

# AmericanAirFilter<sup>®</sup> AstroCel<sup>®</sup> II

### High Quality HEPA and ULPA Filters

- Mini-pleat design lowers operating costs
- Lightweight and compact
- Low off-gassing components
- Wide range of efficiencies
- Leak and/or scan tested

The AAF AstroCel® II is a unique family of mini-pleat HEPA and ULPA filters specially designed to meet the demanding airflow and particulate control requirements of cleanroom applications. It is available with knifeedge or gasket seal frames for installation in any type of grid system or frame.

All AAF AstroCel® II filters are custombuilt to provide the optimum solution for a wide range of application requirements. Available with a variety of media pack configurations and meeting the classifications ranging from H13 to U17 in accordance with EN 1822.

The AstroCel® II filters are designed for use in cleanrooms, clean benches, semiconductor, pharmaceutical, biotech, food processing, and other industries in which airborne contaminants must be carefully controlled.

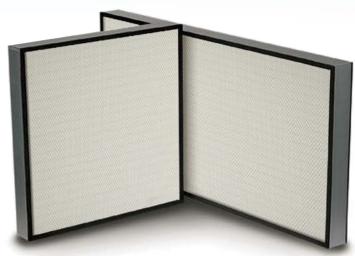
### Mini-Pleat Design Lowers Operating Costs

The mini-pleat design of the AstroCel® II combines maximum efficiency with low pressure drop, thus reducing operating costs.

Special thermoplastic heads are used to maintain equal spacing between pleats for optimal airflow, resulting in high dust holding capacity and full use of the entire depth of the filter.

### **Lightweight and Compact**

The AstroCel® II is made of moisture resistant and fire-retardant glass fiber media. The media pack is permanently bonded to the lightweight anodized extruded al aluminum frame, with a DIN classified, white urethane adhesive.









One-piece Autogasket

Neoprene gasket

The gasket seal frame is designed for use in clean benches and AstroFan FFU. AstroCel® II is available with one-piece Autogasket or Neoprene Gasket.

The knife-edge frame is designed specifically for AstroGel ND wet seal grid system to assure airtight sealing

A white epoxy coated faceguard on both air leaving and air entering sides protect media from damage, The lightweight, compact design makes installation easy in open plenum, fan filter modules and clean benches.

### Low Off-Gassing Components

All components used are low off-gassing to meet the stringent requirements of specific industries.

#### Wide Range Efficiencies

Available in a wide range of efficiencies:

Efficiency	Media Color EN 1822 @ MPPS				
99.99% @ 0.3µm	99.95% (H13)				
99.999% @ 0.3µm	99.995% (H14)				
99.9995% @ 0.12µm	99.9995% (U15)				
99.99995% @ 0.12µm	99.99995% (U16)				
99.999995% @ 0.12µm	99.999995% (U17)				

### Leak and/or Scan Test

AAF has established an extensive testing methodology for all AstroCel® II HEPA and ULPA filters to meet the criteria specified for its application prior to shipment.

All HEPA filters are leak tested and ULPA filters are scanned with a laser spectrometer with PSL particles to determine the overall efficiency in accordance with IES-RP-CCO34-1.

# **AmericanAirFilter**

## AstroCel® II

### **Specifications**

Maximum Operating Temperature : 70°C (158°F) Average Face Velocity : 0.45 m/s

Frame : Anodized extruded aluminum

Separators : Thermoplastic

Sealant : Fire retardant polyurethane sealant
Gasket : One piece foaming polyurethane
Faceguard Location : Epoxy powder coated steel

Media : Moisture resistant and fire-retardant fiber glass media

#### **Performance Date**

Depth (mm)	Rated Initial Resistance								
	H13		H14		U15		U16		
	(In. WG)	(Pa)	(In. WG)	(Pa)	(In. WG)	(Pa)	(In. WG)	(Pa)	
69	0.44	110	0.50	125	0.58	145	0.70	175	
93	0.32	80	0.44	110	0.46	115	0.48	120	
117	0.28	70	0.32	80	0.36	90	0.42	105	
88	0.44	110	0.50	125	0.58	145	0.70	175	
110	0.32	80	0.44	110	0.46	115	0.48	120	
134	0.28	70	0.32	80	0.36	90	0.42	105	

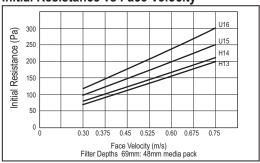
### Standard Sizes

	Available Depths (Nominal Sizes)  x Width Knife Edge Frame Airflow										
Height x Width		Gask	Gasket Seal (Day) Frame			Knife-Edge Frame					
(Inches)	(mm)	23/4"(69mm)	35/8"(93mm)	4 <sup>5</sup> /8"(117mm)	31/2"(88mm)	4 <sup>3</sup> /8"(110mm)	51/4"(134mm)	0.45 m/s m³/ <sub>h</sub>			
12 x 12	305 x 305	•	•	•				150			
12 x 24	305 x 610	•	•	•				300			
20 <sup>7</sup> / <sub>8</sub> x 20 <sup>7</sup> / <sub>8</sub>	530 x 530	•	•	•				450			
20 <sup>7</sup> / <sub>8</sub> x 24	530 x 610	•	•	•				520			
207/8 x 447/8	530 x 1140	•	•	•				980			
24 x 12	610 x 305					•	•	300			
24 x 20 <sup>7</sup> /8	610 x 530							520			
24 x 24	610 x 610	•				•	•	600			
24 x 30	610 x 762	•	•	•	•	•	•	750			
24 x 36	610 x 915	•	•	•		•	•	900			
24 x 48	610 x 1120	•	•	•	•	•	•	1200			
24 x 60	610 x 1524	•	•	•	•	•	•	1500			
30 x 30	762 x 762	•	•	•	•	•	•	940			
30 x 36	762 x 915	•	•	•	•	•	•	1130			
30 x 48	762 x 1220	•	•	•	•	•	•	1500			
30 x 60	762 x 1524	•	•	•	•	•	•	1880			
36 x 30	915 x 762	•	•	•	•	•	•	1130			
36 x 36	915 x 915	•	•	•	•	•	•	1350			
36 x 48	915 x 1220	•	•	•	•	•	•	1800			

Note: 1). Standard knife-edge skirt: 20 mm. Other skirt lengths are also available.

2). Special sizes available request.

### **Initial Resistance vs Face Velocity**





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AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.