# AIR FILTRATION PRODUCTS & CAPABILITIES

# **OUR QUALIFICATIONS**

AAF International is the name recognized globally for quality, expertise and innovation in air filtration. As one of the world's largest manufacturers of commercial, industrial and residential air filters, AAF International makes a wide variety of products for removing and controlling airborne contaminants. Because the need for clean air is universal, AAF designs air filter products for use in all types of air filtration systems, regardless of the original manufacturer. The scope of applications is unlimited and ranges from ultra-clean air for electronics and pharmaceutical manufacturing, to preventing the spread of infection in hospitals. We protect people, processes and systems every minute of every day.

AAF International is a company with an outstanding industry record. Our 80 years of providing clean air, and the diversity of our customers' air filtration requirements, have given us the expertise to provide products and systems based on a broad industry perspective. Superior industry knowledge and an outstanding team of indoor air quality professionals mean our customers receive top quality products and services at a competitive cost.



The original American Air Filter Company.



AAF headquarters, Louisville, Kentucky.

# **ABOUT AAF INTERNATIONAL**

AAF International is one of the world's largest manufacturers and marketers of air filtration products and systems. Selling globally under the AmericanAirFilter<sup>®</sup> and AAF<sup>®</sup> brand names, our products include commercial, industrial and residential air filters; air pollution control products and systems; and machinery filtration and acoustical systems.

With operations in sixteen countries and more than 2,100 employees worldwide, AAF places great emphasis on research and development to meet the increasing demand for cleaner air. AAF's team of professionals are totally committed to the development and production of quality air filtration products. As testimony to this commitment, our Louisville, KY, Headquarters has been ISO certified, as well as the following locations: Fayetteville, AR; Columbia, MO; Cramlington, Northumber-land, UK; Emmen, The Netherlands; Vitoria, Spain; Malaysia; China and Singapore. Other locations are in the process of complying with the applicable ISO standard. This certification assures our customers of consistent quality in every product and service we provide.

As a member of the Hong Leong organization, AAF is supported by the financial resources of a multinational conglomerate involved in financial services, real estate investment and the manufacture and distribution of industrial, consumer, and high technology products. Many years ago, we adopted the slogan, Better Air is Our Business<sup>®</sup>, to simply state our purpose. Better Air is just as applicable today as it was in 1921, when a clever entrepreneur operating an automobile paint shop discovered the solution to dirt settling on his freshly painted automobiles. His "filter" discovery, consisting of steel wool and chicken wire, was so successful that he soon stopped painting automobiles and began selling filters.

The same pioneering spirit that led to the formation of the original American Air Filter Company 80 years ago, is still alive today.

## **OUR SPECIALTY - IMPROVING INDOOR AIR QUALITY**

The EPA ranks indoor air as one of the top five environmental threats to human health. According to the World Health Organization, 30% of commercial buildings show signs of sick building syndrome. As evidence of how pervasive this problem is, IAQ has been ranked the Number 1 management issue by the International Facilities Management Association.

Many factors contribute to poor IAQ. But the largest contributor is particulate dust and microbial contamination in the air we breathe. According to data accumulated in a study of 1,136 public buildings conducted by a leading IAQ consulting firm, over 70% of the contaminants directly responsible for the deterioration of IAQ are airborne particulate. Over 90% of these particulate are in the lung-damaging, submicron size and are not visible to the human eye.

As the recognized leader in providing solutions for improving IAQ, we have developed an easy to implement 3-step approach to improving the quality of air exiting your HVAC system.



Duct work, drip pans, and air intakes have always been major point sources for microbial contamination in HVAC systems. These surfaces trap dust, pollen, and other microbials that reduce the heat transfer efficiency of HVAC units and contaminate the air supply.

#### 1. Trap It

Remove contaminants from the air entering your facility through the HVAC system. AAF's selection of prefilters and high efficiency final filters, designed for virtually any application, will remove the dust particles and microbial contamination most likely to cause deterioration of your facility's IAQ.

#### 2. If Trapped, Don't Let It Grow

Air filters are designed to trap and concentrate particulate air contaminants including viable fungal and bacterial spores. The presence of Intersept<sup>®</sup> antimicrobial preservative in the filter media is intended to inhibit growth of organisms in contact with the filter media.

#### 3. If Not Trapped, Control Its Growth

No filtration system captures all contamination in the HVAC system. Dirty cooling coils and leaks in ductwork, downstream of the filter bank, can contribute to poor IAQ in your facility - each system is unique. Your AAF IAQ Specialist has the knowledge and experience to help. Just give us a call.



AAF filters with Intersept<sup>®</sup> are your first step in a total systems approach to improved IAQ.

## 21ST CENTURY FILTER TECHNOLOGY

AAF offers the most comprehensive engineering and manufacturing capabilities in the industry. With advanced design and in-house testing facilities in the U.S., Europe and Asia, we are unsurpassed in our ability to design air filters to any specification.

All AAF products are guaranteed to meet rated performance standards based on industry accepted test procedures. Rigid quality control procedures ensure consistent performance. Quality control inspections are conducted throughout the manufacturing process, from incoming raw materials to random checks on finished goods.

# INNOVATIVE ENGINEERING AND DESIGN

Our Engineering Department consists of two groups, Research and Development and Product Engineering.

