

Manufacturer of Metal Air Filters, Frames and Housings since 1986.

Product Selection Guide





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HVAC Heating Ventilation and Air Conditioning Filters



All-Metal Particulate

The **All-Metal Particulate** line of impingement type panel filters are designed for use in residential, commercial and industrial HVAC applications to remove large airborne particulate and coolant mist from the airstream. Popular outdoor applications include outside air intake ducts, rooftop economizer hoods and air handling units. Popular indoor applications include ceiling vent fans, home central air conditioners, machinery vents, computer enclosures, electronic air cleaners and room air conditioners. AMFCO's all-metal line offers ideal solutions for any HVAC system in just about any environment that requires a washable and durable pre-filter with low resistance to airflow.

HI Series – Industrial Grade

Available Metal Alloys	Available Thickness*	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Aluminum	½", 1" (7/8), 2" (1-	Screen Wire	1″ = 5	1" = 0.02" wg	1": 68 g/sf	A: 275 F
Galvanized	3/4), 4" (3-3/4)	Mesh	2″ = 7	2'' = 0.02'' wg	2": 97 g/sf	G: 325 F
304 Stainless steel	5/4], 4 (5-5/4)	IVIESII	4" = 9	2 – 0.02 Wg	2.578/51	SS: 900 F

Construction: The HI Series filter uses a metal frame to enclose a media pack consisting of multiple layers of corrugated screen wire assembled in a criss-cross fashion for strength. The pack is then placed between two layers of expanded metal and is made to fit firmly inside the frame giving the HI Series filter its exceptional strength and durability. The frame is made with mitered corners, is secured with pop-rivet(s) and has drain holes in three corners. *See HI Series Tech Sheet for details.*

*Other Available Thicknesses ¼", 3/8", 7/16", etc. Call factory

HC Series – Commercial Grade

Available Metal Alloys	Available Thickness*	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Aluminum	½", 1" (7/8), 2" (1-	.020 Expanded	1‴ = 5	1" = 0.01" wg	1": 20 g/sf	A: 275 F
Galvanized	3/4),	Metal	2″ = 5	2" = 0.01" wg	2": 58 g/sf	G: 325 F

Construction: Construction: The HC Series filter uses a metal frame to enclose a media pack consisting of multiple layers of corrugated expanded metal assembled in a criss-cross fashion for strength. The pack is then placed to fit firmly inside the frame giving the HC Series filter its exceptional strength and durability. The frame is made with mitered corners, is secured with poprivet(s), and has drain holes in three corners. *See HC Series Tech Sheet for details.*

*Other Available Thicknesses ¼", 3/8", 7/16", etc. Call factory



All-Metal Particulate (Continued)

HE Series – Economy Grade								
Available Metal Alloys	Available Thickness*	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature		
Aluminum Galvanized 304 Stainless steel	½", 1" (7/8), 2" (1- 3/4), 4" (3-3/4)	Screen Wire Mesh	1" = 4 2" = 5 4" = 7	1" = 0.01" wg 2" = 0.01" wg	1": 95 g/sf 2": 109 g/sf	A: 275 F G: 325 F SS: 900 F		

Construction: The HE Series filter uses a metal frame to enclose a media pack consisting of multiple layers of corrugated screen wire assembled in a criss-cross fashion for strength. The pack is then placed between two layers of expanded metal and is made to fit firmly inside the frame giving the HE Series filter strength and durability. The frame is made with mitered corners, is secured with pop-rivet(s) and has drain holes in three corners. *See HE Series Tech Sheet for details.*

*Other Available Thicknesses ¼", 3/8", 7/16", etc. Call factory

HX Series – Bonded Aluminum Foil

Available Metal Alloys	Available Thickness*	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Aluminum	½", 1" (7/8), 2" (1-3/4)	Bonded Aluminum Foil	1" = 1 2" = 3	1" = 0.07" wg 2" = 0.18" wg	1": 79 g/sf 2": 100 g/sf	A: 150 F

