THE WORLD LEADER IN CLEAN AIR SOLUTIONS

VariCel® II

EXTENDED SURFACE MINI-PLEAT FILTERS

- Slim line, mini-pleat design lowers operating costs
- Engineered for a variety of applications
- True high efficiency filters - only 4″ thick media pack
- Available in three efficiencies - MERV 15, MERV 14, and MERV 11
- Available with antimicrobial

Designed for high performance under both normal and difficult operating conditions, VariCel II filters are appropriate for general HVAC and applications operating with variable air volume, turbulent airflow, and high humidity. The combination of durable construction and high efficiency also makes VariCel II filters ideal for specialized systems such as diffusion filters in paint booths and prefilters in cleanrooms.

Unique Combination - High Performance and Cost-Saving Features

- High efficiency filtration
- Available with antimicrobial in MERV 15 and MERV 11 efficiencies
- Suitable for a broad range of applications
- Rigid construction holds up in difficult operating conditions
- Microglass paper with water repellent binder
- Easy handling, installation, and removal
- Easy disposal
- Slim Line packaging reduces shipping costs and storage space

AAF® INTERNATIONAL

BETTER AIR IS OUR BUSINESS®

Heavy Duty Construction - High Performance in Tough Operating Conditions

Provides Strength, Moisture Resistance

The frame is made with a 2-piece die cut contructed from high wet strength beverage carrier board.

Indoor Air Quality

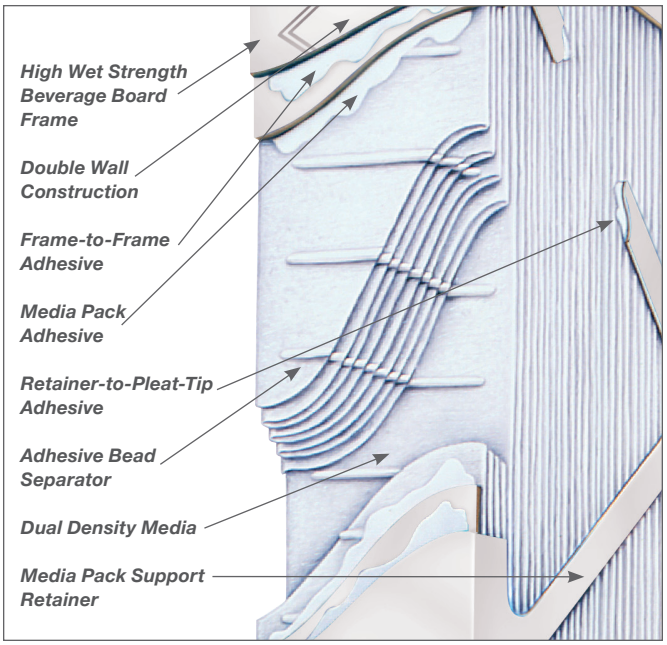
VariCel II filters with antimicrobial are designed specifically to improve Indoor Air Quality (IAQ). Air filters are designed to trap and concentrate particulate air contaminants including fungal and bacterial spores. The presence of antimicrobial in the filter media is intended to preserve the integrity of the media through 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” as they pass through a filter. Antimicrobial is EPA registered and environmentally safe.

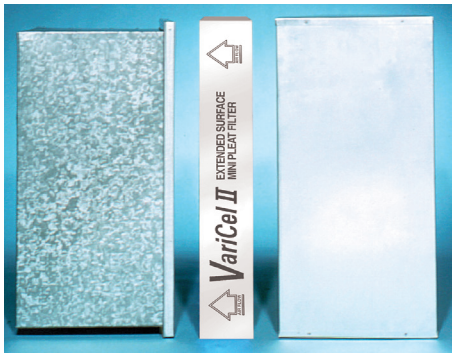
Unitized Construction Adds Strength, Prevents Leakage

Two mating die cut boxes are bonded together, forming a double wall around the perimeter of the filter. The mini-pleat media pack is bonded inside the double wall. The double-walled frame prevents leakage and increases rigidity.

Easy Disposal

The thinner depth and fiber board frame make disposal easy. VariCel II filters are only one-third the volume of other high efficiency filters, significantly reducing the contribution to landfills. With no metal components, they are also suitable for incineration.





VariCel® II filters are only one-third as deep as typical competitive filters.

VariCel® II MH Filters

The VariCel II MH filter combines the efficiency and performance of the VariCel II filter media with AAF’s unique interlocked metal header and cell side. This filter is ideal for environments where excessive turbulence and moisture are factors. Metal makes the VariCel II MH filter a logical choice for side-access systems.

