

General

PrecisionCell extended media separator type rigid filters are designed for use in most commercial or industrial HVAC systems where medium to high efficiency filtration is required. PrecisionCell filters are available in average efficiency ranges of 60-65%, 80-85% and 90-95% per ASHRAE Standard 52.1 test methods and are available in standard and high capacity versions.

These filters are suitable for variable air volume systems. Operating face velocity ranges are from 0 to 625 FPM for 12" deep filters. Three styles are available: box, single and double header. PrecisionCell filters are UL 900 Class 1 listed.

Installation Considerations

PrecisionCell rigid filters may be installed in Flanders Universal Holding Frames, K-Trac Filter Framing Modules, Sureseal Side Access Housings, or in similar existing hardware.

Universal Holding Frames are riveted together to form a bank and may be installed for upstream or downstream service. K-Trac Filter Framing Modules are especially suitable for medium to large built-up filter banks. Smaller systems and systems with minimum upstream access space are best served using Sureseal Side Access Housings.

Construction Options

PrecisionCell filters are designed for temperatures up to 350 degrees Fahrenheit. For high temperature or gas turbine models, see PrecisionCell GT and HT bulletins.

Physical Data

Frame: 24 ga. corrosion-resistant steel. Other frame materials are also available.

Media: Moisture-resistant micro-fine fiberglass paper

Separators: Hemmed corrugated aluminum. Flanders also offers an exclusive Pureform® separatorless model. Contact factory.

Headers: 13/16 " wide corrosion-resistant steel

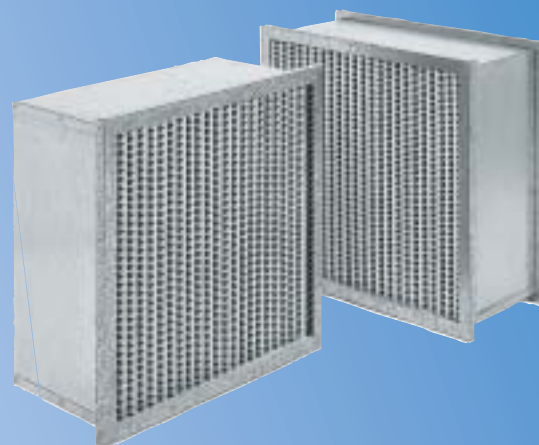
Operating Limits: 100% RH and 350° F

Actual Face: Nominal size less 5/8"

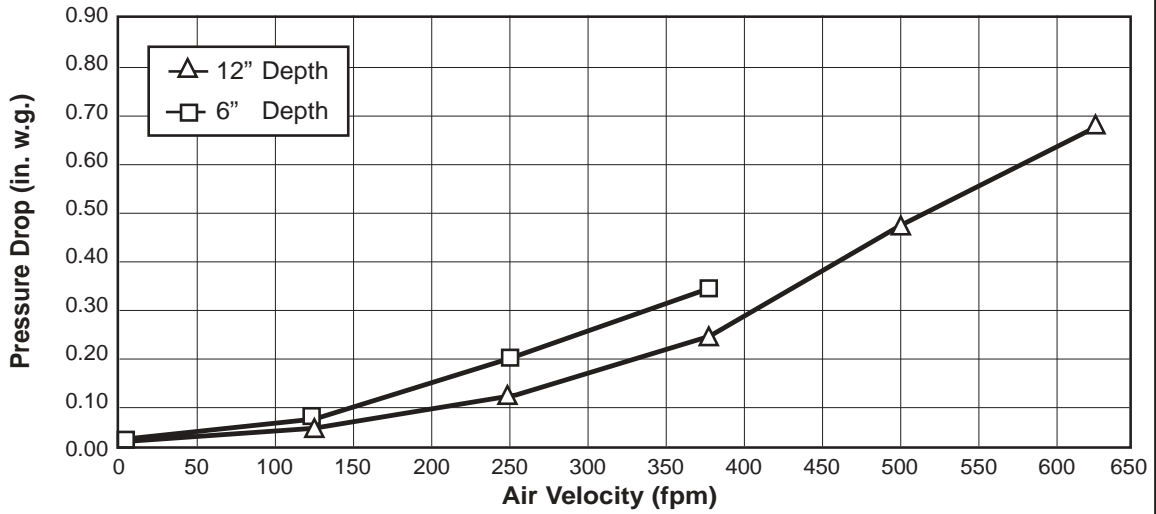
Actual Depth: 5-7/8" or 11-1/2"