Construction: The HX Series filter uses an aluminum frame to enclose the media pack. The bonded, progressive-density media pack consists of multiple layers of aluminum foil slit and expanded to several different size openings. The layers are arranged with larger openings at the air entrance and smaller openings at the air exit. This design causes airborne contaminants to be trapped throughout the entire filter depth rather than just on the surface. The frame is made with mitered corners, is secured with pop-rivet(s) and has drain holes in three corners. *See HX Series Tech Sheet for details.*



*Other Available Thicknesses ¼", 3/8", 7/16", etc. Call factory



Moisture Separator

The **Moisture Separator** line offers the HM Series impingement type panel filter which serves two important functions: its primary purpose is to collect large water droplets and oil mist from the airstream and divert the liquid to an appropriate drain; its secondary function is as a washable particulate filter. The HM Series is built for use in outside air ducts, side-access housings and built-up filter banks. Other applications include chilled water coils and mist-type humidifiers. The HM Series is designed for higher airflow velocities. It performs best in a system running at no more than 10% above or below its rated velocity of 500 fpm.

HM Series – Moisture Separator							
Available Metal Alloys	Available Thickness	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature	
Aluminum Galvanized 304 Stainless steel	1" (7/8), 2" (1-3/4), 4" (3-3/4)	Screen Wire Mesh	1" = 9 2" = 15 4" = 15	2″ = 0.23″ wg	2": 51 g/sf	A: 275 F G: 325 F SS: 900 F	

Construction: The HM Series filter uses a heavy gauge metal frame to enclose a media pack consisting of multiple layers of corrugated and flat screen wire positioned for efficient drainage. The pack is then placed between two layers of expanded metal, and is made to fit firmly inside the frame giving the HM Series filter exceptional strength and durability. The bottom of the filter has 3/8" diameter drain holes and the top is identified with proper positioning for drainage and airflow. The frame is made with mitered corners and is secured with pop-rivet(s). *See the HM Series Tech Sheet for details.*





Foam

The **HF Series Two-Stage Foam & Aluminum Filter** is an impingement type panel filter designed to replace disposable air filters commonly used in residential, commercial and industrial HVAC applications to remove airborne particulate from the airstream. Placing a washable foam pad behind an aluminum mesh pre-filter creates the unique two-stage filtration system that <u>offers MERV 4 initial efficiency and 75% average arrestance</u> efficiency, which is greater than a traditional, all-metal washable filter. Popular applications include computers and any electronic equipment requiring dust particle filtration to protect sensitive hardware and software. The HF Filter is also ideal for vents of machines and air cleaners that require a permanent dust filtration solution.

HF Series – Foam

Available Metal Alloys	Available Thickness*	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Aluminum	½", 1" (7/8), 2" (1- 3/4)	25 PPI Foam	1" = x 2" = x	1" = 0.05" wg	1": 24 g/sf	A: 250 F

Construction: The HF Series filter uses an aluminum frame to enclose the two-stage media pack. The first stage of the media pack is an expanded aluminum grid, corrugated to increase its available surface area, followed by one or two more layers of corrugated aluminum screen wire. These components are assembled in a cross-cross fashion for strength and to remove large airborne particulate. The second stage is made of 25 pores per inch (ppi) filter foam which removes smaller airborne particulate. The entire media pack is backed by an expanded aluminum support grid on the air-exit side of the filter. The frame is made with mitered corners, is secured with poprivet(s) and has drain holes in three corners. *See the HF Series Tech Sheet for details.*

*Other Available Thicknesses ¼", 3/8", 7/16", etc. Call factory





Electrostatic

The **Electrostatic** line offers two electrostatic washable furnace filters designed to replace disposable air filters commonly used in residential, commercial and industrial HVAC applications to remove airborne particulate from the airstream. These filters use a naturally "passive electrostatic" media that generates an electrostatic charge as air passes through it, and airborne pollutants such as dust, pollen, mold, bacteria and lint particles are held in place until washed away. The electrostatic filter is an ideal permanent filter solution for home central air-conditioners.