Brochure AFP-1-239

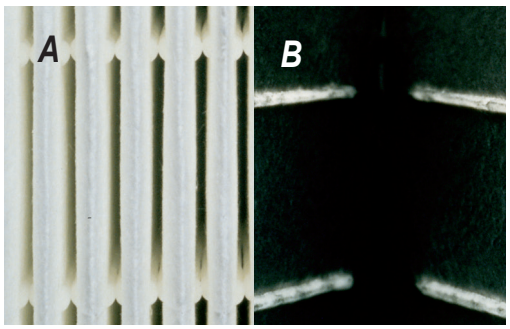
High Efficiency and Low Resistance Reduce Operating Costs

Slim Line Design

The slim line design, providing minimum resistance with maximum dust loading capacity, lowers operating costs.

(A) Rows of adhesive beads are applied 1¼″ apart on both sides of the media to separate the pleats and allow maximum airflow with minimum resistance.

(B) Beads on adjacent pleats bond to form a rigid media pack that maintains even pleat spacing as the dirt load builds, even during turbulent airflow. Media pack support retainers, built into the die cut frame, are bonded to the pleat tips to further secure pleat spacing. Consistent pleat spacing provides even distribution of airflow throughout the entire face of the filter, resulting in lower resistance, full use of the entire depth of the media, and higher dust loading capacity.



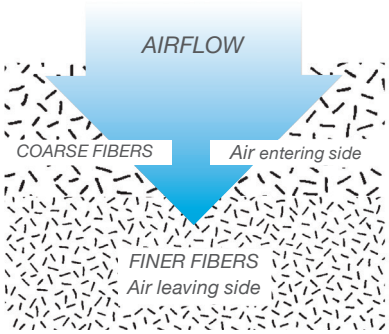
With this design, VariCel II filters have the capacity to retain the same amount of media area, in a filter only one-third as deep, as filters using traditional corrugated aluminum separators. VariCel II filters have twice the media area of 12″ deep competitive cartridge- type, extended surface filters using high loft, fine glass fiber media.

Compact, Space-Saving Packaging

The Slim Line, mini-pleat design enables four VariCel II filters to be shipped in a carton only 16 inches high, compared to most competitive filters which are shipped only one per carton. Shipping costs and storage space are significantly reduced.

Dual Density Media Increases Dust Holding Capacity

VariCel II filter media is made of microglass paper with a water repellent binder. The fibers are formed with dual density construction, consisting of coarser fibers on the air entering side and finer fibers on the air leaving side. This allows particles to be collected throughout the full thickness of the media, substantially increasing dust holding capacity. The media can withstand intermittent exposure to water without affecting filter performance.



Savings for New or Existing Installations

New Installations

- Reduce space requirements for the filter section
- Save on installed cost

Existing Installations

- Save on:
  - Replacement filter costs
  - Shipping costs
  - Storage space
  - Handling and installation
- Simplify disposal
- Upgrade filter efficiency at economical cost
- Convert from more costly, bulkier filters