The Research and Development group is headquartered in Louisville, KY, with staff located in Europe and Asia. Each member of the group is committed to advancing the state-of-the-art in air filtration. Their role in serving AAF's customers is to recognize emerging needs and anticipate future air filtration requirements, in order to provide solutions in a timely manner. Their accumulated years of experience, in synergy with a worldwide network of academic and industrial resources, ensure that AAF will always offer excellence in air filtration.

The Product Engineering staff is located in Louisville and in key manufacturing facilities around the world. They are a team focused on current markets, with an objective of continuous improvement in products and services to provide maximum value to our customers. They also quickly adapt our products to meet short-term changes in air filtration requirements as they arise in the marketplace.



## **AIR FILTRATION FOR WORLD MARKETS**



Around the globe, AAF and AmericanAirFilter brand air filters are meeting the need for clean air in industrial plants, hospitals, schools, airports, museums, commercial buildings, hotels and shopping malls. Our residential air filter products are sold by major retailers and home centers.

From inexpensive disposable panel filters to high efficiency, extended surface filters with Intersept<sup>®</sup>, we market the widest range of air filters available. We've developed and introduced most of the filter designs used throughout the industry, including the mini-pleats, extended surface bag filters, and the incredible, new PerfectPleat<sup>®</sup>.

We have also focused our resources on meeting the specialized clean air requirements for specific industries. For example, in the semiconductor industry, AAF pioneered many of the techniques and products used to clean air in cleanroom operations and processes. We understand the critical nature of contamination-controlled environments. Our engineers are active in standardization committees worldwide and have played an active role in establishing new standards for cleanroom applications. We provide the full range of cleanroom air filtration products and systems, including HEPA filters, ducted ceiling modules and lighting fixtures.

# **PRODUCT INFORMATION**

# ASHRAE FILTERS

### PANEL/ PLEATED FILTERS



**5700<sup>™</sup>** - Built for long lasting service life under heavy loading conditions. The dense media pad is heavily coated with AAF's exclusive Viscosine<sup>®</sup> adhesive to maintain its dirt-trapping characteristic over the life of the filter. (*Brochure Ref No. CI-5700-01-SIN/1002*)

and the second sec	<b>5700</b> ™
Media	Fiberglass
Frame	Moisture resistant board
Nominal Depth	1& 2" (25 & 51MM)
Average Arrestance	80-85%
Rated Face Velocity	Up to 625 FPM (3.2 M/S)
Max. Operating Temp.	66°C (150°F)
U.L. Classification	Class 2

## AirCobra<sup>TM</sup> Link and Panel -

Self-sealing design prevents dirty air bypass; permits fast installation; requires no clips, latches, or other holding devices. Every AirCobra<sup>TM</sup> filter incorporates SAAF-tac, AAF's environmentally-safe filter adhesive. *(Brochure Ref No. AFP-1-152A)* 



Media	Moisture resistant polyester
Туре	Link & Panel
Efficiencies	25-30% (2-ply), 35-40% (3-ply) &
	45-50% (4-ply)
Average Arrestance	80-85%
Rated Face Velocity	Up to 625 FPM (3.2 M/S)
Max. Operating Temp.	66°C (150°F)
U.L. Classification	Class 1 & 2



**AmAir**<sup>®</sup> - Constructed with AAF's totally unitized, double wall moisture resistant die-cut beverage frame. The media pack is bonded inside the frame at all points and the pleat support grid is made from expanded metal. Typically used as a prefilter to prolong the life of higher efficiency filters. Available in a wide variety of grades. Available with INTERSEPT<sup>®</sup> antimicrobial. (*Brochure Ref No. CI-AMAIR-04-SIN/0505*)

	300E	200E	100E
Grade	Premium	Commercial	Standard
Media	Non-woven	cotton synthetic	blend
Frame	Moisture re	sistant beverage	board
Support Grid	Expanded N	vletal	
Efficiencies	25-30%		
Nominal Depth	1, 2 & 4" (2	25, 51 & 102M	M)
Max. Operating Temp.	90°C (200°	F)	
U.L. Classification	Class 2		

**AmAir**<sup>®</sup> **500E** - The same unitized construction as the AmAir<sup>®</sup> 300E except that the media consists of a special combination of high loft glass with synthetic scrim backing. (*Brochure Ref No. CI-AMAIR500-01-SIN/0502*)

	AmAir <sup>®</sup> 500E
Grade	High efficiency
Media	High loft glass or synthetic
Frame	Moisture resistant beverage board
Support Grid	Expanded Metal
Efficiencies	45-55%
Nominal Depth	2 & 4" (51 & 102MM)
Max. Operating Temp.	90°C (200°F)
U.L. Classification	Pending

#### AmAir® HT (High Temperature) -

Designed for applications with continuous operating temperatures up to 260°C (500°F). The special high loft glass media is bonded into a sturdy aluminized steel frame to ensure a rigid, strong construction.



