |
| Filter Model | Series 153 |
| Part Number | 153-2424 |
| Generic Filter Type | Panel |
| Nominal Dimensions (H x W x D) | 24" x 24" x 1" |
| Pocket / Pleat Quantity | N/A |
| Media Type | Polyester |
| Est. Gross Media Area | 4.0 Ft ² |
| Adhesive Type | Dry Tack |



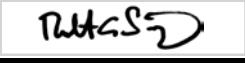
Test Conditions

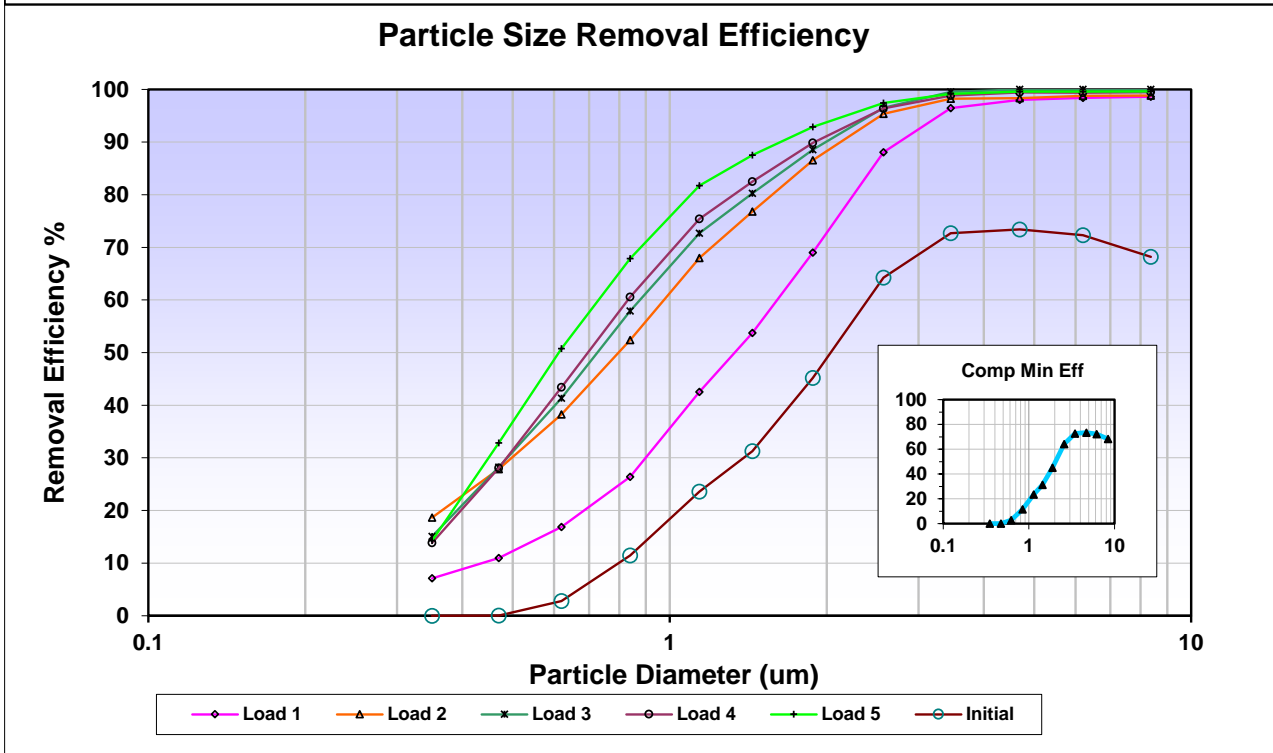
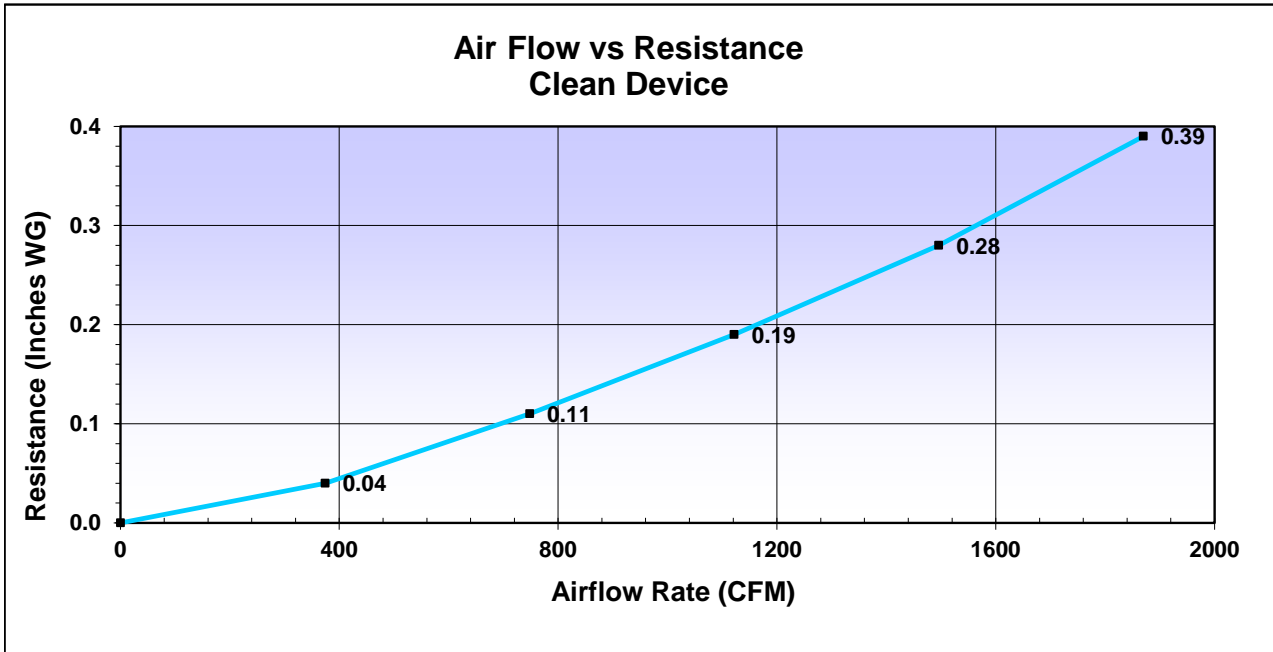
| | | | |
|-------------------------------|--------|----------------------------|----|
| Loading Dust Type | ASHRAE | Test Air Temp (degrees F.) | 73 |
| Barometric Pressure (In. Hg.) | 29.36 | Relative Humidity (%) | 37 |