VariCel® II

Product Information

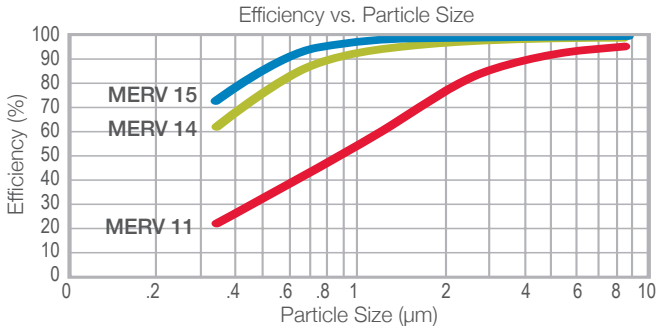
[1] Rated Filter Face Velocity (FPM)	[2] Nominal Size (Inches) (W x H x D)	[2] Actual Size (Inches) (W x H x D)	[3] Rated Airflow Capacity (CFM)	[3] Rated Initial Resistance (in. w.g.)	[4] Recommended Final Resistance (in. w.g.)	Gross Media Area (Sq.Ft.)	Shipping Weight (Lbs. Per Carton)
[3] MERV 15 - Available with Antimicrobial							
500	24 x 24 x 4	23⅜ x 23⅜ x ¾	2000	.75	1.5	119	26
500	20 x 25 x 4	19⅜ x 24⅜ x ¾	1750	.75	1.5	103	22
500	20 x 24 x 4	19⅜ x 23⅜ x ¾	1650	.75	1.5	99	21
500	20 x 20 x 4	19⅜ x 19⅜ x ¾	1400	.75	1.5	82	18
500	18 x 24 x 4	17⅜ x 23⅜ x ¾	1500	.75	1.5	88	19
500	16 x 25 x 4	15⅜ x 24⅜ x ¾	1400	.75	1.5	82	18
500	16 x 20 x 4	15⅜ x 19⅜ x ¾	1100	.75	1.5	65	14
500	12 x 24 x 4	11⅜ x 23⅜ x ¾	1000	.75	1.5	58	13
500	12 x 12 x 4	11⅜ x 11⅜ x ¾	500	.75	1.5	28	7
[3] MERV 14							
500	24 X 24 X 4	23⅜ X 23⅜ X ¾	2000	.65	1.5	119	26
500	20 X 25 X 4	19⅜ X 24⅜ X ¾	1750	.65	1.5	103	22
500	20 X 24 X 4	19⅜ X 23⅜ X ¾	1650	.65	1.5	99	21
500	20 X 20 X 4	19⅜ X 19⅜ X ¾	1400	.65	1.5	82	18
500	18 X 24 X 4	17⅜ X 23⅜ X ¾	1500	.65	1.5	88	19
500	16 X 25 X 4	15⅜ X 24⅜ X ¾	1400	.65	1.5	82	18
500	16 X 20 X 4	15⅜ X 19⅜ X ¾	1100	.65	1.5	65	14
500	12 X 24 X 4	11⅜ X 23⅜ X ¾	1000	.65	1.5	58	13
500	12 X 12 X 4	11⅜ X 11⅜ X ¾	500	.65	1.5	28	7
[3] MERV 11 - Available with Antimicrobial							
500	24 X 24 X 4	23⅜ X 23⅜ X ¾	2000	.45	1.5	119	26
500	20 X 25 X 4	19⅜ X 24⅜ X ¾	1750	.45	1.5	103	22
500	20 X 24 X 4	19⅜ X 23⅜ X ¾	1650	.45	1.5	99	21
500	20 X 20 X 4	19⅜ X 19⅜ X ¾	1400	.45	1.5	82	18
500	18 X 24 X 4	17⅜ X 23⅜ X ¾	1500	.45	1.5	88	19
500	16 X 25 X 4	15⅜ X 24⅜ X ¾	1400	.45	1.5	82	18
500	16 X 20 X 4	15⅜ X 19⅜ X ¾	1100	.45	1.5	65	14
500	12 X 24 X 4	11⅜ X 23⅜ X ¾	1000	.45	1.5	58	13
500	12 X 12 X 4	11⅜ X 11⅜ X ¾	500	.45	1.5	28	7

(1) Filters can be operated up to 125% of rated face velocity.
(2) Width and height dimensions are interchangeable. VariCel II filters may be installed with the pleats either vertical or horizontal.
(3) All performance data based on ASHRAE Standard 52.2. Performance tolerances conform to Section 7.4 of ARI Standard 850-93. For maximum service life, VariCel II filters should always be operated with a prefilter.

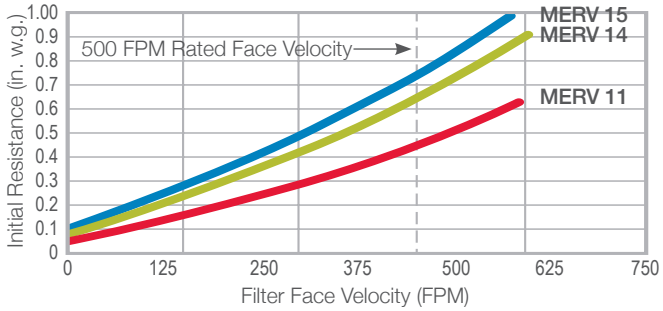
(4) The final operating resistance shown is typical of systems currently in operation. Filters can be operated to a higher or lower final resistance without materially affecting filter efficiency; however, dust holding capacity will be reduced if the filters are changed at a lower final resistance.
(5) VariCel II filters are shipped four per carton.
***Underwriters Laboratories Classification:** All VariCel II filters are UL Classified. Testing was performed according to UL Standard 900.*
***Continuous Operating Temperature Limits:** 150°F (66°C)*
For product information on VariCel II MH filters, request bulletin AFP-1-239.

Performance Data

Composite Minimum Efficiency Curve



Initial Resistance vs. Filter Face Velocity (NH Model)



Tested in accordance with ASHRAE Standard 52.2.

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

ISO Certified Firm

AFP-1-237S 07/15