AEROCEL-II

Medium Filter · Moisture Resistance Series · EN779 / MERV / ISO 16890

FILTLAB



DESIGN FEATURES & ENGINEERING NOTES

Medium Filtration Duty
Designed for medium-grade filtration duty in AHU and HVAC systems — reliable M6–F9 performance for main-filter and pre-filter protection.

Moisture Resistance
Filter media and frame maintain performance at humidity levels up to 95% RH — no delamination or structural degradation.

Light Weight
Optimised lightweight construction for easy handling and installation, reducing labour time during filter changeout.

Fully Incinerateable
Fully incinerateable body simplifies disposal — no hazardous ash or metallic residue per EU waste incineration directives.

Balanced Efficiency
Medium-to-fine efficiency filtration (M6–F9) with low initial pressure drop across all classifications for cost-effective HVAC operation.

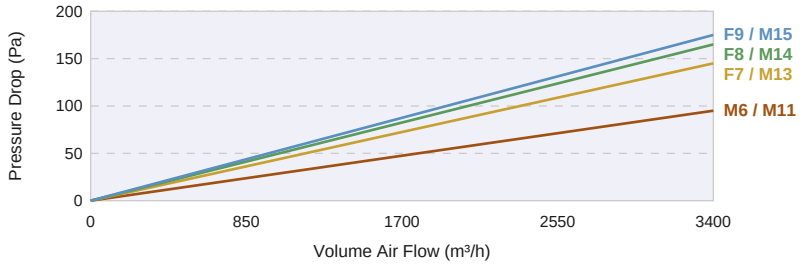
Wide Environmental Range
Rated to 70°C and 95% RH enabling reliable AHU and HVAC deployment across tropical and humid industrial environments.

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 Efficiency @0.4 µm (%)	EN779	ISO 16890	ΔP Initial (Pa)	ΔP Final (Pa)
24×24×4	592×592×95	3,400	MERV 15	>95	F9	ePM1 ≥80%	175	450
12×24×4	287×592×95	1,700	MERV 15	>95	F9	ePM1 ≥80%	175	450
24×24×4	592×592×95	3,400	MERV 14	90–95	F8	ePM1 ≥65%	165	450
12×24×4	287×592×95	1,700	MERV 14	90–95	F8	ePM1 ≥65%	165	450
24×24×4	592×592×95	3,400	MERV 13	80–85	F7	ePM2.5 ≥65%	145	450
12×24×4	287×592×95	1,700	MERV 13	80–85	F7	ePM2.5 ≥65%	145	450
24×24×4	592×592×95	3,400	MERV 11	60–65	M6	ePM10 ≥60%	95	450
12×24×4	287×592×95	1,700	MERV 11	60–65	M6	ePM10 ≥60%	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)



BILL OF MATERIALS & OPERATING CONDITIONS

Frame	Beverage Board / Galvanized Steel	**Max. Temperature**	70 °C
Filter Media	Glass Fiber	**Humidity Limit**	95% RH
Separator	Hot Melt	**Fully Incinerateable**	Yes
Sealant	Adhesive	**Test Standard**	EN779 (MERV / ISO equiv.)
Metal Parts	None (metal-free)	**Test Aerosol**	DEHS
Applications	AHU / HVAC	**Aerosol Size**	0.4 µm

APPLICATION SELECTION GUIDE

EN779 / MERV	ISO 16890	Typical Application	Contaminants Removed	Pre-filter
F9 / MERV 15	ePM1 ≥80%	Pharmaceutical / Hospital Cleanroom ISO 7–8	Fine dust, bacteria, sub-micron particles	M5/M6 mandatory
F8 / MERV 14	ePM1 ≥65%	Commercial HVAC Data centres	Fine dust, pollen, mould spores	M5 recommended
F7 / MERV 13	ePM2.5 ≥65%	Industrial / Offices Retail & transport	Coarse/medium dust, pollen, fibres	G4 minimum
M6 / MERV 11	ePM10 ≥60%	Commercial HVAC General offices	Medium dust, pollen, coarse fibres	G4 pre-filter