

PLEATED PANEL AIR FILTER G4 to EN779:2012

Applications

The Pleated Panel Air Filter is a medium efficiency disposable air filter, suitable for ventilation and air conditioning systems which require a higher efficiency and greater dust holding capacity than can be achieved with glass or synthetic panels.

The G4 filter can be used where glass panels are undesirable, such as in the food industry and hospitals.



Typically, G4 panel filters are used as pre filters on supply air systems to High Performance Bag Filters, or to protect heating or cooling coils from dust build up which leads to system inefficiency. Another common place to see G4 Pleated Panel Air Filters is to protect fans in extract systems for office blocks or kitchen extract systems.

Description

Pleated Panel Filters consist of a dry non-woven fabric media which is pleated to give an extended surface area, producing a low initial resistance for the same air volume, making this an energy efficient filter. The pleat is supported by an expanded galvanised steel mesh.

The pleated air filter media is contained within the air filter by a rigid all-cardboard casing. The filter is sealed together using hot melt adhesive glues to ensure a highly rigid and quality disposable panel air filter.

Three frame options are available; Standard, Airclean Moisture Resistant (AMR) and Metal. Each offering an increased strength and resilience against moisture and humidity experienced in supply air from atmosphere.

Technical

The pleated air filter media is Flame Retardant to UL Class II

Max Operating Temp 80 Deg C

Dust Holding Capacity for 50mm Filter = 840 g/m² Dust Holding Capacity for 100mm Filter = 1260 g/m²

Nominal to Actual Size: less 6mm on H & W, 3mm on Depth

PLEATED PANEL FILTER STANDARD SIZES

Size		Flow Rate			Part Numbers					
OT Inches	Actual mm	22mm m ³ /s	47mm m ³ /s	97mm m ³ /s	1" (22mm)		2"(47mm)		4"(97mm)	
					STD	AMR	STD	AMR	STD	AMR
10 x 10	242 x 242	0.12	0.15	0.18	1130101	1134121	1130201	1134221	1130401	1134421
12 x 12	289 x 289	0.17	0.21	0.25	1130102	1134122	1130202	1134222	1130402	1134422
15 x 15	369 x 369	0.27	0.34	0.41	1130103	1134123	1130203	1134223	1130403	1134423
18 x 18	445 x 445	0.40	0.50	0.59	1130104	1134124	1130204	1134224	1130404	1134424
20 x 10	495 x 242	0.24	0.30	0.36	1130106	1134125	1130206	1134225	1130406	1134425
20 x 16	495 x 394	0.39	0.49	0.59	1130108	1134126	1130208	1134226	1130408	1134426
20 x 20	495 x 495	0.49	0.61	0.74	1130110	1134127	1130210	1134227	1130410	1134427
25 x 16	620 x 394	0.49	0.61	0.73	1130111	1134128	1130211	1134228	1130411	1134428
25 x 20	620 x 495	0.61	0.77	0.92	1130112	1134129	1130212	1134229	1130412	1134429
24 x 12	594 x 289	0.34	0.43	0.51	1130113	1134130	1130213	1134230	1130413	1134430
24 x 20	594 x 495	0.59	0.74	0.88	1130114	1134131	1130214	1134231	1130414	1134431
24 x 24	594 x 594	0.71	0.88	1.06	1130115	1134132	1130215	1134232	1130415	1134432

STD: Standard Cardboard Frame

AMR: Airclean Moisture Resistant Cardboard Frame

Notes

- * Actual sized filters will be manufactured as ordered +/- 3mm
- * Rated Airflows based on Face Velocities : 22mm = 2.0m/s, 47mm = 2.5m/s, 97mm = 3.0m/s
- * Clean Pressure Drops at Rated Airflows : 22mm = 75Pa, 47mm = 75Pa, 97mm = 75Pa
- * Max Size: 625Hx900W

Airclean Moisture Resistant Panel (AMR) Filters

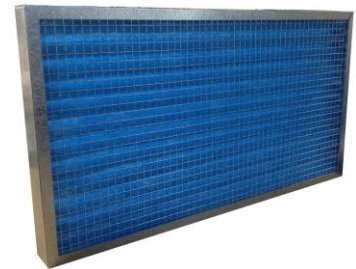
Airclean Moisture Resistant Panel Filters are for use in high humidity or moist environments. These premium filters still have a cardboard frame, but have a higher moisture resistance than our standard range, which help the filter maintain rigidity and functionality without structural failure.

Airclean Moisture Resistant Panels are available in G2/3 Glass Fibre, G3 Synthetic and G4 Pleated Panel Filters. "AMR Panel Filters" are manufactured in the same way as our standard panel filters but utilise "Carrier / Beverage Board" which has an increased wet-strength.

Metal Framed Pleated Panel Filters

Metal Framed Pleated Panels offer an increased level of fire retardancy and rigidity by removing and replacing the cardboard frame with a galvanised or stainless steel frame. A small amount of hot melt or polyurethane adhesive is used to fix and seal the pleated elements into the frame.

PLEASE NOTE: This is not a "wrap around" metal frame, but a complete replacement for the cardboard frame removing any chance the filter collapsing in humid environments.



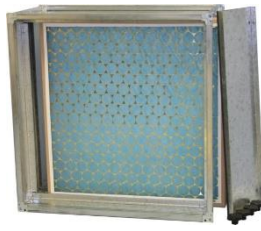
Holding Frames and Cases

Holding frames and casings for Disposable Pleated Panel Filters are available singularly or in multiples, and can be manufactured to suit non-standard sizes and special applications.

See Catalogue Section 8 (code AC8) for full information.



Front Withdrawal
Frame (1810)



MEZ Flanged Side
Access Housing (1820)



Duct Mounted Filter
Housing (1825)



Fully Welded Side
Withdrawal Filter Housing
(1840)