E1 Series – Electrostatic - MERV 8 Initial Efficiency

Available Metal Alloys	Available Thickness	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Initial MERV Rating	Max Operating Temperature
Aluminum	1" (7/8), 2" (1-3/4)	Polypropylene & air-laid polyester	1″ = 5 2″ = 7	1" = 0.18" wg	MERV 8	A: 150 F

Construction: The E1 Series uses a mill-finished aluminum frame to enclose an electrostatic media pack. The patented media pack design places two layers of polypropylene mesh around one layer of air-laid polyester media, and these layers are surrounded by two layers of expanded metal. The pack is then corrugated which increases the material surface area thereby allowing greater dust holding capacity and efficiency at an exceptionally low pressure drop. The height of the pack is made to fit firmly inside the frame giving the filter exceptional strength and durability. The frame is made with mitered corners and is secured with pop-rivet(s). The frame has drain holes in three corners. *See the E1 Series Tech Sheet for details.*



EC Series – Electrostatic – MERV 6 Initial Efficiency

Available Metal Alloys	Available Thickness	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Initial MERV Rating	Max Operating Temperature
Aluminum	½", 1" (7/8),	Polypropylene	1" = 4	1" = 0.13" wg	MERV 6	
Aluminum	2" (1-3/4)	& polyester	2" = 4	2" = 0.16" wg	IVIERV O	A: 150 F

Construction: The EC Series uses a mill-finished aluminum frame to enclose an electrostatic media pack consisting of one electrostatic polyester pad and one piece of polypropylene between two pieces of expanded aluminum which gives the pack structure. The four-ply pack is made to fit firmly inside the frame giving the filter strength and durability. The frame is made with mitered corners, is secured with pop-rivet(s) and has drain holes in three corners. *See the EC Series Tech Sheet for details.*





Grease Baffle

The **HB Grease Baffle** filter is specifically engineered for commercial kitchen ventilating systems and is designed for installation in standard canopies or back-shelf assemblies. A series of offset baffles positioned vertically within the frame alters the flow of grease-laden air. The grease impinges upon the baffles and drains downward. Holes in the frame bottom divert the grease into a trough and then to a container away from the fire danger area. The HB Series filter offers the safest panel filter filtration system for commercial kitchens.

HB Series – Baffle Type

Available Metal Alloys	Available Thickness	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Aluminum	1" (7/8), 2" (1-3/4)	Unique Baffle	N/A	0.2 – 0.5″ wg	NI / A	See Tech
Stainless Steel	1 (7/0), 2 (1-5/4)	Design	N/A	0.2 – 0.5 wg	N/A	Sheet

Construction: The HB Series uses a metal frame to enclose the baffles. The corners are mitered and the frame is secured with pop rivet(s). The concave shape of the exclusive Web-LokTM frame increases the integral strength of the filter (Web-LokTM is a registered trademark of Research Products Corp.). The metal baffles are semi-circular in form, with end flanges to prevent reentry of the grease into the airstream, and they are secured to the frame with blind rivets. *See the HB Series Tech Sheet for details.*



HVAC Frames



Pad-Holding

The **HP Series Pad-holding Frame** is designed to replace disposable air filter in residential, commercial and industrial HVAC applications with an economical, replaceable pad holding system. Regardless of the filtering medium, or combination of media, the HP Series frame is built for the safe and rapid change of the filter media and can last for the life of the original HVAC equipment. The HP Series frame is available with optional wire gate for added pad security. Select from three different metal alloys to obtain the best frame for your application.

