# ASTRO-PLEAT™

## STANDARD PLEATED FILTERS

# MERV13

**BEST**

★ ★ ★ ★ ★


**FILTER LIFE**
UP TO **90 DAYS**

POLLEN · DANDER · DUST · MITES · MOLD
SMOG · ODOR · SMOKE · BACTERIA · ALLERGENS

STAGE 1 · STAGE 2 · STAGE 3

## FEATURES AND BENEFITS

Air Filters Incorporated's **Astro-Pleat™** pleated filters are manufactured using a MERV 8, 11, or 13 rated filter media that effectively reduces and traps pollen, mold, dust, pet dander and dust mites from circulating throughout your home or business. Using an **Astro-Pleat™** filter to capture common airborne contaminates can help alleviate allergies and sinus irritations that can cause watery eyes, itchy throat, coughing and sneezing. Additional benefits from using the **Astro-Pleat™** air filter include extending the life of your air conditioning/ furnace system by removing dirt and dust so the HVAC unit isn't strained from air flow restriction.

## APPLICATIONS

- Commercial Buildings
- Residential
- Hospitals
- Schools and Universities
- Food Processing
- Pharmaceutical Industry
- Shooting Ranges
- Industrial
- Manufacturing

## CONSTRUCTION

- Made with premium synthetic fiber media that has a high dust holding capacity and filtering efficiency. Available in MERV 8, 11, or 13
- The synthetic filter media is reinforced with expanded metal backing to prevent media from sagging during use.
- Astro-Pleat's frame uses a die cut made from heavy duty beverage board to ensure filter integrity in high moisture applications.
- The filter media is internally glued to the filter frame to prevent contaminates from bypassing the media and recirculating in the air.
- When used as a pre-filter (stage 1), Astro-Pleat helps prolong the life of your mid and final stage filters
- Available in Standard and High Capacity
- UL 900 Approved

**CUSTOM** SIZES AVAILABLE

**ECO** FRIENDLY

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| | Nominal Size HxWxD (In.) | Actual Size HxWxD (In.) | High Capacity 300 FPM CFM | 300 FPM PD | 500 FPM CFM | 500 FPM PD | Media Area Sq Ft | Wt. Each (lbs.) |
|---|---|---|---|---|---|---|---|---|
| 1 - Inch Depth | 12x24x1 | 11-1/2" X 23-1/2" X 3/4" | 600 | 0.27 | 1000 | 0.45 | 3.96 | 0.4 |
| | 16x20x1 | 15-1/2" X 19-1/2" X 3/4" | 670 | 0.27 | 1120 | 0.45 | 4.32 | 0.4 |
| | 16x25x1 | 15-1/2" X 24-1/2" X 3/4" | 840 | 0.27 | 1400 | 0.45 | 5.41 | 0.5 |
| | 18x24x1 | 17-1/2" X 23-1/2" X 3/4" | 900 | 0.27 | 1500 | 0.45 | 5.94 | 0.6 |
| | 20x20x1 | 19-1/2" X 19-1/2" X 3/4" | 840 | 0.27 | 1400 | 0.45 | 5.55 | 0.6 |
| | 20x24x1 | 19-1/2" X 23-1/2" X 3/4" | 1000 | 0.27 | 1667 | 0.45 | 6.68 | 0.6 |
| | 20x25x1 | 19-1/2" X 24-1/2" X 3/4" | 1050 | 0.27 | 1750 | 0.45 | 6.96 | 0.7 |
| | 24x24x1 | 23-1/2" X 23-1/2" X 3/4" | 1200 | 0.27 | 2000 | 0.45 | 7.92 | 0.7 |
| 2 - Inch Depth | 12x24x2 | 11-3/8" X 23-3/8" X 1-3/4" | 600 | .18 | 1000 | .36 | 8.66 | 1.2 |
| | 16x20x2 | 15-1/2" X 19-1/2" X 1-3/4" | 670 | .18 | 1120 | .36 | 9.60 | 1.2 |
| | 16x25x2 | 15-1/2" X 24-1/2" X 1-3/4" | 840 | .18 | 1400 | .36 | 12.03 | 1.4 |
| | 18x24x2 | 17-3/8" X 23-3/8" X 1-3/4" | 900 | .18 | 1500 | .36 | 13.28 | 1.6 |
| | 20x20x2 | 19-1/2" X 19-1/2" X 1-3/4" | 840 | .18 | 1400 | .36 | 12.00 | 1.4 |
| | 20x24x2 | 19-3/8" X 23-3/8" X 1-3/4" | 1000 | .18 | 1667 | .36 | 14.43 | 1.8 |
| | 20x25x2 | 19-1/2" X 24-1/2" X 1-3/4" | 1050 | .18 | 1750 | .36 | 15.04 | 1.8 |
| | 24x24x2 | 23-3/8" X 23-3/8" X 1-3/4" | 1200 | .18 | 2000 | .36 | 17.61 | 2.0 |
| 4 - Inch Depth | 12x24x4 | 11-3/8" X 23-3/8" X 3-3/4" | 600 | .14 | 1000 | .31 | 13.61 | 2.0 |
| | 16x20x4 | 15-1/2" X 19-1/2" X 3-3/4" | 670 | .14 | 1120 | .31 | 15.43 | 2.0 |
| | 16x25x4 | 15-1/2" X 24-1/2" X 3-3/4" | 840 | .14 | 1400 | .31 | 19.34 | 2.6 |
| | 18x24x4 | 17-3/8" X 23-3/8" X 3-3/4" | 900 | .14 | 1500 | .31 | 21.03 | 2.8 |
| | 20x20x4 | 19-1/2" X 19-1/2" X 3-3/4" | 840 | .14 | 1400 | .31 | 18.52 | 2.6 |
| | 20x24x4 | 19-3/8" X 23-3/8" X 3-3/4" | 1000 | .14 | 1667 | .31 | 22.27 | 3.0 |
| | 20x25x4 | 19-1/2" X 24-1/2" X 3-3/4" | 1050 | .14 | 1750 | .31 | 23.20 | 3.2 |
| | 24x24x4 | 23-3/8" X 23-3/8" X 3-3/4" | 1200 | .14 | 2000 | .31 | 27.21 | 3.6 |

