



## AFX™ Series – Air Filtration Excellence Clean Air, Clean Performance

### AFX-PNL™ – Panel Filters Product Highlights

Filtracore Asia's **AFX-PNL™ Panel Filters** deliver **low-resistance, flat-panel prefiltration** for commercial HVAC and general ventilation – ideal where **cost per operating hour, fast change-outs, and portfolio standardisation** matter. Built to fit **standard 25 mm and 50 mm frames**, they drop into existing side-access or front-load housings with **no retrofit**.



The range covers three proven constructions so you can match duty to site conditions while keeping one family across the estate: **AFX-PNL-SNW™** (*synthetic nonwoven*) for **maintained efficiency and moisture resilience**; **AFX-PNL-FG™** (*glass fibre*) for **economical coarse dust control**; and **AFX-PNL-AC™** (*carbon-loaded composite*) for **comfort odour/VOC mitigation** in the same footprint. Frames are available in **high wet-strength beverage board, galvanised steel, or ABS**, with **expanded-metal/wire backing** where additional rigidity is preferred.

Efficiency options align with where flat panels are typically specified: **MERV 4–9** with corresponding **ISO 16890 (ISO Coarse / ePM10) classes** (*model-dependent*), providing reliable protection for coils, fans, and downstream fine stages. For

higher efficiency requirements (ePM2.5/ePM1 or **MERV 11–13**), standardise on **AFX-PLT™ Pleated Panel Filters** to maintain airflow and lifecycle economics.

Dimensioned to industry-standard **nominal sizes**, AFX-PNL™ serves as a **form-fit-function replacement** when **size, depth, and class** are matched across leading OEM frame systems – supporting **simple stocking, predictable lead times, and consistent energy performance** across sites.

***Low Resistance. Fast Change-Out. True Panel Economics.***

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## Applications

**AFX-PNL™ Panel Filters** are deployed where cost-effective, low-resistance flat-panel prefiltration protects coils, fans, and downstream stages while enabling quick, predictable service cycles. Typical applications include:

- **Commercial offices, retail & hospitality:** supply/return prefiltration to cut dust load, keep coils clean, and support IAQ programmes
- **Healthcare & laboratories (non-critical):** offices, waiting areas, plant rooms – used as a prefilter upstream of higher-efficiency stages
- **Education & public buildings:** classrooms, campuses, libraries, arenas, and civic facilities with high occupant turnover
- **Data centres & telecom:** intake/return prefiltration to stabilise  $\Delta p$  across fine stages and support uptime
- **Food & beverage HVAC (dry, non-product-contact zones):** packaging halls and utilities; variant-level documentation available on request
- **Light industrial & warehousing:** general ventilation prefiltration; match grade to dust profile and change-out policy
- **Museums & archives:** particulate prefilter for IAQ-sensitive spaces; for odours/VOCs specify AFX-PNL-AC™
- **Transport hubs:** airports, stations, bus interchanges – high-duty AHUs needing low resistance and rapid change-outs
- **Paint facilities (make-up air):** intake prefiltration only; not for overspray arrest (use dedicated arrestor media)




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## OEM Compatibility & Replacement Cross-Reference

AFX-PNL™ flat panel filters are produced in industry-standard nominal sizes and 25 / 50 mm depths for true drop-in use in common holding frames and side-access housings. Representative equivalents<sup>1</sup> include:

- **AAF® / AAF Flanders®** – EZ Flow® II (fibreglass disposable panels); StrataDensity® fibreglass disposable panels; AmerSeal® polyester panels/pads; bonded carbon panel filters for comfort odour/VOC reduction
- **Parker Hannifin® (Purolator® / Airguard®)** – F312 , P312
- **Camfil®** – Panel filters for general ventilation (synthetic/fibreglass media options in panel format); molecular panel filters (thin-bed carbon/alumina) for comfort-IAQ odour/VOC applications
- **Koch Filter®** – Maxi-Grid™ internally-supported panel filters (individual and link panels); Commercial & Industrial disposable panels with polyester media; slip-on sleeves/pads
- **Freudenberg® Viledon®** – Filter panels with polyurethane frames using Viledon filter mats (e.g., P 15/500 S media); media pads/rolls matched to panel frames.

**Other compatible OEM systems upon request**

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## Ordering Information - AFX-PNL™ Panel Filters

When placing an order, please specify the following:

- **Nominal size (H × W × D):** 592 × 592 × 25/50 mm; 610 × 610 × 25/50 mm; 592 × 287 × 25/50 mm. Other sizes available, including actual-size (mm) options for tight rails
- **Media construction:** AFX-PNL-SNW™ (synthetic nonwoven, mechanical); AFX-PNL-FG™ (glass fibre); AFX-PNL-AC™ (carbon-loaded nonwoven for comfort odour/VOC mitigation)
- **Efficiency grade (particulate):** MERV 4–9 (ASHRAE 52.2) with corresponding ISO 16890 classes (ISO Coarse / ePM10, model-dependent)
- **Frame type:** High wet-strength beverage board, galvanised-steel U-channel, or ABS
- **Backing / support:** Expanded-metal / wire-backed or self-supported (model-dependent)
- **Gasket / seal (optional):** Neoprene or EPDM; upstream or downstream location; full-perimeter or selected edges
- **Design airflow / face velocity (reference):** Typical selection ranges – 25 mm: ≈ 1.5–2.0 m/s; 50 mm: ≈ 2.0–2.5 m/s
- **Operating conditions:** Non-condensing service. For AFX-PNL-AC™, adsorption performance is humidity-sensitive; service life is governed by odour/VOC breakthrough (IAQ metrics) rather than  $\Delta p$
- **Format / options:** Single panels; link-panel format for side-access racks; pad-and-frame sets
- **Compliance / documentation:** ASHRAE 52.2 (MERV) and/or ISO 16890 (ePM classes). Hygiene and related documentation available
- **Packaging / identification:** Units are labelled with series (AFX-PNL™), size, depth, media, grade, frame, backing, gasket (if any), and lot/traceability code

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<sup>1</sup> Compatibility is based on matching nominal size, depth (25/50 mm), panel construction (flat panel, not pleated), and efficiency class (e.g., ISO Coarse / ePM10; low-MERV classes typical of flat panels). Always verify actual dimensions (mm), frame type/rigidity, and pressure-drop / velocity limits before substitution.

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