	AmAir <sup>®</sup> HT
Grade	High temperature
Media	Ultra-fine glass fibers
Frame	Aluminized steel frame
Support Grid	Wire grid
Efficiencies	30-35%
Nominal Depth	2 & 4" (51 & 102MM)
Max. Operating Temp.	260°C (500°F)
U.L. Classification	Class 1



#### PerfectPleat<sup>™</sup> Premium HM & Premium -

Consistent self-supporting media with process controlled fiber size and blend. Designed to withstand significant abuse. Recommended for high moisture applications. *(Brochure Ref No. AFP-1-200)* 

	PerfectPleat <sup>™</sup> Premium HM & Premium
Media	Synthetic fibers
Frame	Beverage board
Nominal Depth	2" (51MM)
Efficiencies	25-30%
Max. Operating Temp.	66°C (150°F)
U.L. Classification	Class 2

## **POCKET FILTERS**

**DriPak® 2000** - Made of layered melt blown synthetic, water resistant media featuring a unique, ultrasonically sealed pocket configuration. Ideal for use in healthcare facilities, automotive paint booth, commercial buildings and a variety of industrial applications. Available with INTERSEPT® antimicrobial. (Brochure Ref No. AFP1-114E)



**DriPak**<sup>®</sup> - Made of micro-fine glass fiber, protected by a thin layer of scrim to provide lower resistance and higher cleaning capacity. The pockets are span stitched with durable sealant for protection under heavy loading conditions. Available with INTERSEPT<sup>®</sup> antimicrobial. (*Brochure Ref No. AFP-1-120*)

	DriPak <sup>®</sup> 2000
Media	Meltblown synthetic
Efficiencies	40-45%, 60-65%, 80-85% & 90-95%
Nominal Depth	12, 15, 19, 21, 30 & 36"
	(305, 381, 483, 534, 762 & 914MM)
Max. Operating Temp.	66°C (150°F)
U.L. Classification	Class 2
	DriPak®
Media	Micro-fine fiberglass
Efficiencies	60-65%, 80-85% & 90-95%
Nominal Depth	12, 15, 19, 21, 30 & 36"
•	(305, 381, 483, 534, 762 & 914MM)
Max. Operating Temp.	66°C (150°F)
U.L. Classification	Class 2



**AirCobra™ Cube** - Self-sealing design provides fast, easy installation; requires no clips, latches, or other holding devices. High dust holding capacity is ideal for use as prefilter in paint overspray booth. (Brochure Ref No. AFP-1-160)

AirCobra™ Cube

Media	Moisture resistant polyester media
Туре	Cube (Single & two pockets)
Efficiencies	25%
Nominal Depth	10, 15 & 20" (254, 381 & 508MM)
Max. Operating Temp.	66°C (150°F)
U.L. Classification	Class 2

### **COMPACT FILTERS**

VariCel<sup>®</sup> - High & medium efficiency extended surface filter; characterized by low initial resistance and high dust holding capacity particularly suited for Variable Air Volume (VAV) systems. Available in a variety of materials and headers for different applications. Available with INTERSEPT<sup>®</sup> antimicrobial (90% to 95% efficiency). (Brochure Ref No. AFP-1-158M)



VariCel<sup>®</sup> C - Commercial Grade. (Brochure Ref No. CI-VARIC-01-SIN/0302)

	VariCel <sup>®</sup> & VariCel <sup>®</sup> C
Media	Dual density, ultra-fine glass fibers
Separators	Corrugated aluminium
Sealant	Fiberglass pack or glue
Frame	Galvanized steel particle board
Efficiencies	90-95%, 80-85% & 60-65%
Nominal depth	6 & 12" (152 & 292MM)
Max. Operating Temp.	93°C (200°F) - 177°C (350°F)
U.L. Classification	Class 1



**VariCel® I HT** - Similar in construction to the VariCel® I except designed to handle high temperature applications such as automotive paint drying ovens where temperatures may reach 500°C (900°F).

	VariCel® I HT
Media	Dual density, ultra-fine fiberglass
Frame	Aluminized steel
Efficiencies	90-95% & 60-65%
Nominal depth	12" (292MM)
Max. Operating Temp.	260°C (500°F) - 480°C (900°F)
U.L. Classification	Class 1

### **MINI-PLEAT FILTERS**



VariCel<sup>®</sup> II - Medium and High Efficiency micro-fine glass fiber filter, made with AAF's exclusive Slim Line Design, mini-pleat separator concept. Available with INTERSEPT<sup>®</sup> antimicrobial (90-95% efficiency). (Brochure Ref No. AFP-1-237J)

VariCel<sup>®</sup> II C - Commercial Grade. (Brochure Ref No. CI-VARIIC-01-SIN/0302)

	VariCel® II & II C
Media	Dual density, ultra-fine fiberglass
Separators	Thermoplastic beads
Frame	Foil laminated moisture resistance
	fiber board or beverage board
Efficiencies	90-95%, 80-85% & 60-65%
Nominal depth	4" (102MM)
Max. Operating Temp.	66°C (150°F)
U.L. Classification	Class 2

VariCel<sup>®</sup> II M & II MH - Both filters are constructed using the same microglass paper media, mini-pleat arrangement and efficiencies of the VariCel<sup>®</sup> II. The difference is the VariCel<sup>®</sup> II M & MH are built with metal cellsides. VariCel<sup>®</sup> II MH adopts the VariCel<sup>®</sup> I unique interlocked cellsides and header. The VariCel<sup>®</sup> II M uses a



U-channel frame. They offer the right combination of rugged construction, high efficiency and convenience for both front and side access housing. Available with INTERSEPT<sup>®</sup> antimicrobial (90-95% efficiency). (Brochure Ref No. CI-VARIIM-01-SIN/1002)

