#### THE WORLD LEADER IN CLEAN AIR SOLUTIONS

# VariCel® M-Pak

# **HIGH EFFICIENCY SUPPORTED PANEL FILTERS**

- MERV 14, MERV 13, and MERV 11 efficiencies
- 6"-deep (nominal) filter with the same media area and performance as a 12"-deep (nominal) filter
- "Midi" media pack design
- Space-saving design; reduces freight, storage, and handling costs
- Sturdy high impact polystyrene cell sides enclose a fixed media pack
- Fully incinerable
- MERV 14 and 11 models available with antimicrobial
- MERV 13 and higher meet LEED® Project Certification efficiency requirements



The VariCel® M-Pak filter has the same media area and half the weight of a standard 12"-deep VariCel® filter.

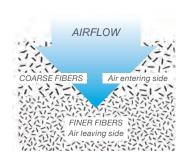
AAF introduced the innovative
VariCel M-Pak filter over a decade
ago, and the performance is still
unmatched today in filters with
comparable depth. This unique filter
offers the same media area as the
traditional VariCel 12"-deep filter in a
6"-deep design. The VariCel M-Pak filter
delivers comparable efficiency, pressure drop,
and overall performance in a much smaller package.

#### Construction

The header and cell sides of the VariCel M-Pak filter are constructed of high impact polystyrene. The design, which encloses a fixed media pack, creates a rugged filter that resists damage during shipping, handling, and operation. All components of the VariCel M-Pak filter are fully incinerable.

## **Dual-Density Media**

The VariCel M-Pak media pack is constructed with wet-laid fiberglass that is moisture resistant. The VariCel M-Pak filter can withstand exposure to free moisture in the atmosphere, making it ideal for installation in applications where moisture is an issue. The media is manufactured with two layers of glass fibers: coarser fibers on the air entering side and finer fibers on the air leaving side. The media pack is bonded to the cell sides using urethane sealant.



Our dual-density design allows dirt particles to be collected throughout the entire depth of the media pack, utilizing the full filtering potential of the media and maximizing dust holding. Maximizing dust holding capacity extends the life of the filter and minimizes operating costs.

Thermoplastic separators maintain uniform spacing between pleats to allow optimal air into, and through, the filter. The separators also ensure a large effective media area to minimize pressure drop and eliminate the need for aluminum separators. Without aluminum separators, risk of damage to the media pack from turbulent or non-laminar airflow is reduced.



# VariCel® M-Pak

#### **Designed to Improve Indoor Air Quality**

VariCel M-Pak filters with antimicrobial (MERV 14 and 11 models) are designed specifically to improve Indoor Air Quality (IAQ). Air filters are designed to trap and concentrate particulate air contaminants including viable fungal and bacterial spores. The presence of antimicrobial in the filter media is intended to preserve the integrity of the media throughout the useful life of the filter. Antimicrobial preservatives are not meant to increase the efficiency of the filter, or to kill microorganisms "on the fly."

#### **Cost-Saving Design**

The smaller footprint of the VariCel M-Pak filter means less space is required for storage. VariCel M-Pak filters weigh approximately 8 pounds, less than half the weight of 12"-deep filters with metal cell sides. That means reduced maintenance costs and time savings, as the VariCel M-Pak filter is easier to handle. Additionally, as a result of its reduced depth, the VariCel M-Pak filter will be packed two to a carton lowering freight costs and reducing the amount of space required for storage. The VariCel M-Pak filter also halves disposal volume and reduces disposal costs. Best of all, there is no performance penalty accompanying these savings. The VariCel M-Pak filter meets, or exceeds, the performance of the 12"-deep filters it replaces.

#### **Specifications**

Maximum Operating Temperature: 176°F/80°C

Media: High efficiency, dual-density, moisture-resistant

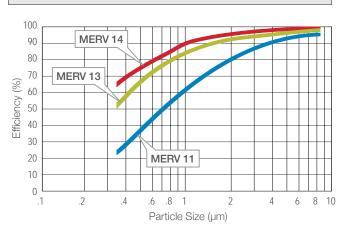
microglass

Frame: High impact polystyrene (HIPS)

Separators: Hot-melt glue bead Media Pack Sealant: Urethane Gaskets: Available on request

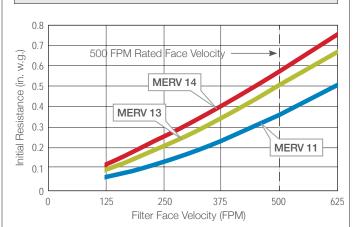
#### **Performance Data**

## **Composite Minimum Efficiency Curve**



Tested in accordance with ASHRAE Standard 52.2.

#### Initial Resistance vs. Filter Face Velocity



Filters are rated at 500 FPM filter face velocity. Recommended final resistance for all VariCel M-Pak filters is 1.5 $^{\prime\prime}$  w.g.

**Underwriters Laboratories Classification:** All VariCel M-Pak filters are UL Classified. Testing was performed according to UL Standard 900.



AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.