HP Series – Pad-holding Frame

	<u> </u>					
Available Metal Alloys	Available Thickness	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Aluminum Galvanized Stainless Steel	1" (7/8), 2" (1-3/4)	filter pad not included	N/A	N/A	N/A	A: 275 F G: 400 F SS: 900 F

Construction: The HP Series uses a metal frame to enclose a metal support grid. The grid is made of expanded metal and is permanently welded to the inside flange on the air exit side. It fits firmly inside the frame giving the HP Series exceptional strength and durability. As an option, a hinged wire gate may be installed on the air entrance side of the frame. The frame is made with mitered corners and secured with pop-rivet(s). *See the HP Series Tech Sheet for details.*



HVAC Frames



Filter-Holding

The **H9 Series Filter-holding Frame** is used to construct ASHRAE built-up filter banks with fasteners in order to facilitate a leak-free system. This frame is used for applications requiring any combination of panel, rigid and bag-type air filters on the upstream or downstream side of the frame. The H9 Series offers two configurations: BASIC (H9B) which uses press-fit fasteners; and LANCE AND FORM (H9L) which accommodates both wire-type and press-fit fasteners. Both options offer flexibility when engineering a new system or retro-fitting an existing installation.

H9B Series – Filter-holding Frame Basic							
Available Metal Allovs	Available Thickness	Primary Filter Medium	# Total Lavers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature	
Galvanized Stainless Steel	2", 3", 4"	N/A	N/A	N/A	N/A	G: 400 F SS: 900 F	

Construction: The H9B Series frame is constructed of two corner sections of 16-gauge metal TIG welded together to ensure a rigid assembly with zero air bypass. Each flush welded mitered joint is deburred and treated to protect the exposed metal from corrosion. The frame includes a $\frac{3}{4}$ " flange to seal the filter and is available with a close-cell PVC foam gasket. Each frame is supplied with pre-punched holes for easy field assembly and with dimples to keep filters centered against the retaining flange. *See the H9B Tech Sheet for details.*



See also H9 Series Fastener Tech Sheet for available options.

H9L Series – Filter-holding Frame with Lance and Form

Available Metal Alloys	Available Thickness	Primary Filter Medium	# Total Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Galvanized Stainless Steel	2-5/8", 3", 4"	N/A	N/A	N/A	N/A	G: 400 F SS: 900 F

Construction: The H9L Series frame is constructed of two corner sections of 16-gauge metal TIG welded together to ensure a rigid assembly with zero air bypass. Each flush welded mitered joint is deburred and treated to protect the exposed metal from corrosion. The frame includes a $\frac{3}{4}$ " flange to seal the filter and is available with a close-cell PVC foam gasket. Each frame is supplied with pre-punched holes for easy field assembly and with dimples to keep filters centered against the retaining flange. *See the H9L Tech Sheet for details.*

See also H9 Series Fastener Tech Sheet for available options.





HEPA-Holding

The **HG Series HEPA-holding Frame** is a permanent holding frame to build up HEPA filter banks on the jobsite or in OEM factory-produced air handling units. The frames are to be used with filters having integral face gaskets. Standard frame sizes are available for those that hold 12" deep full-face sized filters. Frames are usually joined with rivets or bolts and nuts. Filter banks may be constructed for upstream or downstream service. Two types of seals are available: The HGK uses a gasket seal and the HGS uses a gel seal. Each frame is supplied with four removable SS locking arm and tightening screw assemblies as a standard.

HGK Series – HEPA-holding Frame Gasket Seal						
Available Metal Alloys	Available Depth	Primary Filter Medium	Seal Type	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Galvanized Stainless Steel	8″	N/A	Gasket	N/A	N/A	G: 400 F SS: 900 F

Construction: The **HGK gasket seal** frame is constructed of 14-gauge steel panels which have been deburred for safety. Panels receive seamless welds to eliminate air bypass and entrapment of contaminants. Corners are mitered and TIG welded to ensure a square and rigid frame. All welds are ground smooth and treated to prevent rust on exposed metal. Each frame is supplied with pre-punched holes for easy field assembly and with dimples to keep filters centered against the retaining flange. Each frame is furnished with four removable 304 stainless steel locking arm and tightening screw assemblies. *See the HGK Tech Sheet for details.*



HGS Series – HEPA-holding Frame Gel Seal

Available Metal Alloys	Available Depth	Filter Medium	Seal Type	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Galvanized Stainless Steel	8″	N/A	Gel	N/A	N/A	G: 400 F SS: 900 F

