

## **AmericanAirFilter** VariCel® M-Pak

### Extended Surface Pleated Filter "Midi" Media Pack Design

- 6"-deep (nominal) filter with the same media area and performance as 12"-deep (nominal) filters
- Available in MERV 14, 13, and 11 efficiencies
- 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

AAF is proud to introduce another innovation in air filtration — VariCel<sup>®</sup> M-Pak. This unique filter offers the same media area as the traditional VariCel 12"-deep filter in a 6"-deep design. The M-Pak delivers comparable efficiency, pressure drop, and overall performance in a much smaller package.

#### Construction

The header and cell sides of the M-Pak are constructed of highimpact 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 are fully incinerable.

#### Standard VariCel vs. VariCel M-Pak

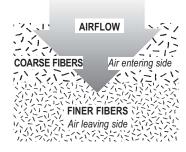


M-Pak has the same media area and half the weight of a standard 12"-deep VariCel.



VariCel<sup>®</sup> M-Pak with a MERV rating of 13 or 14 may contribute to the achievement of LEED<sup>®</sup> Project Certification.

#### **Dual-Density Media**



The media pack of the M-Pak is constructed with wet-laid fiberglass that is moisture resistant. The M-Pak 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.

# American Air Filter VariCel<sup>®</sup> 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 M-Pak means less space is required for storage. 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 M-Pak is easier to handle. Additionally, as a result of its reduced depth, the M-Pak will be packed two to a carton lowering freight costs and reducing the amount of space required for storage. The M-Pak also halves disposal volume and reduces disposal costs. Best of all, there is no performance penalty accompanying these savings. The M-Pak meets, or exceeds. the performance of the 12"-deep filters it replaces.

#### **Specifications**

Max. Operating Temperature: 176°F/80°C

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

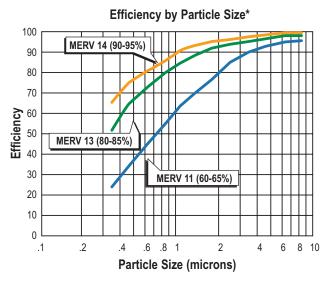
Cell Sides: High-impact polystyrene

Separators: Hot-melt glue bead

Media Pack Sealant: Urethane

Gaskets: Available on request

#### Performance Data



\*Tested in accordance with ASHRAE Standard 52.2-1999. Efficiencies determined using ASHRAE test method 52.1-1992.

#### Initial Resistance vs. Filter Face Velocity 0.8 ີ ຄຸດ.7 ≥ 0.6 Resistance (in. MERV 13 0.5 MERV 14 0.4 0.3 0.2 Initial MERV 11 0.1 0.0 0 125 250 375 500 625 Filter Face Velocity (FPM)

Filters are rated at 500 FPM filter face velocity. Recommended final resistance for all VariCel M-Pak filters is 1.5" w.g.

Underwriters Laboratories Inc. Classification: All VariCel M-Paks are Class 2. Testing was performed according to UL Standard 900.



10300 Ormsby Park Place Suite 600 Louisville, Kentucky 40223-6169

www.aafintl.com Customer Service 888.AAF.2003 Fax 888.223.6500





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