	VariCel® II M & II MH
Media	Dual density, ultra-fine fiberglass
Separators	Thermoplastic beads
Frame	Galvanized steel
Efficiencies	90-95%, 80-85% & 60-65%
Nominal depth	4" (102MM)
Max. Operating Temp.	66°C (150°F)
U.L. Classification	Class 2



VariPak 2000 - Designed using minipleat concept featuring a wide variety of cell side materials and configurations ideally suited for HVAC systems. VariPak 2000 is made of dual density, water repellent fiberglass media, which allows particles to be collected throughout the full thickness of the media. The 90-95% version is also available with INTERSEPT<sup>®</sup> antimicrobial. (Brochure Ref No. RA-2-509-IN-1-0699)

	VariPak 2000	
Media	Dual density, ultra-fine fiberglass	
Separators	Thermoplastic beads	
Frame	Galvanized steel, plywood, MDF, and	
	particle board	
Efficiencies	90-95%, 80-85% & 60-65%	
Nominal depth	6 & 12" (152 & 292MM)	
Max. Operating Temp.	70°C (158°F)	

**VariCel® V** - High capacity, low resistance mini-pleat extended surface filters designed for operation up to 750 fpm (3.8 m/s). Made of dual density ultra-fine glass fiber media and corrosion resistant components. Ideal choice for installation in humid areas and VAV systems.



(Brochure Ref No. CI-VARV-02-SIN/0505)

	VariCel <sup>®</sup> V
Media	Dual density ultra-fine fiberglass
Separators	Thermoplastic beads
Frame	Plastic & aluminium
Efficiencies	95%, 80% & 70%
Nominal depth	12" (305MM)
Max. Operating Temp.	70°C (158°F)
U.L. Classification	Class 2

# HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTERS

### **COMPACT FILTERS**

## AstroCel<sup>®</sup> I & HCX (High Capacity) -

HEPA filters for use in cleanrooms, hospitals, pharmaceutical plants and other areas requiring the very highest levels of contamination control. The pleat spacing is



maintained by corrugated aluminium separators, and the media pack is thoroughly sealed to the inside of the cell sides with an adhesive. Available in a wide range of sizes, capacities, separator designs, bonds, and cell side materials. Also available with INTERSEPT<sup>®</sup> antimicrobial. (Brochure Ref No. AFP-1-110R)

**AstroCel® I HT (High Temperature)** - The same construction as the AstroCel® I filter except that the High Temperature filter is made with stainless steel or aluminum cell sides and special sealant specifically built for applications with continuous operating temperatures up to 750°F (399°C).

	AstroCel® I	НСХ	НТ
Grade	Standard	High Capacity	High Temp.
			& Nuclear
Media	Ultra-fine fire retardant fiberglass		
Separators	Corrugated aluminium, plastic & vinyl		
Frame	Aluminium, galvanized steel, stainless steel,		
	plywood, MDF and particle board		
Efficiencies	99.97% - 99.999% @ 0.3 micron particle		
Nominal depth	$5^{7}/_{8} \& 11^{1}/_{2}$ "	(149 & 292MM)	
Max. Operating Temp.	100°C (210°F	F) - 399°C (750°F)	
U.L. Classification	Class 1		



**BioCel® I** - Primarily designed to remove airborne biological contaminants in hospital critical areas and pharmaceutical and food processing plants. It also meets requirements of precision manufacturing operations and laboratories where very high efficiency on fine particulate matter is necessary. *(Brochure Ref No. AFK-1-116L)* 

	BioCel® I
Media	Ultra-fine fiberglass
Separators	Corrugated aluminium
Sealant	Fiberglass pack
Frame	Galvanized steel
Efficiencies	95% @ 0.3 micron particle or 99% per ASHRAE
Nominal depth	5 <sup>7</sup> / <sub>8</sub> & 11 <sup>1</sup> / <sub>2</sub> " (149 & 292MM)
Max. Operating Temp.	177°C (350°F)
U.L. Classification	Class 2

## **MINI-PLEAT FILTERS**

**BioCel® II** - Designed primarily to remove airborne biological contaminants in hospital critical areas, food and pharmaceutical processing plants. Provides significantly higher efficiency filtration than that of 90-95% ASHRAE efficiency filters and has an efficiency of 99% based on the ASHRAE test method and rated 95% by the DOP test.



**BioPak** - Ideally suited for use in critical areas such as the semiconductors, pharmaceuticals, photos and food processing and hospitals. It features mini-pleat concept and fills the gap between the ASHRAE grade high efficiency filters and ultra-high efficiency HEPA at lower pressure drop. The 90-95% version is also available with INTERSEPT<sup>®</sup> antimicrobial (6 and 12").

	BioPak		
Media	Ultra-fine fiberglass		
Separators	Thermoplastic beads		
Sealant	Polyurethane		
Frame	Extruded anodized aluminium, galvanized steel, plywood, MDF & particle board		
Efficiencies	95% @ 0.3 micron particle or 99% per ASHRAE		
Nominal depth	3 & 5" (69 & 117MM) 6 & 12" (149 & 292MM)		
Max. Operating Temp.	70°C (158°F)		



**BioCel® V** - A high efficiency, high airflow filter specifically designed for handling difficult conditions such as variable airstream, turbulent airflow and repeated fan shutdown in critical areas such as hospitals, laboratories and manufacturing plants in the food, pharmaceutical and microelectronic industries. Similar in construction to AAF's other V Series of mini-pleat

design using anti-corrosive framework and moisture resistant media.

