

ADD **FILTRATION**

Air Filtration Product Guide



Standards

ASHRAE 52.1 – This standard covers the determination of ‘dust spot efficiency’ and ‘dust weight arrestance’.

ASHRAE 52.2 – This standard covers the general testing of removal efficiency by particle size.

EN 779:2012 – This standard widely used in Europe defines the filtration classes according to the average filtration efficiency of particles with a diameter of 0.4 micron size.

EN 16890 – This new standard defines the air concentrations of particles whose diameters are less than 10, 2.5 & 1 micron size.

EN 1822:2009 – This standard covers HEPA filtration.

EN 779 Class	ASHRAE 52.1	ASHRAE 52.1	ASHRAE 52.2	ASHRAE 52.2	ASHRAE 52.2	EN 779: 2012	EN 1822: 2009	EN 1822: 2009
	Arrest	Dust spot	3-10 µm	1-3 µm	0.3-1 µm	0.4 µm	0.3 µm	MPPS
G2	<75%	<20%	<20%	-	-	-	-	-
G3	<90%	<20%	<50%	-	-	-	-	-
G4	>90%	<45%	>80%	<50%	-	-	-	-
M5	>95%	50-55%	>85%	50-65%	-	40-60%	-	-
M6	>98%	60-75%	>90%	65-80%	-	60-80%	-	-
F7	>98%	80-90%	>90%	>90%	<75%	80-90%	-	-
F8	>98%	90-95%	>90%	>90%	75-85%	90-95%	-	-
F9	>98%	95%	>90%	>90%	85-90%	>95%	-	-
H10	-	-	-	-	-	-	95%	85%
H13	-	-	-	-	-	-	99.997%	99.95%
H14	-	-	-	-	-	-	99.999%	99.995%

EN 779 Class	EN 16890 ISO Coarse	EN 779 Grade	EN 16890 ISO PM10	EN 779 Grade	EN 16890 ISO PM2.5	EN 779 Grade	EN 16890 ISO PM1
G2	≥30%	M5	≥50%	M6	≥50%	F7	≥50%
G3	≥45%					F8	≥70%
G4	≥60%					F9	≥80%

G4 Grade Pleated Panel Filters



Card Case Pleat

Metal Case Pleat

Construction: 100% polyester filter media supported by a wire mesh to increase the surface area. Encased in a lattice cardboard or metal case. The G4 grade pleated polyester media provides an even dust retention and maximum protection with a low initial resistance. An airflow direction indicator is fitted as standard.

Available in a large range of standard and custom sizes to suit.

Depths available: 22mm (1"), 45mm (2"), 95mm (4").

Typical Applications: HVAC of Offices, Retail, Education, Leisure, Restaurants, Kitchens, Hotels, Residential Homes, etc.

Technical Data:

Flammability:	DIN 53438 – K1/F1
Initial pressure drop at rated airflow capacity:	22mm deep – 40Pa
	45mm deep – 60Pa
	95mm deep – 80Pa
Rec. final pressure drop:	250Pa
Filter class:	G4
Max. operating temperature:	80°C

Synthetic Bag Filters



G4 Synthetic Bag F7 Synthetic Bag

Construction: 100% synthetic fibre media, pockets fitted with capping strips to ensure no leakage and inflation separators to prevent over inflation. The synthetic media is particularly suitable where fibre shedding is unacceptable. The pockets are retained in rigid galvanised steel channels.

Grades available: G4 coarse, M5 & M6 medium, F7, F8 & F9 fine.

Available in any reasonable pocket depth. Standard depths are 300mm, 380mm, 500mm & 600mm.

Typical Applications: HVAC of Offices, Retail, Education, Leisure, Restaurants, Kitchens, Hotels, Residential Homes, etc.

Technical Data:

Flammability:	DIN 53438 – K1/F1
Initial pressure drops at rated airflow capacity:	G4 – 45Pa, M5 – 50Pa, M6 – 65Pa, F7 – 80Pa, F8 – 90Pa, F9 – 110Pa
Rec. final pressure drops:	G4 – 250Pa. M5 thru to F9 – 350Pa
Max. operating temperature:	80°C

Wire Frame Fan Coil Filters



White Synthetic Wire Frame Filter

Construction: Media sewn onto a 3mm \varnothing pre-formed copper coated wire frame with cross support braces attached as necessary.

Grades available: G2 & G3 white polyester, G2 black polyester, washable reticulated foam, nylon mesh coarse & fine.

Available in any reasonable size and with pull tabs as required.

Typical Applications: Air conditioning units, fan coil units, MHRV systems, warm air furnaces, refrigeration & electronic cabinets. Also used as dust and fluff protection for higher grade downstream filters.

Technical Data:

Flammability:	DIN 53438 – K1/F1
Initial pressure drop at rated airflow capacity:	G2 grade – 10Pa
	G3 grade – 14Pa
Average arrestances:	75-85%
Filter class:	G2 or G3
Max. operating temperature:	80°C

Filter Media Rolls



Glass fibre Media

Synthetic Media

Glass fibre and non-woven polyester media available in 1m & 2m wide rolls and as pre-cut pads in any quantity.

Grades and sizes available:

G2 8mm white synthetic – 1m x 50m & 2m x 50m rolls and cut pads.

G3 12mm white synthetic – 1m x 20m & 2m x 20m rolls and cut pads.

G3 20mm white synthetic – 1m x 20m & 2m x 20m rolls.

G3 25mm oiled blue glass fibre – 1m x 20m rolls and cut pads.

G3 50mm oiled blue glass fibre – 1m x 20m rolls and cut pads.

G3 50mm dry green glass fibre – 1m x 20m & 2m x 20m rolls.

G3 100mm dry green glass fibre – 1m x 20m & 2m x 20m rolls.

