

# Microguard® 99

HEPA and ULPA Filters 99.97%, 99.99%, 99.999% on .3 micron particles



### State-of-the-Art Engineering and Design



Every Microguard 99 Filter is individually tested at the factory before it is shipped.

#### **Cell Sides:**

Choose from particle board, fire retardant particle board, fire retardant plywood, galvanized steel, stainless steel, formed aluminum or anodized aluminum.

#### Media

Wet laid paper produced from glass microfibers, Microguard 99 media is waterproof and heat resistant up to 1000 °F. The continuous media sheet is subject to eleven distinct tests and inspections prior to shipment.

### **Pleat Design:**

Microguard 99 filters utilize a unique score fold design developed by Airguard Industries. This channel design increases media surface area and reduces opportunities for media damage during handling and installation.

### **Faceguards:**

Expanded metal faceguards in galvanized steel, stainless steel or aluminum can be furnished on one or both sides of the filter.

### **Separators:**

Utilizing Airguard's hemmed (rolled) safety edge, corrugated aluminum separators allow for maximum media utilization. The design minimizes risk of media puncture, adds overall filter pack rigidity and stability, and offers maximum air flow through the filter. Separator materials offered include aluminum, vinyl coated aluminum, and kraft paper.

### Sealant/Bond:

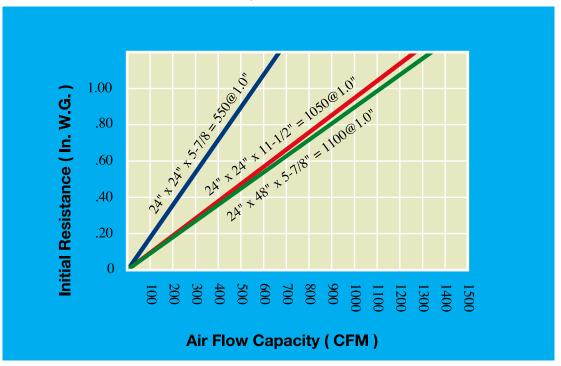
The entire media pack is bonded to the interior of the cell sides with urethane sealant. Silicone bond is used in high temperature models (500° F).

### **Gaskets:**

Dove tail interlocking urethane gaskets are standard on Microguard 99. Gaskets are 3/4" x 1/4" and are furnished as standard on the air leaving (downstream) side of the filter. Silicone gaskets are used on high temperature models. Gel seal filters are also available.

### **Performance and Operating Data**

### **Air Flow Capacity vs. Initial Resistance**



### **Standard Microguard 99 Sizes**

Actual Filter Size (Inches) H x W x D	Air Flow Capacity (CFM) @1.0" W.G.	Actual Filter Size (Inches) H x W x D	Air Flow Capacity (CFM) @1.0" W.G.	Actual Filter Size (Inches) H x W x D	Air Flow Capacity (CFM) @1.0" W.G.
12x12x11-1\2	260	8 x 8 x 5-7/8	55	30 x 24 x 5-7/8	685
12x24x11-1\2	525	12 x 12 x 5-7/8	140	30 x 30 x 5-7/8	860
15-3/8 x 19-3/8 x 11-1/2	545	12 x 24 x 5-7/8	275	30 x 36 x 5-7/8	1030
20-7/8 x 20-7/8 x 11-1/2	795	20-7/8 x 44-7/8 x 5-7/8	895	30 x 48 x 5-7/8	1370
23-3/8 x 23-3/8 x 11-1/2	1000	23-1/4 x 47-1/4 x 5-7/8	1050	30 x 60 x 5-7/8	1715
24 x 12 x 11-1/2	525	23-3/8 x 23-3/8 x 5-7/8	520	30 x 72 x 5-7/8	2055
24 x 24 x 11-1/2	1050	24 x 24 x 5-7/8	550	36 x 24 x 5-7/8	825
24 x 30 x 11-1/2	1315	24 x 30 x 5-7/8	685	36 x 30 x 5-7/8	1030
		24 x 36 x 5-7/8	825	36 x 36 x 5-7/8	1235
		24 x 48 x 5-7/8	1100	36 x 48 x 5-7/8	1645
		24 x 60 x 5-7/8	1370	36 x 60 x 5-7/8	2055
		24 x 72 x 5-7/8	1645	36 x 72 x 5-7/8	2470

- 1. All dimensions shown are actual filter sizes (not including gaskets). Filters have a manufacturing tolerance of +0 -1/8" to insure proper fit.
- 2. All filters are listed with the height (H) dimension shown first. It is important to install the filters with the pleats in the vertical position only.
- 3. Underwriters Laboratories Classifications: Microguard 99 filters are available with U.L. 900 or U.L. 586 classifications.
- $4. \ Operating \ temperature \ limits \ (continuous): 180^{\circ}F \ (82^{\circ}C) high \ temperature \ models \ available \ up \ to \ 500^{\circ}F \ (260^{\circ}C).$

## Microguard® 2000

High Capacity HEPA Filters

### **500 FPM Operation**

Microguard 2000 High Capacity HEPA filters are designed for use in higher air flow applications up to 500 FPM. They offer a wide range of operating and cost advantages including:

- Higher air flow with no increase in resistance.
- Higher air flow while providing HEPA efficiency.
- Lower resistance, lower energy cost, longer life at standard air flow rates. Microguard 2000 filters have only .60" W.G. resistance at 1000 CFM.
- Longer service life reduces disposal costs, less contribution to landfills.
- Reduces space required for filter bank.

High capacity operation is achieved by designing additional media into the filters - 50% more than standard capacity HEPAs. Decreased height of the corrugated separators enables the filter to contain more pleats, more media.

#### **New Installations**

If designing a new system, Microguard 2000 filters can reduce the space required for HEPA filters by installing one half the quantity normally specified. Delivery of 2000 CFM at only 1.35 W.G. or 1500 CFM at 1.0 W.G. offers a wide range of space saving opportunities.



### Renovations

If renovating an existing system, selection of high capacity filters means longer service life, lower resistance, lower energy cost, lower maintenance expenses and less disposal cost, if existing air flow rates are maintained. Microguard 2000 filters are directly interchangeable with standard HEPA filters.

### **Choose from Three Efficiencies**

99.97% on 0.3 microns – IEST Type A 99.99% on 0.3 microns – IEST Type C available 99.999% on 0.3 microns – IEST Type E available

Microguard	=11.	99.97%		
2000 High Capacity Model	Filter Dimensions H x W x D	Capacity (CFM) @ initial pressure drop		
Number	(inches)	.60"	1.0"	1.35"
MC2000-501	24 x 24 x 11-1/2	1000	1500	2000
MC2000-501A	23-3/8 x 23-3/8 x 11-1/2	930	1400	1870
MC2000-500	12 x 24 x 11-1/2	500	750	1000
MC2000-500A	11-3/8 x 23-3/8 x 11-1/2	450	690	920

99.99%				
Capacity (CFM) @ initial pressure drop				
1.0"	1.35"			
1500	2000			
1400	1870			
750	1000			
690	920			
	1.0" 1500 1400 750			

Distributed by:

99.999%					
Capacity (CFM) @ initial pressure drop					
.60"	1.0"	1.35"			
760	1170	1560			
720	1100	1460			
300	575	780			
350	540	715			

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