Test Results

| | |
|---|--------------------------|
| Airflow Rate (CFM) | 1496 |
| Nominal Face Velocity (fpm) | 374 |
| Initial Resistance (in WG) | 0.28 |
| Final Resistance (in WG) | 1.50 |
| Dust Fed (gms) to Final Resistance | 305 |
| E1 (%) Composite Minimum Avg. Efficiency 0.30 - 1.0 um | 4 |
| E2 (%) Composite Minimum Avg. Efficiency 1.0 - 3.0 um | 41 |
| E3 (%) Composite Minimum Avg. Efficiency 3.0 - 10.0 um | 72 |
| Minimum Efficiency Reporting Value (MERV) | MERV 8 @ 1496 CFM |

Comments Tested For: Viskon-Aire Corp
 Final Pressure Drop ("w.c.) 1.50"w.c.
 Dust Holding Capacity (gms) 279
 Average Arrestance (%) 91.4

Test Performed by: JPS Approved By:  Test Completed: 28-Sep-17



Data - Initial Resistance

| Airflow (CFM) | Resistance (in WG) |
|---------------|--------------------|
| 0 | 0.00 |
| 374 | 0.04 |
| 748 | 0.11 |
| 1122 | 0.19 |
| 1496 | 0.28 |
| 1870 | 0.39 |