(Brochure Ref No. RA-2-541-A-IN-3-0394)

	BioCel <sup>®</sup> V
Media	Ultra-fine fiberglass
Separators	Thermoplastic beads
Sealant	Polyurethane
Frame	Plastic and aluminium components
Efficiencies	95% @ 0.3 micron particles
Nominal depth	12" (292MM)
Max. Operating Temp.	90°C (194°F)

# HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTERS

## **MINI-PLEAT FILTERS**

**AstroPak®** - This mini-pleat design filter is used to remove fine airborne particulate in semi-conductor, pharmaceutical, hospital, and food processing industries. Available in various sizes and construction materials such as MDF, particle board and galvanized steel. Stainless steel and aluminum are available as options. *(Brochure Ref No. RA-3-535-IN-3-1299)* 



#### **AstroPak**<sup>®</sup>

Media	Waterproof, fire retardant fiberglass
Separators	Thermoplastic beads
Sealant	Polyurethane
Frame	Plywood, particle board, electro-galvanized steel
	and aluminium
Efficiencies	99.997-99.999% @ 0.3 micron particle
Nominal depth	3, 6 & 12" (78, 149 & 292MM)
Max. Operating Tem	p. 90°C (194°F)



AstroVee<sup>®</sup> - A series of mini-pleat packs assembled in a V-shaped, powder coated, electro-galvanized steel housing. Specifically designed for installation in both Constant Air Volume (CAV) and Variable Air Volume (VAV) systems.

	Astro Vee <sup>®</sup>
Media	Ultra-fine fiberglass
Frame	Powder-coated electro-galvanized steel housing
Efficiencies	99.99-99.995% @ 0.3 micron particle
Nominal depth	12" (292MM)
Max. Operating Temp.	90°C (194°F)

#### AstroCel<sup>®</sup> II - A family of mini-pleat HEPA and ULPA filters specifically designed for demanding airflow and particulate

control requirements of cleanroom applications. Available with a variety of



media packs configurations and classifications. Frames are available with gasket seal, gel seal, or knife-edge for fluid seal grids. (Brochure Ref No. CI-ASTII-04-SIN/0505)

	AstroCel <sup>®</sup> II
Media	Moisture resistant, fire retardant fiberglass
Separators	Thermoplastic beads
Sealant	Polyurethane
Frame	Anodized extruded aluminium
Efficiencies	99.99-99.99995% @ 0.3-0.12 micron particle
Nominal depth	3, 4 & 5" (69, 93 & 117MM)
Max. Operating Temp.	70°C (158°F)
U.L. Classification	Class 2

AstroCel<sup>®</sup> III 4000 - High capacity filter specifically designed for use in high air volume applications up to 2300 cfm (4000 m<sup>3</sup>/h). Multiple mini-pleat packs are arranged in a V-shaped galvanized steel housing. The filter's high media area



ensures a low pressure drop which reduces energy costs. (Brochure Ref No. RA-4-129-SI-3-4042)

AstroCel <sup>®</sup> III 4000
Ultra-fine fiberglass
Thermoplastic beads
Polyurethane
Galvanized steel
99.99-99.9995% @ 0.3 micron particle
12" (292MM)
70°C (158°F)



### AstroCel® TM Module

- A disposable unit designed for optimum filter performance with an individually ducted system for use in laminar and non-laminar flow cleanrooms from Class 10

to Class 10,000. Ideal for hospital operating theatres and other industries where airborne contamination must be carefully controlled. *(Brochure Ref No. CR-ASTTM-03-SIN/0105)* 

	AstroCel <sup>®</sup> TM Module
Media	Ultra-fine fiberglass
Filter	AstroCel <sup>®</sup> II
Housing	Anodized aluminium extrusion
Efficiencies	99.999-99.9995% @ 0.3-0.12 micron particle
Nominal sizes	2x2' (600x600MM) &
	2x4' (600x1210MM)
Nominal height	5, 6 & 7" (125, 152 & 175MM)
Max. Operating Temp.	70°C (158°F)

# PADS & ROLLS

AmerTex® R & F-Series - Made of synthetic fibers and characterized by a relatively low resistance to airflow and a high dust holding capacity. F-Series is primarily designed as diffusion media for use as a final filter in the supply air stream of low velocity paint spray and drying booths.



(Brochure Ref No. RA-2-504-SI-4-0198, RA-2-532-SI-4-0198)

	F30	F55	F60
Media	Synthetic		
Туре	Fine	Superfine	Superfine Scrim
Average Arrestance	96%	98%	98%
Max. Operating Temp.	100°C (212°F)	)	

	R15	R17	R29	R50
Media	Synthetic			
Туре	Economy	Durable	Standard	Super
Ave. Arrest.	75-80%	75-80%	80-85%	87-92%
Max. Operating Temp.	100°C (212	2°F)		



**Roll-O-Mat**<sup>®</sup> - Developed for use in AAF Roll-O-Matic Automatic Renewable Media Air Filters. Roll-O-Mat<sup>®</sup> has high fiber content and

impregnated with AAF's VISCOSINE<sup>®</sup> adhesive gel. (Brochure Ref No. AFP-1-112F)