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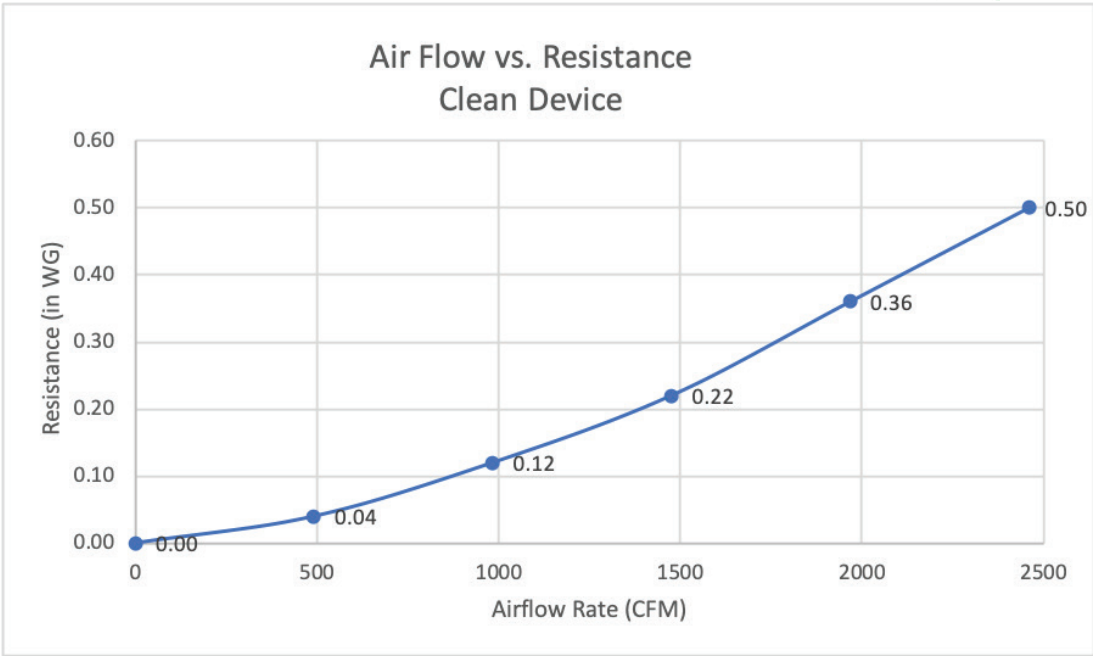