Important Features

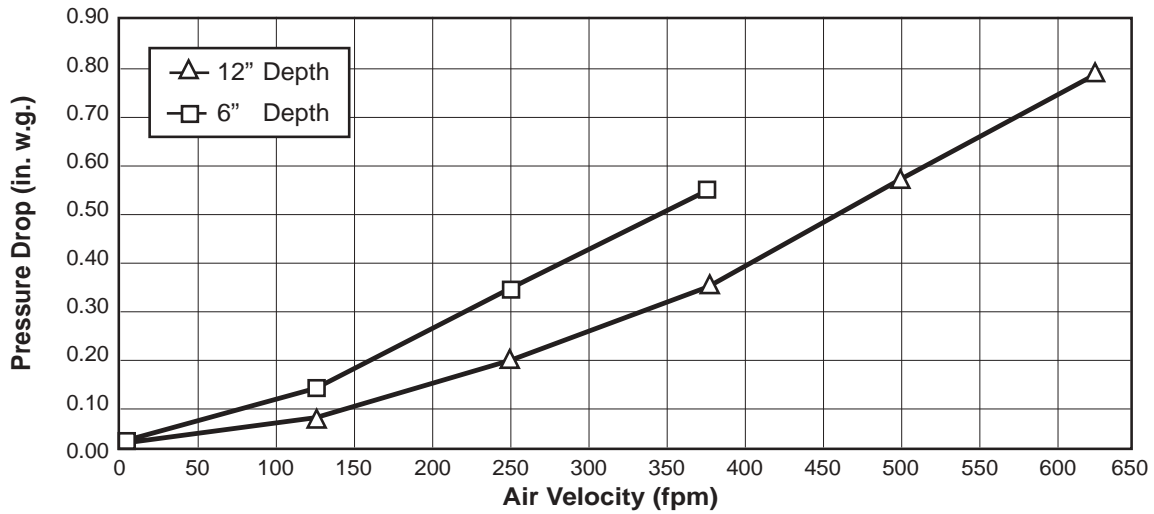
- Rugged 24 gauge corrosion resistant steel casing minimizes damage during shipping and handling
- Corrugated aluminum separators stabilize the moisture-resistant media pack and prevent damage in applications downstream of the supply fan.
- MERV 11 to 14



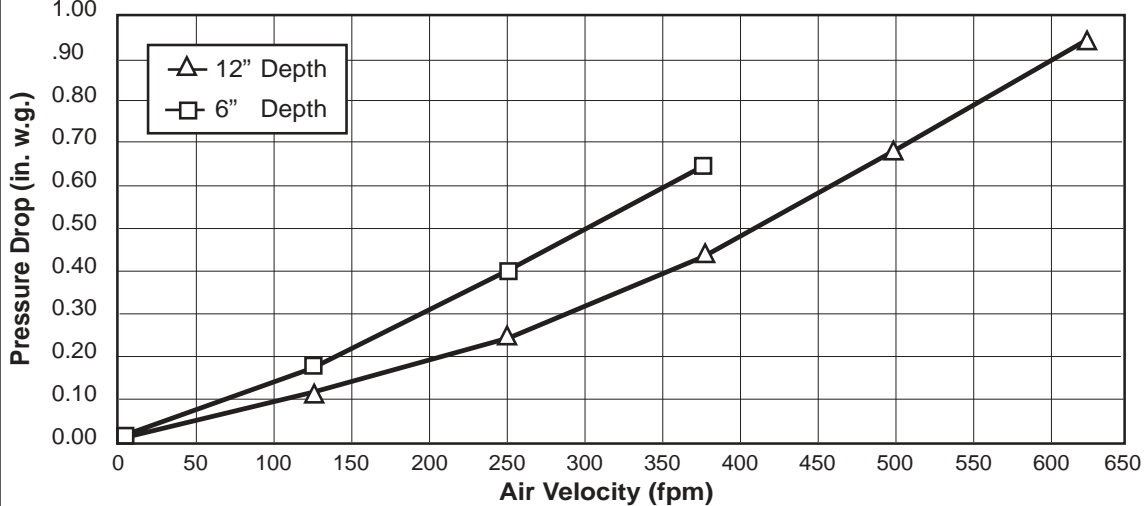
PrecisionCell w/Header 60-65% Pressure Drop vs. Air Velocity