Data - Particle Removal Efficiency

| Particle Size Range (µm) | Geometric Mean Diam (µm) | Particle Removal Efficiency (%) | | | | | | | |
|--------------------------|--------------------------|---------------------------------|---------|---|--------|--------|------|------|------|
| | | CME | Initial | Load 1 | Load 2 | Load 3 | | | |
| 0.30 - 0.40 | 0.35 | 0.0 | 0.0 | 7.1 | 18.6 | 15.1 | 13.8 | 14.3 | |
| 0.40 - 0.55 | 0.47 | 0.0 | 0.0 | 11.0 | 27.9 | 28.2 | 28.1 | 32.9 | |
| 0.55 - 0.70 | 0.62 | 2.8 | 2.8 | 16.9 | 38.3 | 41.3 | 43.4 | 50.7 | |
| 0.70 - 1.00 | 0.84 | 11.5 | 11.5 | 26.4 | 52.4 | 57.9 | 60.6 | 67.9 | |
| 1.00 - 1.30 | 1.14 | 23.6 | 23.6 | 42.5 | 68.0 | 72.7 | 75.4 | 81.7 | |
| 1.30 - 1.60 | 1.44 | 31.3 | 31.3 | 53.7 | 76.8 | 80.3 | 82.5 | 87.5 | |
| 1.60 - 2.20 | 1.88 | 45.2 | 45.2 | 69.0 | 86.5 | 88.6 | 89.9 | 92.9 | |
| 2.20 - 3.00 | 2.57 | 64.2 | 64.2 | 88.1 | 95.4 | 96.5 | 96.4 | 97.4 | |
| 3.00 - 4.00 | 3.46 | 72.7 | 72.7 | 96.4 | 98.2 | 99.5 | 98.8 | 99.2 | |
| 4.00 - 5.50 | 4.69 | 73.4 | 73.4 | 98.0 | 98.3 | 100.0 | 99.4 | 99.6 | |
| 5.50 - 7.00 | 6.20 | 72.3 | 72.3 | 98.4 | 98.8 | 100.0 | 99.4 | 99.6 | |
| 7.00 - 10.00 | 8.37 | 68.2 | 68.2 | 98.6 | 98.8 | 100.0 | 99.5 | 99.6 | |
| | | | | Resistance after Dust Load (in w.c.) -----> | 0.32 | 0.59 | 0.89 | 1.20 | 1.50 |
| | | | | Dust Load (gms) -----> | 10 | 140 | 213 | 273 | 305 |

| 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. | µm | Stage 1 | Stage 2 | Stage 3 | Stage 4 | Stage 5 |
| 1 | 0.35 | 0.383 | 0.562 | 0.126 | 0.033 | 0.035 |
| 2 | 0.47 | 0.081 | 0.142 | 0.138 | 0.018 | 0.019 |
| 3 | 0.62 | 0.027 | 0.063 | 0.131 | 0.016 | 0.012 |
| 4 | 0.84 | 0.009 | 0.043 | 0.223 | 0.021 | 0.015 |
| 5 | 1.14 | 0.008 | 0.069 | 0.283 | 0.020 | 0.014 |
| 6 | 1.44 | 0.022 | 0.096 | 0.286 | 0.017 | 0.033 |
| 7 | 1.88 | 0.006 | 0.094 | 0.361 | 0.031 | 0.016 |
| 8 | 2.57 | 0.015 | 0.238 | 0.627 | 0.053 | 0.053 |
| 9 | 3.46 | 0.030 | 0.365 | 1.100 | 0.138 | 0.112 |
| 10 | 4.69 | 0.022 | 0.598 | 1.870 | 0.207 | 0.193 |
| 11 | 6.2 | 0.073 | 1.391 | 2.410 | 0.459 | 0.327 |
| 12 | 8.37 | 0.153 | 1.007 | 2.099 | 0.453 | 0.400 |