

## Pre Pleat M13

- Complies with the Air Filter requirements of Credits 1.4 and 1.5 under LEED® IEQ Version 3
- Contributes to satisfying the following LEED® Version 3 Credits:
  - Energy & Atmosphere:  
Credit 1.0
  - Materials & Resources:  
Credit 1.0
  - Indoor Environmental Quality:  
Credits 1.1 and 3.2
  - Innovation:  
Credit: 1.0

### Pre Pleat® M13

#### MERV 13 Pleated Filter

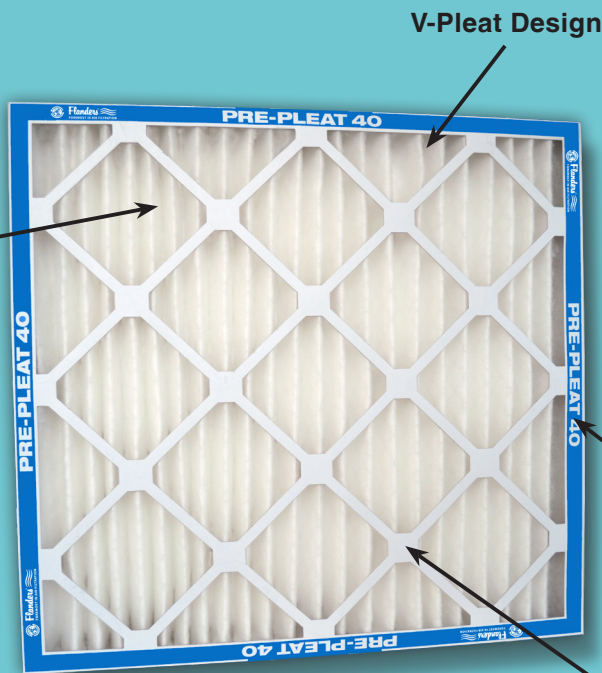
#### Low Initial Resistance for Reducing Energy



Flanders has led the world in filter media development and the application of high efficiency filtration for over 60-years. Pre Pleat M13 pleated panel filters can be an ideal choice to achieve the compliance requirements of LEED® V3 IEQ Credits 1.5 and 1.5. The low initial resistance of the M13 can also contribute an overall strategy of reducing energy consumption. Its one, two and four inch depths makes MERV 13 upgrades as trouble-free as a direct replacement for most commercial and industrial applications.

## Construction / Physical Data

**100% Synthetic  
Recyclable High-Loft  
Media**



### **Additional Features:**

- 2-Piece heavy duty die-cut frame
- New designed expanded metal backing

**Double-Wall Frame**

**Diagonal grid supports for maximum strength**

### **Airflow Resistance**

- 1" Depth: .25" w.g. @ 300 FPM
- 2" Depth: .30" w.g. @ 500 FPM
- 4" Depth: .23" w.g. @ 500 FPM

### **Media**

100% Non-woven synthetic media manufactured from recyclable material.

### **Media Support**

Diamond-shaped expanded metal maintains maximum support while avoiding air by-pass.

### **Pleat Design**

V-Pleat design minimizes resistance keeping consistent pleat count, height and shape.

### **Frame**

Heavy-duty two piece moisture-resistant frame includes diagonal and horizontal support members bonded to the media on the air entering and leaving sides. Durable for any commercial and industrial application.

### **General**

The Pre Pleat M13 provides an initial efficiency of MERV 13 per ASHRAE 52.2-2007 (80-85%) at a resistance of only .20" w.g. (2" depth) when operating at approach velocity of 375 FPM - only 0.30 at 500 FPM.

### **Installation Considerations**

Distinctions can be made in air filter technology. Flanders is committed to continuously developing new and improved products to assist in an environmentally responsible, healthy, and prosperous environment.

The Pre Pleat M13 pleated panel filters are suitable as pre filters but are best suited for heavy duty commercial, industrial, and pharmaceutical applications. The Pre Pleat M13 can be installed in PF-1 Holding Frames, K-Trac Framing Modules, Surepleat Side Access Housings and Bag-In / Bag-Out Containment housings.

### **Operating Temperature Limits**

Maximum operating temperature is 180°F (82.22°C).