	White	Blue	Red
Media	Fiberglass		
Nominal depth	2" (51MM)		
Average Arrestance	80-85%	75-80%	60-65%
Max. Operating Temp.	79°C (175°F)		
U.L. Classification	Class 1 or 2		

## **FrontLine**<sup>™</sup> - Designed

with "progressive density" construction and is impregnated with VISCOSINE<sup>®</sup> adhesive gel providing high arrestance and dust holding capacity. (Brochure Ref No. AFP-1-228D)



	<b>FrontLine</b> <sup>™</sup>
Media	Fiberglass
Туре	FrontLine Gold, Blue & Red
Grade	Gold - Industrial, Blue - Commericial,
	Red - High Temperature Application
Nominal depth	1 & 2" (25 & 51MM)
Average Arrestance	75-85% (Gold), 70-80% (Blue),
	75-80% (Red)
Max. Operating Temp.	80°C (176°F) - 121°C (250°F)
U.L. Classification	Class 1 or 2

**AG-28** - A constant dens media consisting of continuous glass filamen fiber media exclusively designed to remove paint overspray solids of



all types - lacquer, air dry or baked enamels to protect exhaust ducts, fans and motors from paint build-up. (Brochure Ref No. AFP-1-106G)

	AG-28
Media	Fiberglass
Туре	Pads
Nominal depth	2" (51MM)
Max. Operating Temp.	80°C (176°F)
U.L. Classification	Class 2



AmerKleen M80 - A heavy duty disposable continuous filament progressive density glass fiber media pad impregnated with a AAF VISCOSINE<sup>®</sup> adhesive gel providing high arrestance and dust holding capacity. Primarily

used in conjunction with metal pad frames in industrial & commercial applications having heavy dust loading conditions. *(Brochure Ref No. RM-2-170-SI-0198)* 

	AmerKleen M80
Media	Fiberglass
Туре	Pads
Nominal depth	4" (102MM)
Average Arrestance	89%
Max. Operating Temp.	100°C (212°F)
U.L. Classification	Class 2

# **AmerKool® M81** - A heavy duty, highly efficient mist

eliminator pad constructed from continuous progressive density glass filament fibers with special formulated water resistant binder. It is ideal as a coalescing



pad and is an economical solution, at low pressure drop, in installations where sensible moisture is present. *(Brochure Ref No. RA-2-528-SI-0198)* 

	AmerKool® M81
Media	Fiberglass
Туре	Pads
Nominal depth	3" (76MM)
Max. Operating Temp.	66°C (150°F)
U.L. Classification	Class 2

# **OTHER PANEL FILTERS**

**Pleated Washable Filter** - A V-form design pleat type panel constructed with AAF AmerTex<sup>®</sup> high efficiency synthetic media in metal frame. Primarily used as a prefilter to extend the life of final higher efficiency filters used in general ventilation and comfort air-conditioning.



#### **Pleated Washable Filter**

Media	Synthetic
Frame	Galvanized or aluminium
Average Arrestance	75-90%
Nominal depth	2 & 4" (47 & 95MM)
Max. Operating Temp.	100°C (212°F)



**Permanent Metal Filter** - A heavy duty, washable metal filter constructed with a combination of herringbone type undulating metal sheets and fine mesh expanded metal sheets. Ideal for use in HVAC systems and as grease filters in kitchen hoods.

	Permanent Metal Filter
Media	Corrugated screen wire media
Frame	Galvanized stainless steel and aluminium
Nominal depth	2" (48MM)
Average Arrestance	80-85%
Max. Operating Temp.	66°C (150°F)

### AmerFrame <sup>™</sup> and

**RenuFrame**<sup>™</sup> - Designed to hold a wide range of pre-cut synthetic and fiberglass media pads designed for light to extra heavy dust loading conditions. (Brochure Ref No. RFD-1023 DEC 94)



	AmerFrame TM and RenuFrame TM
Construction	Galvanized steel U-channel cell sides
Nominal depth	1 & 2" (25 & 50MM)

# GAS PHASE AND ODOR CONTROL

**AmerSorb** - An oxidant with a well-developed pore structure, good resistance to attrition, and low resistance to flow. AmerSorb oxidizes contaminants to stable solids that will not desorb and does not support combustion.

**AmerCarb ACX** - A high capacity type of activated carbon media, removes and retains within its microscopic porous structure almost all volatile materials whether they are chemicals, solvents or mixtures of odor causing substances. It has an activity rating of 60% on carbon tetrachloride.