PrecisionCell w/Header 80-85% Pressure Drop vs. Air Velocity



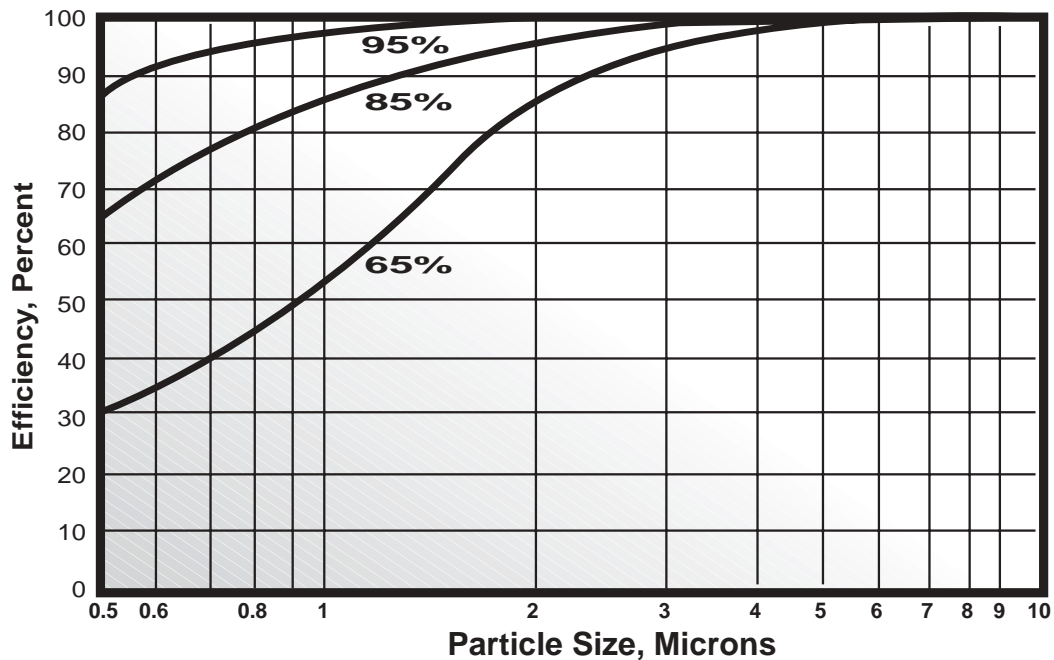
PrecisionCell w/Header 90-95% Pressure Drop vs. Air Velocity



Values shown may be averages or estimates typical of products styles.
Contact factory for test data on specific products.

Nominal Depth (Inches)	Efficiency	Nominal Size HxWxD (Inches)	250 FPM		375 FPM		500 FPM		625 FPM		Media Area (sq. ft.)	Weight Each (lbs)
			cfm	PD	cfm	PD	CFM	PD	CFM	PD		
12	90-95%	24x24x12	1000	.25	1500	.43	2000	.68	2500	.95	125	18
		24x12x12	500		750		1000		1250		57	9
	80-85%	24x24x12	1000	.20	1500	.36	2000	.57	2500	.78	105	18
		24x12x12	500		750		1000		1250	47	9	
	60-65%	24x24x12	1000	.12	1500	.25	2000	.47	2500	.68	105	18
		24x12x12	500		750		1000		1250	47	9	
6	90-95%	24x24x6	1000	.40	1500	.65	6" Depth Filters Not Recommended For These Velocities.				60	11
		24x12x6	500		750						27	8
	80-85%	24x24x6	1000	.35	1500	.55					50	11
		24x12x6	500		750		22	8				
	60-65%	24x24x6	1000	.2	1500	.35	50	11				
		24x12x6	500		750		22	8				

