



Better Air is Our Business®

AmericanAirFilter® **AstroCel® III**

High Capacity Mini-Pleat High Efficiency Particulate Air Filter (HEPA)

The AstroCel III HEPA filter is the latest arrival to a unique family of mini-pleat filters designed to meet the demanding airflow and efficiency requirements of the most critical applications.

- *Ideal for demanding operating conditions in critical applications*
- *Longer service life — 436 square feet of media — means fewer changeouts*
- *Low energy consumption and lower operating costs*
- *High capacity operation with minimal resistance to airflow; 2400 CFM rated airflow at 1 in. w.g.*
- *Chemical resistant anodized aluminum frame provides superior strength*
- *Gasket seal and gel seal designs available*

Longer Service Life and Lower Energy Consumption

Multiple mini-pleat media packs, assembled into a series of V-banks, permit substantially more media to be contained in the filter — double the media typically found in most HEPA filters. Maximum effective media area provides greater airflow capacity, low resistance, high dust holding capacity, and unusually long service life.

The V-bank configuration provides greater airflow capacity and longer service life, while lowering operating costs.

Typical Applications

AstroCel III HEPA filters are ideal for applications operating with higher airflows, up to 600 FPM, and requiring ultra low pressure drop:

- **Semiconductor and Electronics manufacturing**
- **Pharmaceutical processing**
- **Nuclear power stations***
- **Departments of Defense and Energy installations***
- **Photo film manufacturing/processing**
- **Hospitals, Laboratories, and Optical facilities**
- **Food processing**

*See Brochure NES-1-708



*AstroCel® III filters with
Gel Seal Frame (front) and
Gasket Seal Frame (back).*



AstroCel® III filters meet efficiency requirements established for LEED® Project Certification.

Designed for High Performance

Media Configuration Reduces Operating Costs

AstroCel III filter media is made from sub-micron glass fibers formed into a high density paper. Glass filament separators are used to form the media into mini-pleat panels that withstand high velocity airflow. The V-bank configuration optimizes media performance for high airflow at very low resistance. Mini-pleat packs are sealed to the frame with two-component polyurethane to increase rigidity and prevent bypass leakage.

Anodized Aluminum Construction

Extruded aluminum frame components resist chemical corrosion, provide high strength, and are lighter. Cell sides are made from a single extrusion to maximize construction integrity.



Gel Seal Frame



**Gel Seal Frame
Extractor Clips**

AstroCel® III filters are designed for installation into high integrity filter holding frames, side access housings, and bag in/bag out systems. Gasket seal filters are available, as well as gel seal filters for frames and systems designed with knife-edge seal framing. Extractor clips are offered for side access systems requiring gel seal frames.

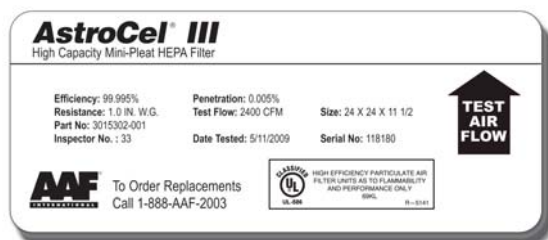
Life Cycle Valuation Program

The large media area and lower resistance of the AstroCel III filter can greatly reduce operating costs. Your local AAF sales representative uses an exclusive software tool, Life Cycle Valuation (LCV), to help you choose the optimum filter design for your specific operating conditions.

Filter / Stage	Eff. / Merv	Material (\$)	Disposal (\$)	Labor (hrs)	Service Life (mos)	Initial Oper. Res.	Final Oper. Res.
MEGAcel I	99.99	390.00	100	1	25.00	0.7	1.7

Guaranteed Performance

Every AstroCel III filter is individually tested before it leaves the factory — your assurance that it meets rated efficiency. The actual test data is indicated on the label. Each filter is also assigned a serial number and a permanent record is kept of the materials of construction and performance.



Product Information

Seal Method	Size (in.)	Airflow (CFM)	Resistance @ Airflow (in. w.g.)	Media Area (sq. ft.)
Gasket	24 x 12 x 11½	1125	1.0	174
Gasket	24 x 24 x 11½	2400	1.0	436
Gasket	23¾ x 23¾ x 11½	2270	1.0	426
Gel	24 x 12 x 11½	1025	1.0	160
Gel	24 x 24 x 11½	2220	1.0	398

Efficiency for all models is 99.99% @ 0.3 micron.

Dimensions are actual and do not include gasket.

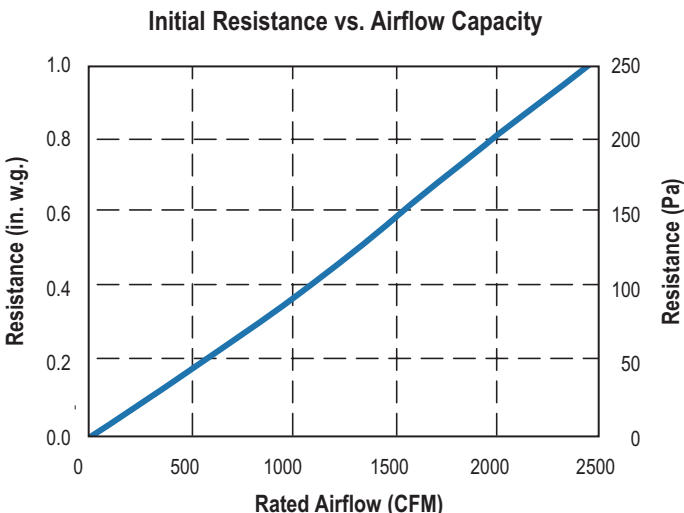
Additional sizes are available. Call your local AAF sales representative, **888.AAF.2003**, for availability.

Operating Data

Maximum Operating Temperature: 175°F (80°C).

Underwriters Laboratories Inc. Classification: AstroCel III filters are classified Class 2 in accordance with UL Standard 900 and CAN 4-S111.

Performance Data



Performance data is based on AstroCel III 24 x 24 x 11½ gasket seal filter.