AmAir<sup>®</sup>/C - A disposable odor control panel filter containing impregnated activated carbon media. It combines odor control with particulate filtration. Interchangeable with standard air filter. *(Brochure Ref No. AFPS-1-247B)* 



	AmAir <sup>®</sup> /C	
Media	Polyester fibers and activated carbon media	9
Nominal depth	1 & 2" (25 & 51MM)	-
Max. Operating Temp.	49°C (120°F)	
U.L. Classification	Class 2	



VariSorb® VS - Designed for effective gas phase removal of low and medium concentrations of molecular contamination in fresh air and recirculation air handling systems. The pleat packs are arranged in a V-shape to utilize maximum amounts of carbon to ensure high spontaneity of reaction. (Brochure Ref No. CI-VARSORB-01-SIN/0102)

	VariSorb® VS
vledia	Micro-granulate carbon, embedded in synthetic
	media
Frame	Plastic
Carbon content	4.9kg
Active carbon area	1000-1300m²/g
Max. relative humidity	60%
Max. Operating Temp.	30°C (86°F)

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## EQUIPMENT



**Roll-O-Matic** - A heavy-duty, rigidly constructed, automatic, renewable filter media system for use in a wide range of airconditioning and ventilating systems in commercial, public and industrial buildings. Consists of an upper dispensing unit to accommodate the media roll, a lower rewind unit with a drive motor and gear assembly to accept the used media. A built-in control unit

advances the media from the dispensing unit into the effective filtration area when media is loaded with dirt. The media is automatically spooled into the rewind unit.

# HOUSING AND FRAMES



#### AccessAir TM Housing System -

Side Access Housing designed for use with air handling units or other side access equipment. Offers the convenience of filter servicing from outside the air duct. Especially suited for installations with space limitations. (Brochure Ref No. AFP-1-137F)

	AccessAir ™ Housing System
Models	Polyseal, Leverlock, Adsorber, Demister & Diffuser
Construction	Galvanized steel
Nominal depth	12, 21 & 33" (305, 533 & 838MM)
Capacities	1000 CFM @ 500 FPM to 60000 CFM @ 625 FPM
	(1700 M³/HR @ 2.5 M/S to 102,000 M³/HR @ 3.2 M/S)



**RPT Safe Change Housing** - A reliable duct housing for

HEPA filters used for the purification of air in hazardous environments, in particular areas where radioactive pathogenic or toxic materials are handled. The compact housing is equipped with a fully enclosed bag system and is capable of withstanding an overpressure of up to 2500Pa positive and 3000Pa negative. temperature limit of 60 °C.

Differential pressure measuring points are included as standard in both the prefilter and main filter sections. (Brochure Ref No. AF-2-741-SI-1-0402)



#### AstroSeal 500 Side Access -

Designed for use with air handling units or other side access equipment. It offers the convenience of filter servicing from outside the air duct and is especially suited for installations with space limitation. AstroSeal housings are fabricated to withstand a pressure drop of 10" WG (2500 Pa). Available in 15 sizes,

with capacities from 2,000 cfm to 30,000 cfm (3,400 m<sup>3</sup>/h to 51,000 m<sup>3</sup>/h). *(Brochure Ref No. AFP-1-130L)* 



**Universal Holding Frame** - Can be used individually or arranged in any size filter bank using a combination of the available sizes. Standard units are manufactured in galvanized steel. Other materials are available. *(Brochure Ref No. AFPS-1-170G)* 

#### **Universal Holding Frame**

Construction	Galvanized steel and stainless steel
Nominal Depth	2" (50MM)
Max. Operating Temp.	482°C (900°F)