1. PD represents clean pressure drop in inches w.g. The recommended final pressure drop for all models is 1.5 inches w.g.
3. Efficiency average is based on ASHRAE Standard 52.1 test methods. Performance values stated may be averages typical of the products listed. Contact factory for actual performance test reports on specific products.
4. Performance tolerances conform to Section 7.4 of ARI Standard 850
5. Actual face size is 5/8" under on height and width. Actual filter depth is 5-7/8" or 11-1/2"
6. Values shown may be averages or estimates typical of products styles. Contact factory for test data on specific products.



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Engineered Products: 1-800-637-2803 Replacement Products: 1-800-347-2220

PrecisionCell Additional Sizes

Nominal Depth (Inches)	Efficiency	Nominal Size HxWxD (Inches)	250 FPM		375 FPM		500 FPM		625 FPM		Media Area (sq. ft.)	Weight Each (lbs)
			cfm	PD	cfm	PD	CFM	PD	CFM	PD		
12	90-95%	25x20x12	868	.25	1302	.43	1736	.68	2170	.95	108	18
		25x16x12	694		1041		1389		1736		84	17
		24x20x12	833		1250		1666		2083		103	18
		24x18x12	750		1125		1500		1875		91	17
		20x20x12	694		1042		1389		1736		84	17
		20x16x12	55		833		111		1389		65	15
12	80-85%	25x20x12	868	.20	1302	.36	1736	.57	2170	.78	90	16
		25x16x12	694		1041		1389		1736		70	14
		24x20x12	833		1250		1666		2083		86	16
		24x18x12	750		1125		1500		1875		76	14
		20x20x12	694		1042		1389		1736		70	14
		20x16x12	55		833		111		1389		54	14
12	60-65%	25x20x12	868	.12	1302	.25	1736	.47	2170	.68	90	16
		25x16x12	694		1041		1389		1736		70	14
		24x20x12	833		1250		1666		2083		86	16
		24x18x12	750		1125		1500		1875		76	14
		20x20x12	694		1042		1389		1736		70	14
		20x16x12	55		833		1100		1389		54	14
6	90-95%	25x20x6	868	.40	1302	.65	6" Depth Filters Not Recommended For These Velocities.			52	10	
		25x16x6	694		1041					40	9	
		24x20x6	833		1250					49	10	
		24x18x6	750		1125					44	9	
		20x20x6	694		1042					40	10	
		20x16x6	55		833					31	9	
6	80-85%	25x20x6	868	.35	1302	.55	6" Depth Filters Not Recommended For These Velocities.			44	10	
		25x16x6	694		1041					33	10	
		24x20x6	833		1250					31	10	
		24x18x6	750		1125					36	10	
		20x20x6	694		1042					33	10	
		20x16x6	55		833					26	10	
6	60-65%	25x20x6	868	.35	1302	.55	6" Depth Filters Not Recommended For These Velocities.			43	10	
		25x16x6	694		1041					33	10	
		24x20x6	833		1250					41	10	
		24x18x6	750		1125					36	10	
		20x20x6	694		1042					33	10	
		20x16x6	55		833					31	10	

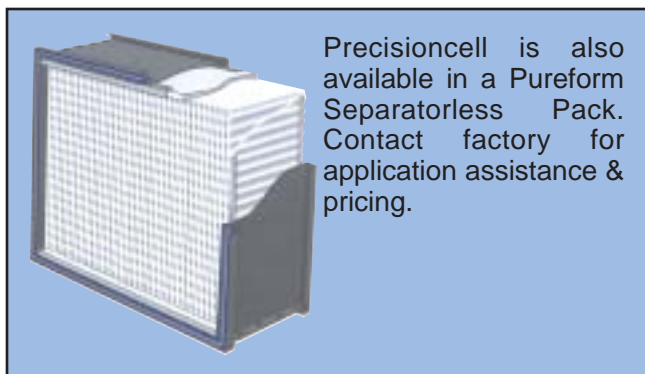
Values shown may be averages or estimates typical of products styles.
Contact factory for test data on specific products.



