

AmericanAirFilter®
VariCel® II

*Extended Surface
Mini-Pleat Filters Featuring
the Slim Line Design*

VariCel® II
with Intercept®

*IAQ Engineered Media with
Intercept®*

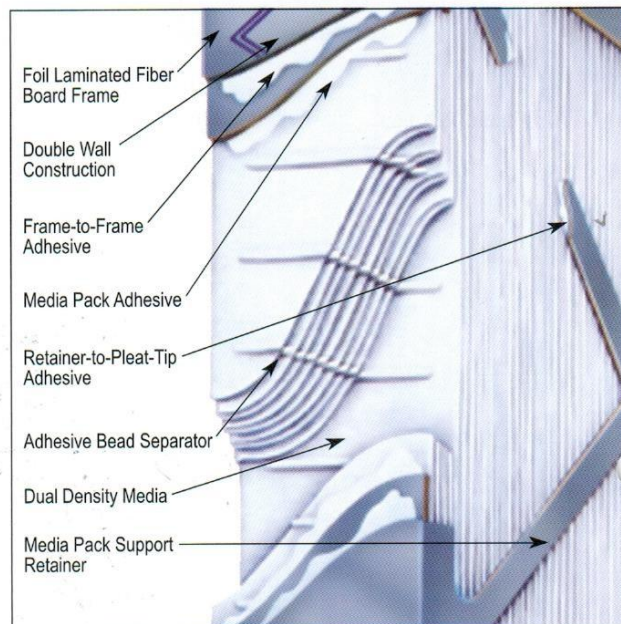
Better Air is Our Business®



AmericanAirFilter® VariCel® II and VariCel® II with Intersept®

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 - 90-95% (MERV 15), 80-85% (MERV 14), 60-65% (MERV 11).



Designed for high performance under both normal and difficult operating conditions, VariCel® II and VariCel® II with Intersept® 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 ideal for specialized systems such as diffusion filters in paint booths and prefilters in cleanrooms.

Unique Combination of High Performance and Cost-Saving Features

- High efficiency filtration
- Available with Intersept in 90-95%, 80-85% and 60-65% efficiencies
- 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

Heavy Duty Construction-High Performance in Tough Operating Conditions

Foil Laminated Fiber Board Frame Provides Strength, Moisture Resistance

The frame (cell side) is made of fiber board, with a special ingredient added to maintain its strength under high moisture conditions. A layer of foil is laminated to the outer surface to further enhance moisture resistance.

Indoor Air Quality

VariCel® II filters with Intersept are engineered to improve Indoor Air Quality (IAQ). Intersept acts as a preservative to ensure the integrity of the media throughout the life of the filter. EPA registered and environmentally safe, Intersept inhibits the growth of microorganisms documented to affect IAQ.

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, foil laminated frame prevents leakage and increases rigidity.

Easy Disposal

The thinner depth and fiber board frame make disposal easy - the easiest of any high efficiency filter. 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.*

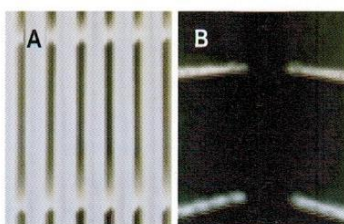


VariCel® II Filters are only one-third as deep as typical competitive filters.

*Except for aluminum strip on side access models

High Efficiency and Low Resistance Reduce Operating Costs

Slim Line Design



VariCel® II's slim line design, providing minimum resistance with maximum dust loading capacity, lowers operating costs. (A) Rows of adhesive beads are applied 1 1/4" 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.

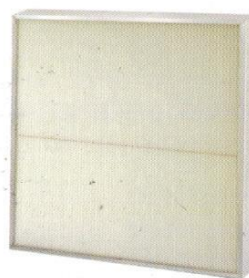
With this design, VariCel® II has the capacity to retain the same amount of media area, in a filter only one-third as deep, as filters using traditional corrugated aluminum separators. VariCel® II filters have twice the media area of 12" deep competitive cartridge-type, extended surface filters using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

VariCel II M & MH

The VariCel® II M & MH combine the efficiency and performance of VariCel® II media with AAF's unique interlocked metal header (MH) and cell side. These filters are ideal for environments where excessive turbulence and moisture are factors. Metal makes the VariCel® II M & MH a logical choice for side-access systems. For more information, Please contact AAF salesperson.



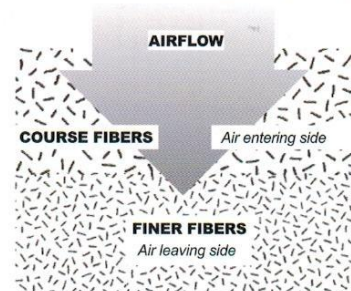
VariCel® II M



VariCel® II MH

Dual Density Media Increases Dust Holding Capacity

VariCel® II 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 to be collected 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 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
- Converted from more costly, bulkier filters

