EXTRUDE ALUMINIUM FRAME

Standard Synthetic Pre-filter · Aluminum Extrusion Frame Series · EN779 / MERV / ISO 16890

FILTLAB



DESIGN FEATURES & ENGINEERING NOTES

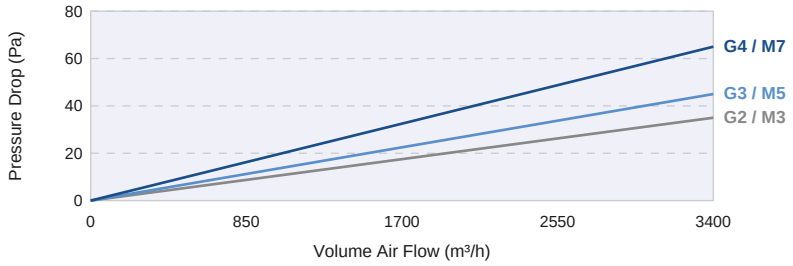
Aluminum Extrusion Frame Extruded aluminum frame delivers precise dimensional stability and corrosion resistance. Custom sizes available for exact replacement in existing AHU systems.	**Synthetic Fiber Filter Media** High-loft synthetic fiber media achieves consistent G2–G4 arrestance with low initial pressure drop across all rated airflow conditions.
Galvanized Steel Rod Retainer Steel rod support grid locks media in place, preventing migration under rated airflow velocities and repeated handling during service.	**Washable & Reusable** All components withstand repeated wash cycles — rinse with water, dry, and reinstall. No disposable media replacement required.
Low Initial Pressure Drop Open fiber geometry minimizes airflow resistance, reducing fan energy consumption and extending media service life.	**No Glue / Adhesive Construction** Fully mechanical assembly without adhesives — safe for food processing environments and chemical-sensitive HVAC applications.

PERFORMANCE MATRIX — EN779 TESTED · MERV / ISO 16890 EQUIVALENT

Nominal Size W×H×D (in)	Actual Dims (mm)	Air Flow (m³/h)	ASHRAE 52.2	Avg Arrestance (%)	EN779	ISO 16890	ΔP Initial (Pa)	ΔP Final (Pa)
24×24×1	592×592×22	3,400	MERV 3	≥65	G2	ISO Coarse	22	450
24×24×2	592×592×47	3,400	MERV 3	≥65	G2	ISO Coarse	35	450
24×24×4	592×592×96	3,400	MERV 3	≥65	G2	ISO Coarse	50	450
24×24×1	592×592×22	3,400	MERV 5	≥80	G3	ISO Coarse	29	450
24×24×2	592×592×47	3,400	MERV 5	≥80	G3	ISO Coarse	45	450
24×24×4	592×592×96	3,400	MERV 5	≥80	G3	ISO Coarse	65	450
24×24×1	592×592×22	3,400	MERV 7	≥90	G4	ISO Coarse	41	450
24×24×2	592×592×47	3,400	MERV 7	≥90	G4	ISO Coarse	65	450
24×24×4	592×592×96	3,400	MERV 7	≥90	G4	ISO Coarse	95	450

Measurement Method: EN779:2012 | MERV & ISO 16890 = equivalent (Eurovent REC 4/23) | Initial Resistance ±10% | Other sizes available upon request

PRESSURE DROP vs. AIRFLOW (592 × 592 mm — D=2")



BILL OF MATERIALS & OPERATING CONDITIONS

Frame	Aluminum Extrusion	**Max. Temperature**	80 °C
Filter Media	Synthetic Fiber	**Humidity Limit**	100% RH
Support Grid	Galvanized Steel Rod	**Test Standard**	EN779 (MERV / ISO equiv.)
Washable	Yes	**Applications**	Pre-filter HVAC / Clean Room / Industrial

APPLICATION SELECTION GUIDE

EN779 / MERV	ISO 16890	Typical Application	Contaminants Removed	Pre-filter
G2 / MERV 3	ISO Coarse	Coarse pre-filter Upstream of fine filters	Coarse dust, lint, fibres, insects	Upstream pre-filter for M/F-class
G3 / MERV 5	ISO Coarse	Commercial HVAC Industrial AHU	Medium dust, pollen, synthetic fibres	Pre-filter or standalone coarse stage
G4 / MERV 7	ISO Coarse	Industrial primary Clean room pre-stage	Fine dust, textile fibres, pollen, spores	Optional pre-filter downstream of G2