G4 22mm blue/white synthetic – 1m x 20m & 2m x 20m rolls and cut pads.

G4 25mm white synthetic – 1m x 20m & 2m x 20m rolls and cut pads.

F5 20mm white synthetic – 1m x 20m & 2m x 20m rolls and cut pads.

F5 22mm white synthetic with scrim backing – 1m x 20m & 2m x 20m rolls.

Glass Fibre & Synthetic Panels



G3 Glass Fibre Panel G4 Synthetic Panel

Construction: Graduated density filter media pad encased in a lattice cardboard case. An airflow direction indicator is fitted as standard.

Available in a large range of standard and custom sizes to suit.

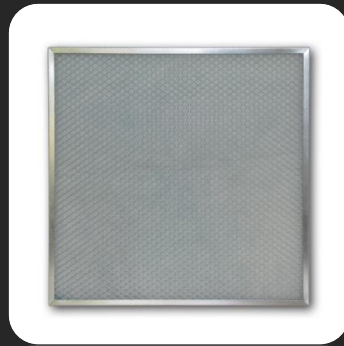
Depths available: 22mm (1"), 45mm (2").

Typical Applications: Pre-filter for higher grade filters or simple filter for general applications.

Technical Data:

Flammability:	DIN 53438 – K1/F1
Initial pressure drop at rated airflow capacity:	Glass fibre 22mm deep – 25Pa
	Glass fibre 45mm deep – 40Pa
	Synthetic 22mm deep – 40Pa
	Synthetic 45mm deep – 60Pa
Rec. final pressure drop:	250Pa
Filter class:	G3 Glass fibre, G4 Synthetic
Max. operating temperature:	80°C

Pad Holding Frames



Galvanised Pad Frame

Construction: Galvanised channel frame with a wire mesh on the outlet face and a 'V' retaining clip on the other face.

Available in any reasonable footprint size, depths available 13mm, 20mm, 25mm and 47mm.

Advantages: Although more expensive an initial outlay than panel filters, the galvanised frames offer greater economical long term maintenance costs than disposable panels as only the pads are replaced when dirty, the frame itself is retained. The range of pads available also mean the grade selection of media pads can be upgraded if required.

Replacement pads available in grades:

G3 white 12mm, G4 blue/white 20mm, G4 white 25mm, G4 white 50mm, F5 white 20mm, G3 oiled glass fibre 25mm, G3 oiled glass fibre 50mm.

HEPA and Rigid Bag Filters



HEPA Filter

Multi-Wedge HEPA

Rigid Bag Filter

HEPA Filter – Manufactured using high-quality borosilicate micro glass paper with either aluminium or kraft separators, sealed into a wooden or galvanised case with a 2 part polyurethane sealant. A neoprene gasket is fitted on clean air side.

Multi-Wedge HEPA – Manufactured from mini-pleat packs of high quality micro glass paper, bonded into 'V' banks and sealed into a galvanised frame. A neoprene gasket is fitted on clean air side.

Rigid Bag Filter – Core manufactured from mini-pleat packs of high quality paper with thermoplastic separators, sealed in a 'V' pattern into either a 20mm or 25mm headed plastic frame.

Grades available: HEPA – H10, H13 or H14. Multi-Wedge HEPA – H13 steel case or H14 plastic case, Rigid Bag Filters – F7 or F9.

Filters are available in a wide range of standard sizes in either 150mm or 292mm depths for HEPA Filters and 292mm depths for Multi-Wedge HEPAs and Rigid Bag Filters.

Typical Applications: Where high levels of efficiency are required, such as smoke removal, cleanrooms, decontamination, hospitals, etc.

Grease Filters



Baffle Grease Filter Mesh Grease Filter

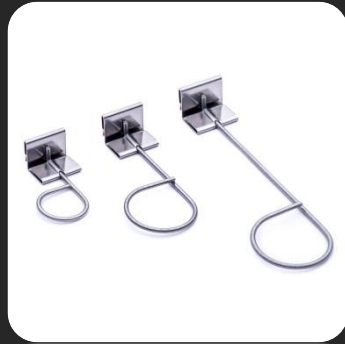
Baffle type – Manufactured from stainless steel with aerodynamically profiled baffle blades. Lay-flat handles are fitted as standard to the shortest sides with drain holes in the top and bottom leading edges. The grease droplets from the grease laden air settle on the blades as it passes and through the drain holes onto the drip tray. This method reduces the risk of fire and is more energy efficient, as there is no resistance causing grease build up.

Mesh type – Manufactured from either galvanised or aluminium frames with a knit wire mesh infill media pad. Lay-flat handles are fitted as standard to the shortest sides. Used in lower grease environments, the filters are best cleaned regularly, allowing for years of use.

Both filter types are available in a range of standard sizes, with custom sized mesh filters also available.

We can also supply activated bonded carbon filters on request for airborne odour removal in commercial kitchens, factories and chemical processes. The filters are available as standard in carbon grade 207C, fitted into complete ‘V’ banks units and also flat panels.

P-Clips & Wedge V-Belts



Air Filter P-Clips



V-Belt

Air Filter P-Clips - Made from stainless steel tempered wire attached to an integral stainless steel bracket.

Sizes available: 1", 2", 3", 4", 5" & 6".

Size measured from base of loop of 'P' to bracket.

Wedge V-Belts - Wrapped wedge section V-Belts for belt driven fans in air handling units.

Sizes available: SPZ 9.7 x 8mm, SPA 12.7 x 10mm, SPB 16.3 x 13mm. XPZ (SPXZ) cogged 9.7 x 8mm, XPA (SPAX) cogged 12.7 x 10mm, XPB (SPBX) cogged 16.3 x 13mm.

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