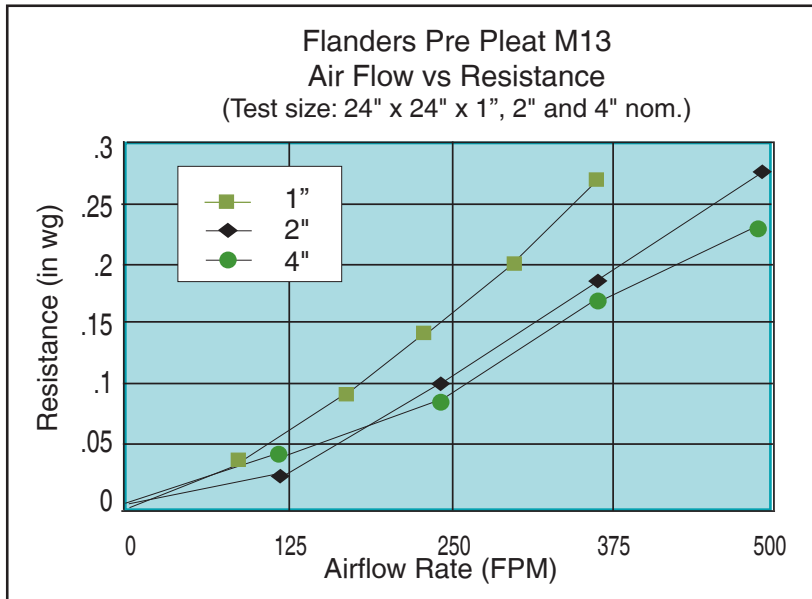
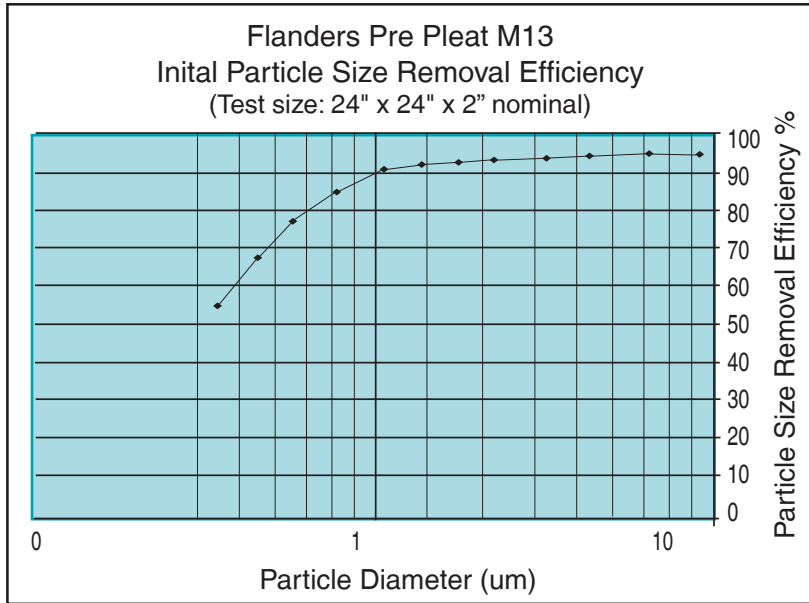
# Capacities and Dimensions

Nominal Depth (in.)	Nominal Size WxHxD (in.)	Air Flow Capacity				Media Area (sq. ft.)	Wt. Each (lbs.)
		300 FPM		500 FPM			
		CFM	PD	CFM	PD		
1"  Air Flow Capacity 15 ppf	10x20x1	417	0.25	694	-	2.7	0.3
	12x20x1	500	0.25	833	-	3.1	0.3
	12x24x1	600	0.25	1000	-	3.7	0.4
	14x20x1	583	0.25	972	-	3.7	0.4
	14x25x1	729	0.25	1215	-	4.6	0.5
	15x20x1	625	0.25	1042	-	3.9	0.4
	16x20x1	667	0.25	1111	-	4.1	0.4
	16x24x1	800	0.25	1333	-	4.9	0.5
	16x25x1	833	0.25	1389	-	5.2	0.5
	18x20x1	750	0.25	1250	-	4.7	0.5
	18x24x1	900	0.25	1500	-	5.7	0.6
	18x25x1	938	0.25	1563	-	5.9	0.6
	20x20x1	833	0.25	1389	-	5.1	0.5
	20x24x1	1000	0.25	1667	-	6.2	0.6
	20x25x1	1042	0.25	1736	-	6.4	0.6
	24x24x1	1200	0.25	2000	-	7.4	0.7
25x25x1	1302	0.25	2170	-	8.3	0.8	
2"  Air Flow Capacity 15 ppf	10x20x2	417	0.15	694	0.30	6.1	0.6
	12x20x2	500	0.15	833	0.30	7.3	0.7
	12x24x2	600	0.15	1000	0.30	8.8	0.8
	14x20x2	583	0.15	972	0.30	8.5	0.8
	14x25x2	729	0.15	1215	0.30	10.6	1.0
	15x20x2	625	0.15	1042	0.30	9.1	0.8
	16x20x2	667	0.15	1110	0.30	9.7	0.9
	16x24x2	800	0.15	1335	0.30	11.2	1.0
	16x25x2	833	0.15	1390	0.30	12.2	1.1
	18x20x2	750	0.15	1250	0.30	10.9	1.2
	18x24x2	900	0.15	1500	0.30	13.1	1.3
	18x25x2	938	0.15	1563	0.30	13.7	1.1
	20x20x2	833	0.15	1390	0.30	12.2	1.3
	20x24x2	1000	0.15	1667	0.30	14.6	1.3
	20x25x2	1042	0.15	1735	0.30	15.2	1.5
	24x24x2	1200	0.15	2000	0.30	17.5	1.6
25x25x2	1302	0.15	2170	0.30	19.0	1.6	
4"  Air Flow Capacity 9 ppf	12x24x4	600	0.13	1000	0.23	11.3	.09
	16x20x4	667	0.13	1110	0.23	12.5	1.0
	16x25x4	833	0.13	1390	0.23	15.6	1.3
	18x24x4	900	0.13	1500	0.23	17.5	1.4
	20x20x4	833	0.13	1390	0.23	15.6	1.3
	20x24x4	1000	0.13	1667	0.23	18.8	1.5
	20x25x4	1042	0.13	1735	0.23	19.6	1.6
	24x24x4	1200	0.13	2000	0.23	22.6	1.8
28x30x4	1750	0.13	2915	0.23	32.6	2.8	

## Notes:

1. PD represents clean pressure drop in inches w.g. The recommended final pressure drop for all models is 1.0 in. w.g. System design may dictate a lower change-out point.
2. Actual filter face size for 12x24 and 24x24 filters is 5/8 inch under on height and width. Actual face size on all other sizes is 1/2 inch under on height and width.
3. Actual filter depth is 1/4 inch under for these nominal 1-inch, 2-inch and 4-inch deep filters. For capacities other than those shown, ratio the face velocities.

# Dust Loading / Resistance Curve



**Notes:**

1. The Pre Pleat M13 maintains efficiency values during conditioning tests.
2. All data per ASHRAE 52.2, latest revision. Independent test reports are available upon request.

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