# **AAF Air Filter Selection Guide**

	Filter Type	AAF Product Trademark		EN	779 CLASS	ASHRAE 52.2
	Gas Phase	AmAir/C		G 1	Am ≤ 65	MERV 1
ISS	Permanent Metal Filters Washable Filters	Permanent Metal Filter (Dry) Pleated Washable Filter				
Ë	Media Pads & Rolls	AmerTex R15 & 17. Roll-O-Mat. FrontLine		G 2	$65 \le Am < 80$	MERV 2 - 4
() ()	Gas Phase	Phase AmAir/C anent Metal Filters Permanent Metal Filter (With Viscosine) Pable Filters Pleated Washable Filter				
	Permanent Metal Filters					
S S	Washable Filters					
i.	Disposal Panel Filters	5700 Elevender CA Desider 25		G 3	80 < Am < 90	MERV 4 - 5
	Supported Pocket Filters Media Pads & Rolls	pported Pocket Filters FlexPak CA, DriPak 25 adia Pade & Polle AmerTax P20 Poll O Mat Front Line M80				
S.	Washable Filters	Pleated Washable Filter				
Dal	Disposal Panel Filters	CG Series				
ပို	Disposal Pleated Filters	AmAir 100 & 200 & 300, AmAir 300GT, AmAir HT			90 ≤ Am	MERV 6 - 7
	Supported Pocket Filters	AmerPak, FlexPak FA, AirCobra Cube				
	Internal Wire Frame Ring Panel Filters	Amer lex Kou				
	Disposal Panel Filters	CG Series				
	Washable Filters	Pleated Washable Filter AmAir 62 Plus, AmAir 500 DriPak 2000 RigiFil			40 ≤ Em < 60	
	Disposal Pleated Filters					MERV 8 - 11
	Non-Supported Pocket Filters					
	Box Style Filter					
	Supported Pocket Filters	Amer lex F30/F35/F60 FlexPak FΔ				
(S)	Non-Supported Pocket Filters	DriPak, DriPak 2000 DuraCel, RigiFil, VariCel I, VariCel I HT			60 ≤ Em < 80	MERV 11 - 12
las	Box Style Filters					
ပ	Mini-Pleat Filters	VariCel II, VariCel II HT, VariCel II M, VariCel I	I MH,			
E)		VariCel V, DuraVee, VariCel V5000				
S	Supported Pocket Filters	FIEXPAK FA Dribak Dribak 2000				
Ite	Box Style Filters	RigiFil, VariCel I, VariCel I HT VariCel II, VariCel II HT, VariCel II M, VariCel II MH, VariCel V, DuraVee, VariCel V5000			80 ≤ Em < 90	MERV 13- 14
ΪĒ	Mini-Pleat Filters					
Je						
Ē	Gas Phase	VariSorb				
	Supported Pocket Filters	FlexPak FA DriPak, DriPak 2000 DuraCel, RigiFil, VariCel , VariCel HT BioCel V, DuraVee, VariCel II, VariCel II HT, VariCel II M,			90 ≤ Em < 95	
	Box Style Filters					MERV 14 -15
	Mini-Pleat Filters					
		VariCel II MH, VariCel V, VariCel V5000				
	Cartridge/Cylindrical Canister	DuraPulse, Pulstar, ASC II Panel Pak BioCel I BioCel V, DuraVee				
	Box Style Filters Mini Plant Filters				$95 \le \text{Em}$	MERV 15 -16
					N 1822 CLASS	IEST RP-CC-001.3
			<b>Ε % @ 0.3</b> μ <b>m</b>		E % @ MPPS	<b>Ε % @ 0.3</b> μ <b>m</b>
	Box Style Filters	BioCel I BioCel V, Durevies	≥ 95	H10	≥ 85	
ss)	Box Style Filters	BioCel I				
la	Mini-Pleat Filters	BioCel V	≥ 98	H11	≥ 95	
ပ ပ	Box Style HEPA Filters	AstroCel I, AstroCel I HT	> 00 00	U19	~ 00 5	TVDE C
	Mini-Pleat HEPA Filters	AstroCel III, AstroVee, AstroPak	2 99.99	1112	2 99.0	TIFEC
∞ ⊤	Box Style HEPA Filters	AstroCel I AstroCel II AstroCel III AstroCel EM				
t t	Mini-Pleat HEPA Filters	ASTROCEL II, ASTROCEL III, ASTROCEL F.M., AstroPak AstroVee	≥ 99.995	H13	≥ 99.95	TYPE C
SLO	Ceiling Module/HEPA Filters	AstroCel TM, PharmaGel, FM II, AstroFan FFU				
≣	Box Style HEPA Filters	AstroCel I				
ц. И	Mini-Pleat HEPA Filters	AstroCel II, AstroCel III, AstroCel FM,	≥ 99,999	H14	≥ 99.995	TYPE D
PA	Caller a Mashala / HEDA Filterer	AstroPak, AstroVee				
Ⅎ	Celling Module/HEPA Filters	Astrocel 1 M, AstroFan FFO, FM-II, PharmaGel	F%@012um			F % @ 0 19um
8	Box Style ULPA Filters	AstroCel I				
A	Mini-Pleat ULPA Filters	AstroCel II, AstroCel III, AstroCel FM,	~ 99 9995	U15	~ 99 9995	TVPF F
Ш		AstroPak, AstroVee		015	- 00.0000	1 11 11 1
I	Celling Module/ULPA Filters	AstroCel IM, AstroCal EM, MECAcal				
	Ceiling Module/III PA Filters	ASUUCEI II, ASUUCEI FIVI, IVIEGACEI AstroCel TM AstroFan FFI   FM-II	≥ 99.99995	U16	$\geq 99.99995$	TYPE F
	Mini-Pleat ULPA Filters	AstroCel II, AstroCel FM	00.00		00.000555	
	Ceiling Module/ULPA Filters	AstroCel TM, FM II, AstroFan FFU	≥ 99.999995	U17	≥ 99.999995	ТҮРЕ Ғ
	Notes And Armonto and the Comment	Change in the design for the most C1 C1		D	In a Dential Class	

 Note:
 Am % = Average arrestance for Coarse filters in the classification range G1-G4

 EM% = Average efficiency for Fine filters in the classification range F5-F9

 E% = Mean frantional efficiency for HEPA & ULPA filters in the classification range H10-U17

MPPS = Most Penetrating Particle Size Type C (scanned) (>=99.99%) Type D (0.3µm) (>=99.999%) Type F (0.1 - 0.2µm) (>=99.999%)

# CUSTOMER SUPPORT WHEN YOU NEED IT



Our IAQ professionals, backed by our team of filtration experts, are prepared to meet your need for clean air.



IAQ professionals will conduct a thorough survey of your current filtration system.



Our IAQ professionals will share their knowledge and resources with you to ensure your air filtration needs are met.

Understanding filtration and matching the correct filter with your application are essential to achieving the air quality you need. On our team are filtration specialists with years of experience in analyzing and developing filtration products. They are available for consultation when problems arise, or at any time their expertise and advice are needed. The AAF Air Filtration team is always there to help provide the best conditions for the operation and maintenance of your office, building or process.

AAF IAQ Professionals will conduct a review of your air handling system, assess the condition of your filter and make recommendations to improve performance and reduce cost. We can help you develop specifications based on filter performance to ensure proper filtration maintenance.

We can give you a computerized analysis of the cost of operating your air filtration system, including replacement filters, labour and energy. We invite you to compare the total annual operating cost of different filters or experiment with variable factors, such as a change in final resistance or the use of prefilters, to determine the effect on cost.



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







• • • COMMERCIAL & INDUSTRIAL

AIR FILTRATION PRODUCTS & CAPABILITIES