PrecisionCell Single Header filters are ideally suited for upstream or downstream installation in K-Trac Filter Modules. Insert the horizontal sides of the header in the gasketed 1" secondary track of the framing system.



PrecisionCell Single Header filters are recommended for through-the-frame applications. Install by loading the filters through the Universal frame until the header comes into contact with the gasket on the frame. Secure in place with Model P knock-on fasteners.



Precisioncell is also available in a Pureform Separatorless Pack. Contact factory for application assistance & pricing.



PrecisionCell Single Header filters are designed for use in Sureseal Side Access Filter Housings. The Sureseal unit provides space for prefilters to prolong the life of the filters. Install by sliding the header of the filter into the gasketed 1" secondary filter track.

Application Guidelines

PrecisionCell filters may be used wherever job requirements dictate totally rigid filters and available space will allow only minimal inline depth.

PrecisionCell filters should be selected using 24" x 24" and 24" x 12" face sizes. This allows for 12" increments in height and width of the filter bank and insures that replacement cartridges will be readily available.

PrecisionCell filters should be installed with separators vertical where ever possible. It is permissible to install 24" x 12" face size cartridges with separators horizontal if necessary to meet the size requirements of the filter bank.

Prefilters

We recommend that Prepleat 40 pleated panel filters or Precision Pak bag filters be used as prefilters for PrecisionCell installations. Where there must be long intervals between filter changes, we recommend using 65% ASHRAE rated PrecisionPak as prefilters. Refer to individual bulletins for performance data on these prefilters.

VAV Systems

Filter banks should be sized so that the maximum rated flow at design conditions falls within the published recommended velocities. PrecisionCell filters may be applied at any capacity between zero flow and cataloged capacities.

Hospital Applications

PrecisionCell filters are the preferred selection for hospital systems where code or good practice require that the filters be downstream of coils.

Gasketed Headers

PrecisionCell headered filters installed in Flanders K-Trac Filter Framing Modules or Sureseal Side Access Housings require gaskets on opposite header sides to prevent air bypass.

To specify filters with gasketed headers, add suffix "S" to "H" to the model number as follows:

Model Number - S: Gaskets are on the sides parallel to the separators.

Model Number - H: Gaskets are on the sides perpendicular to the separators.

Guide Specifications

1.0 General

- 1.1 Medium and high efficiency rigid filters shall be PrecisionCell extended media separator type rigid filters as manufactured by Flanders.
- 1.2 Filter sizes, efficiencies and capacities shall be as scheduled on the drawings.

2.0 Filter Construction

- 2.1 Filters shall be constructed by pleating a continuous sheet of moisture-resistant water-laid micro-fine glass media into closely spaced pleats with hemmed-edge corrugated aluminum separators.
- 2.2 The filter pack shall be sealed into a 24 gauge corrosion resistant steel frame.

- 2.3 The enclosing frame shall be assembled in a rigid manner and shall incorporate a single or double header as required by job conditions.
- 2.4 Filters shall be UL 900 Class 1 listed.

3.0 Performance

- 3.1 Initial and final resistances shall not exceed the scheduled values.
- 3.2 Media area must equal or exceed that of the specified filter.
- 3.3 The average efficiency shall be as determined by the ASHRAE Standard 52.1 test methods.
- 3.4 The manufacturer shall guarantee performance as stated in the literature within tolerances as outlined in Section 7.4 of ARI Standard 850.

Flanders Precisionaire

Foremost in Air Filtration

Engineered Products: 1-800-637-2803

Replacement Products: 1-800-347-2220

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