Construction: The **HGS gel seal** frame is constructed of 14-gauge steel panels which have been deburred for safety. Panels receive seamless welds to eliminate air bypass and entrapment of contaminants. Corners are mitered and TIG welded to ensure a square and rigid frame. All welds are ground smooth and treated to prevent rust on exposed metal. Each frame is supplied with pre-punched holes for easy field assembly and with dimples to keep filters centered against the retaining flange. Each frame is furnished with four removable 304 stainless steel locking arm and tightening screw assemblies. *See the HGS Tech Sheet for details.*



HVAC Filter and Frame Fasteners and Accessories



Fasteners Accessories

AMFCO offers popular fasteners and accessories to aid in the installation, operation and maintenance of its HVAC filters and frames. To properly order filter accessories, please note on your PO the desired location of the accessory on the filter and AMFCO will produce to your specification. Pricing varies on the accessory and locations can be limited on certain products, so please contact the factory for further assistance in sourcing for your specific need.



Range Hood and Microwave Oven Filters



AMFCO offers the most comprehensive line of OEM replacement grease and odor filters in the industry. Contact the factory today for up-to-date cross referencing and for information on custom sizes and accessory options.

Grease Filters				
Construction:	Contains an aluminum foil pad between two layers of expanded aluminum.			
Cleaning:	Wash with mild detergent under light rinse of water as often as required to prevent grease			
	buildup and a resultant loss of airflow.			
Replacement:	Replace every 6 to 9 months to ensure proper filtration of kitchen airborne particulate.			

Application: AMFCO's Grease Filter is a washable aluminum filter that is used in *ducted* range hoods and microwave ovens to help remove cooking grease particulate form the airstream.



Odor Filters	
Construction:	Contains a carbon polysorb pad and one layer of expanded aluminum.
Cleaning:	DO NOT WASH. Odor filters are disposable because carbon polysorb material is not washable.
Replacement:	Replace every 6 months to ensure proper filtration of kitchen airborne odors.

Application: AMFCO's Odor Filter is a disposable carbon filter that is used in *ductless* range hoods and microwave ovens to help remove cooking odors from the airstream.



Range Hood and Microwave Oven Filters



Combination Grease and Odor Filters				
Construction:	Contains an aluminum foil pad and a carbon polysorb pad between expanded aluminum.			
Cleaning:	DO NOT WASH. Combo filters are disposable as carbon polysorb material is not washable.			
Replacement:	Replace every 6 months to ensure proper filtration of kitchen airborne particulate and odors.			

Application: This combination filter is used in *ducted* and *ductless* range hoods to help remove grease particulate and cooking odors from the airstream.



Range Hood and Microwave Oven Filter Accessories

Accessories

AMFCO offers popular accessories to aid in the installation, operation and maintenance of its range hood and microwave oven filters. Note on your PO the location of the accessory on the frame and AMFCO will produce to your specification. Pricing varies on the accessory and desired locations can be limited on certain products, so contact the factory for further assistance in sourcing accessories for your specific need.



Custom OEM and Blueprint (CMP) Filters



AMFCO can custom manufacture filters to blueprint specifications for OEM and after-market replacement applications. Contact the factory today to begin the design process for your next project or opportunity.

CMP Filters						
Available Metal Alloys	Available Thickness	Primary Filter Medium	# of Layers	Initial Air Resistance (w.g)	Dust Holding Capacity (Grams/SqFt)	Max Operating Temperature
Aluminum	1/8" – 4" and					A: 275 F
Galvanized	everything in-	Variable	Variable	Variable	Variable	G: 400 F
Stainless Steel	between					SS: 900 F

Application: AMFCO's CMP Filters can be found in food service machinery, portable HVAC systems, electronic air cleaners, outdoor electronic and computer hardware panels, telecom towers and casino game machines. Any application that requires ventilation and dust and particulate filtration can use an AMFCO CMP filter.



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