

# VariCel® II MH

## EXTENDED SURFACE MINI-PLEAT FILTERS

- Metal construction improves performance under the most difficult operating conditions
- Available with metal header
- Superior moisture resistance
- Engineered to improve Indoor Air Quality (IAQ)
- True high-efficiency filters (only 4" thick media pack)
- Three efficiencies: MERV 14, MERV 13, and MERV 11
- Easy to install and remove
- Available with antimicrobial

The VariCel II MH filter is constructed using the same high standards for efficiency and performance of the original VariCel II filter. The microglass paper media with water repellent binder and the mini-pleat design are also the same as the original.

The VariCel II MH filter includes a metal header with rolled edges for safe handling and uses AAF Flanders' unique interlocking cell sides and header.

The combination of unique design and metal cell sides and headers means the VariCel II MH filters work well in turbulent operating conditions and in environments where high moisture content is an issue. When combined with the water-repellent binder used in the media, the metal construction makes the VariCel II MH filters highly moisture resistant. In addition, the metal header model makes it an easy fit in side access systems.

### Available with Antimicrobial

VariCel II MH filters with antimicrobial are available in MERV 14 and MERV 11 efficiencies. Antimicrobial acts as a preservative to ensure the integrity of the media throughout the life of the filter. EPA registered and environmentally safe, antimicrobial inhibits the growth of microorganisms documented to affect IAQ.

### Slim-Line Design

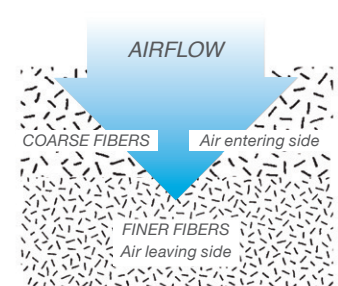
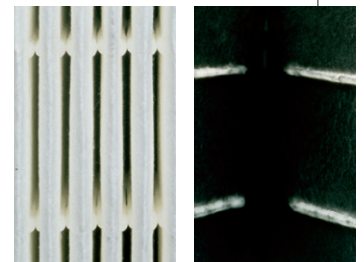
The slim-line design of the VariCel II MH filters provide minimum resistance and maximum dust loading capacity while lowering operating costs. Rows of adhesive beads are used to maintain even pleat spacing and provide maximum airflow with minimal resistance. The consistent pleat spacing of the media allows higher dust holding capacity and full use of the entire depth of the media.

### Dual-Density Media Increases Dust Holding Capacity

VariCel II MH filters use microglass paper media 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 design allows for collection of particulate throughout the full thickness of the media, substantially increasing dust holding capacity. The media is water repellent and can withstand intermittent exposure to water without affecting performance.



VariCel® II MH MERV 14 and higher filters meet efficiency requirements established for LEED® Project Certification.



# VariCel® II MH Filters

## Product Information – Standard Sizes

(2) Nominal Size (Inches) (W x H x D)	(2) Actual Size (Inches) (W x H)	Actual Depth (Inches)		(3) Rated Airflow Capacity (CFM)	(3) Rated Initial Resistance (in. w.g.)	(4) Recommended Final Resistance (in. w.g.)	Gross Media Area (sq. ft.)
		M	MH				
<b>(3)MERV 14 - Available with Antimicrobial</b>							
24 x 24 x 4	23 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	2000	.75	1.5	111
20 x 25 x 4	19 <sup>3</sup> / <sub>8</sub> x 24 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1750	.75	1.5	96
20 x 24 x 4	19 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1650	.75	1.5	91
20 x 20 x 4	19 <sup>3</sup> / <sub>8</sub> x 19 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1400	.75	1.5	75
18 x 24 x 4	17 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub>	N/A	4 <sup>1</sup> / <sub>4</sub>	1500	.75	1.5	81
16 x 25 x 4	15 <sup>3</sup> / <sub>8</sub> x 24 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1400	.75	1.5	74
16 x 20 x 4	15 <sup>3</sup> / <sub>8</sub> x 19 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1100	.75	1.5	58
12 x 24 x 4	11 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1000	.75	1.5	50
<b>(3)MERV 13</b>							
24 x 24 x 4	23 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	2000	.70	1.5	111
20 x 25 x 4	19 <sup>3</sup> / <sub>8</sub> x 24 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1650	.70	1.5	91
20 x 20 x 4	19 <sup>3</sup> / <sub>8</sub> x 19 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1400	.70	1.5	75
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12 x 24 x 4	11 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1000	.70	1.5	50
<b>(3)MERV 11 - Available with Antimicrobial</b>							
24 x 24 x 4	23 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	2000	.50	1.5	111
20 x 25 x 4	19 <sup>3</sup> / <sub>8</sub> x 24 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1750	.50	1.5	96
20 x 24 x 4	19 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1650	.50	1.5	91
20 x 20 x 4	19 <sup>3</sup> / <sub>8</sub> x 19 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1400	.50	1.5	75
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16 x 25 x 4	15 <sup>3</sup> / <sub>8</sub> x 24 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>	1400	.50	1.5	74
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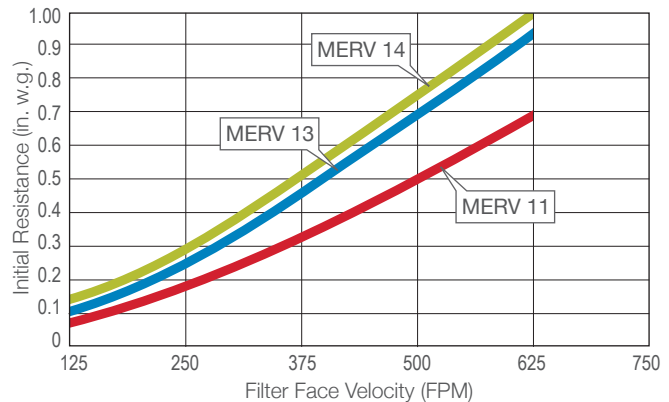
- (1) Filters can be operated up to 125% of rated face velocity.
- (2) Width and height dimensions are interchangeable. VariCel II MH filters may be installed with the pleats either vertical or horizontal.
- (3) All performance data based on ASHRAE Standard 52.2. Performance tolerances conform to Section 7.4 of ARI Standard 850-93. For maximum service life, VariCel II MH 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 MH filters are packed two per carton.

**Underwriters Laboratories Classification:** All VariCel II MH filters are UL Classified. Testing was performed according to UL Standard 900.

**Continuous Operating Temperature Limits:** 150°F (66°C)

## Performance Data

Initial Resistance vs. Filter Face Velocity



VariCel® is a registered trademark of AAF International in the U.S. and other countries.



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ISO Certified Firm

AFP-1-2391 01/17