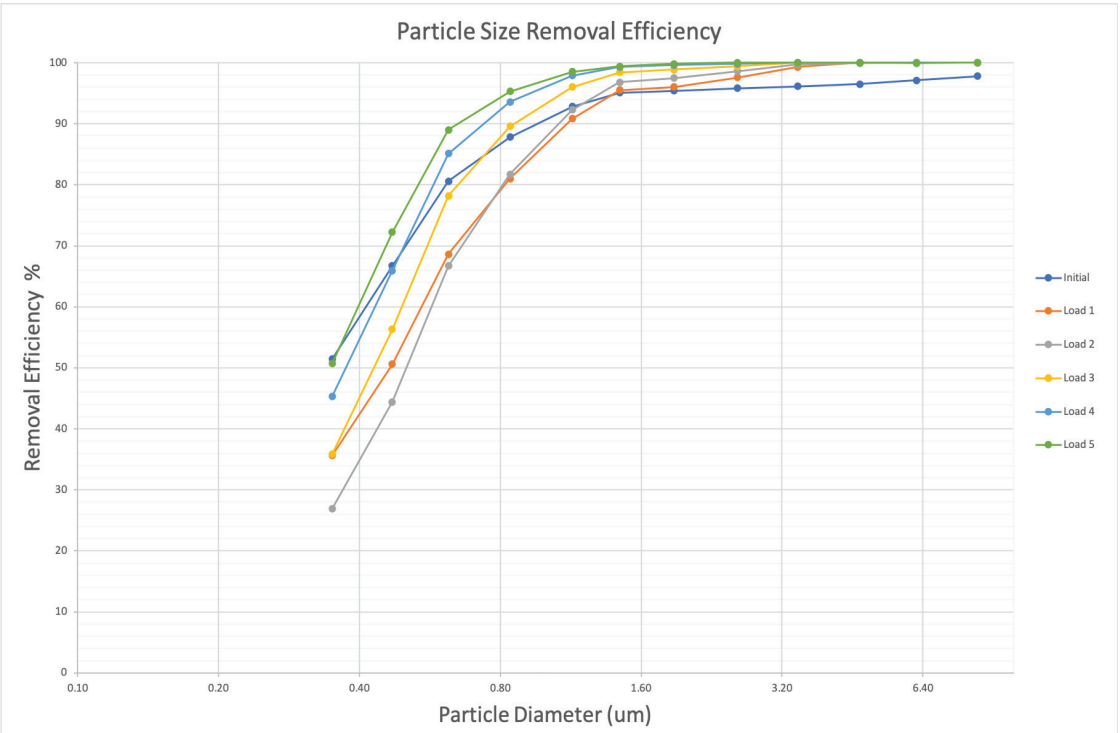


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## Particle Removal Efficiency

| | | Particle Removal Efficiency (%) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Particle Size Range (um) | Geometric Mean Diameter (um) | CME | Initial | Load 1 | Load 2 | Load 3 | Load 4 | Load 5 |
| 0.30 - 0.40 | 0.35 | 26.9 | 51.4 | 35.6 | 26.9 | 35.8 | 45.3 | 50.7 |
| 0.40 - 0.55 | 0.47 | 44.4 | 66.7 | 50.6 | 44.4 | 56.3 | 65.9 | 72.2 |
| 0.55 - 0.70 | 0.62 | 66.7 | 80.6 | 68.6 | 66.7 | 78.2 | 85.1 | 89.0 |
| 0.70 - 1.00 | 0.84 | 81.0 | 87.8 | 81.0 | 81.7 | 89.6 | 93.6 | 95.3 |
| 1.00 - 1.30 | 1.14 | 90.8 | 92.8 | 90.8 | 92.3 | 96.0 | 97.9 | 98.5 |
| 1.30 - 1.60 | 1.44 | 95.1 | 95.1 | 95.5 | 96.8 | 98.4 | 99.3 | 99.4 |
| 1.60 - 2.20 | 1.88 | 95.4 | 95.4 | 96.0 | 97.5 | 98.9 | 99.6 | 99.8 |
| 2.20 - 3.00 | 2.57 | 95.8 | 95.8 | 97.6 | 98.6 | 99.4 | 99.8 | 100.0 |
| 3.00 - 4.00 | 3.46 | 96.1 | 96.1 | 99.3 | 99.7 | 100.0 | 100.0 | 100.0 |
| 4.00 - 5.50 | 4.69 | 96.5 | 96.5 | 100.0 | 99.9 | 100.0 | 100.0 | 100.0 |
| 5.50 - 7.00 | 6.20 | 97.1 | 97.1 | 100.0 | 100.0 | 100.0 | 100.0 | 99.9 |
| 7.00 - 10.00 | 8.37 | 97.8 | 97.8 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Resistance after Dust Load (in WG) ---> | | | | 0.40 | 0.65 | 0.93 | 1.22 | 1.50 |
| Dust Load (gms) ----------> | | | | 5 | 45 | 75 | 95 | 108 |

| Initial Resistance | |
|---|---|
| Airflow (CFM) | Resistance (in WG) |
| 0 | 0.00 |
| 492 | 0.04 |
| 984 | 0.12 |
| 1476 | 0.22 |
| 1968 | 0.36 |
| 2460 | 0.50 |

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