AmericanAirFilter®

VariCel® II and VariCel® II with Intersept®

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) 90-95% AVERAGE EFFICIENCY (MERV 15) - Available with Intersept®							
500	24 x 24 x 4	23-3/8 x 23-3/8 x 3-3/4	2000	.75	1.5	119	26
	20 x 25 x 4	19-3/8 x 24-3/8 x 3-3/4	1750	.75	1.5	103	22
	20 x 24 x 4	19-3/8 x 23-3/8 x 3-3/4	1650	.75	1.5	99	21
	20 x 20 x 4	19-3/8 x 19-3/8 x 3-3/4	1400	.75	1.5	82	18
	18 x 24 x 4	17-3/8 x 23-3/8 x 3-3/4	1500	.75	1.5	88	19
	16 x 25 x 4	15-3/8 x 24-3/8 x 3-3/4	1400	.75	1.5	82	18
	16 x 20 x 4	15-3/8 x 19-3/8 x 3-3/4	1100	.75	1.5	65	14
	12 x 24 x 4	11-3/8 x 23-3/8 x 3-3/4	1000	.75	1.5	58	13
	12 x 12 x 4	11-3/8 x 11-3/8 x 3-3/4	500	.75	1.5	28	7
(3) 80-85 AVERAGE EFFICIENCY (MERV 14) - Available with Intersept®							
500	24 x 24 x 4	23-3/8 x 23-3/8 x 3-3/4	2000	.65	1.5	119	26
	20 x 25 x 4	19-3/8 x 24-3/8 x 3-3/4	1750	.65	1.5	103	22
	20 x 24 x 4	19-3/8 x 23-3/8 x 3-3/4	1650	.65	1.5	99	21
	20 x 20 x 4	19-3/8 x 19-3/8 x 3-3/4	1400	.65	1.5	82	18
	18 x 24 x 4	17-3/8 x 23-3/8 x 3-3/4	1500	.65	1.5	88	19
	16 x 25 x 4	15-3/8 x 24-3/8 x 3-3/4	1400	.65	1.5	82	18
	16 x 20 x 4	15-3/8 x 19-3/8 x 3-3/4	1100	.65	1.5	65	14
	12 x 24 x 4	11-3/8 x 23-3/8 x 3-3/4	1000	.65	1.5	58	13
	12 x 12 x 4	11-3/8 x 11-3/8 x 3-3/4	500	.65	1.5	28	7
(3) 60-65% AVERAGE EFFICIENCY (MERV 11) - Available with Intersept®							
500	24 x 24 x 4	23-3/8 x 23-3/8 x 3-3/4	2000	.45	1.5	119	26
	20 x 25 x 4	19-3/8 x 24-3/8 x 3-3/4	1750	.45	1.5	103	22
	20 x 24 x 4	19-3/8 x 23-3/8 x 3-3/4	1650	.45	1.5	99	21
	20 x 20 x 4	19-3/8 x 19-3/8 x 3-3/4	1400	.45	1.5	82	18
	18 x 24 x 4	17-3/8 x 23-3/8 x 3-3/4	1500	.45	1.5	88	19
	16 x 25 x 4	15-3/8 x 24-3/8 x 3-3/4	1400	.45	1.5	82	18
	16 x 20 x 4	15-3/8 x 19-3/8 x 3-3/4	1100	.45	1.5	65	14
	12 x 24 x 4	11-3/8 x 23-3/8 x 3-3/4	1000	.45	1.5	58	13
	12 x 12 x 4	11-3/8 x 11-3/8 x 3-3/4	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 52.2-1999 and ASHRAE 52.1-1992 test methods. 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:

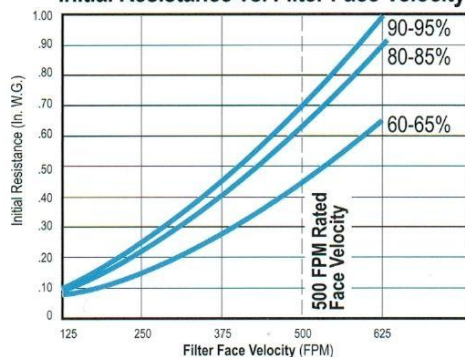
All VariCel II filters are classified U.L. Class 2. Testing was performed according to U.L. Standard 900 and CAN 4-S111.

Continuous Operating Temperature Limits:

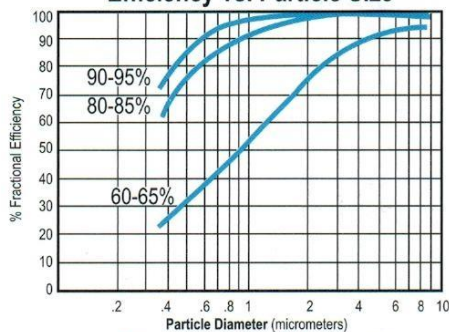
150°F (66°C)

Performance Data

Initial Resistance vs. Filter Face Velocity



Efficiency vs. Particle Size



Tested in accordance with ASHRAE Test Standard 52.2-1999.



American Air Filter Manufacturing Sdn. Bhd.

Lot 6, Jalan Pengapit, 15/19,
Seksyen 15, 40000 Shah Alam,
Selangor, Malaysia.
Email: enquires@aafmal.com
Website: www.aafasia.com

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

©2008 AAF Malaysia
VCII-03-MAL/MAR 13