

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 offered as a MERV 11 to 14 according to ASHRAE Standard 52.2.

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 Astr Holding Frames, K-Trac Filter Framing Modules, Sureseal Side Access Housings, or in similar existing hardware.

Astr 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 250 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, sealed in the frame with Class 1 urethane.

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

Headers: 13/16 " wide corrosion-resistant steel

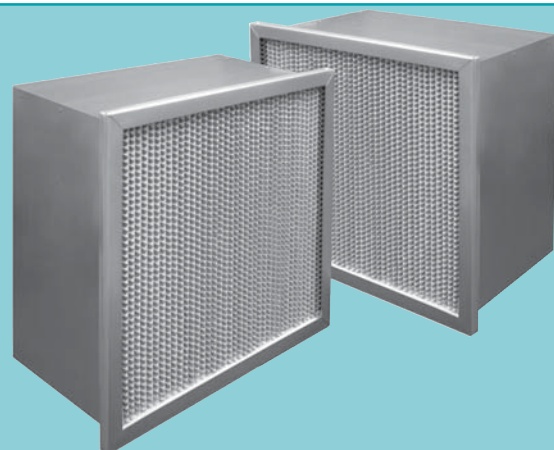
Operating Limits: 100% RH and 250° F

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



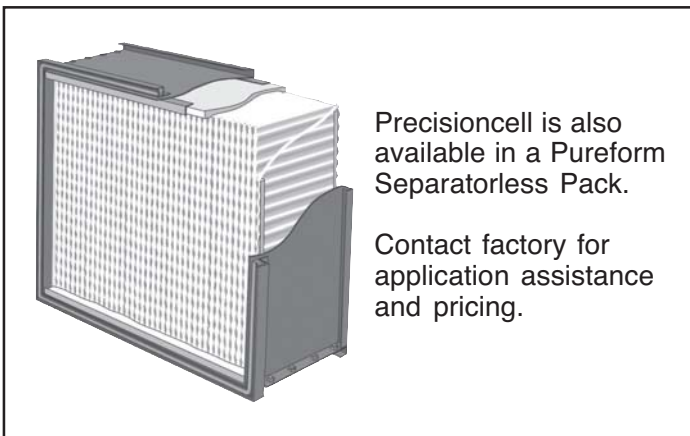


PrecisionCell Single Header filters are recommended for through-the-frame applications. Install by loading the filters through the Astr frame until the header comes into contact with the gasket on the frame. Secure in place with Model P knock-on fasteners.

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 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.

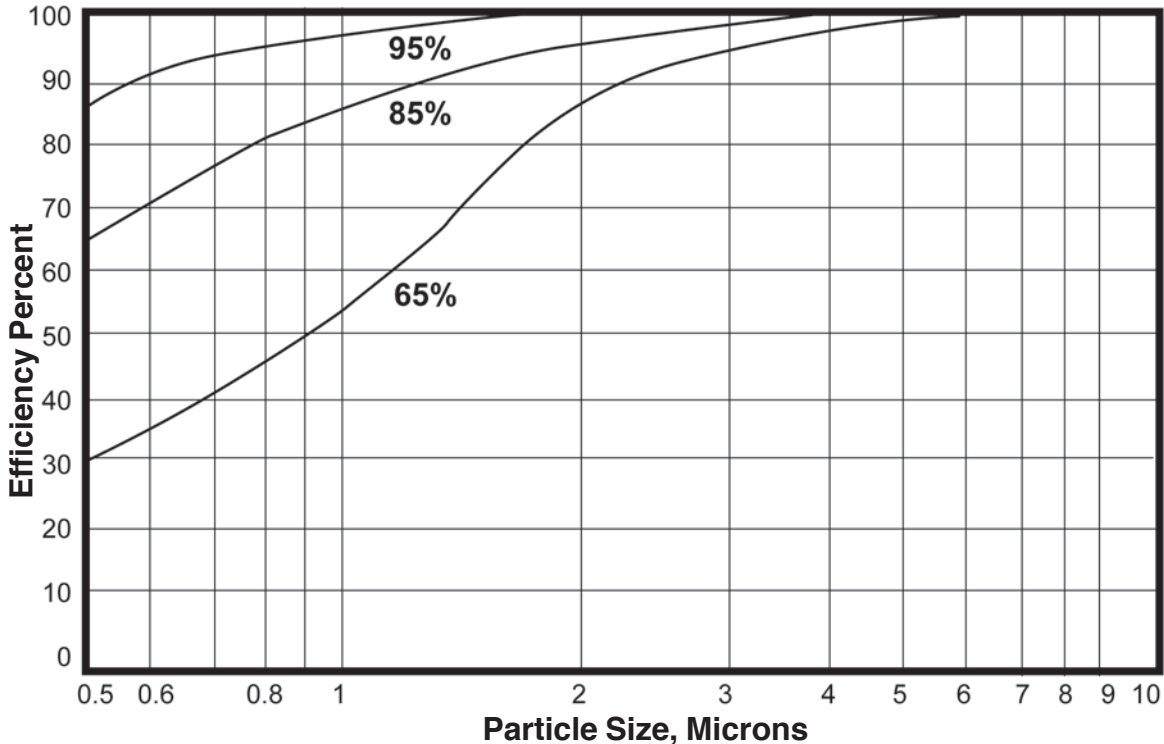


Precisioncell is also available in a Pureform Separatorless Pack.

Contact factory for application assistance and pricing.

Nominal Depth (Inches)	Efficiency	Nominal Depth HxWxD (Inches)	250 FPM		375 FPM		500 FPM		625 FPM		Medi Area (sq.ft.)	Weight Each (lbs)
			CFM	PD	CFM	PD	CFM	PD	CFM	PD		
12	90-95%	24x24x12 24x12x12	1000 500	.25	1500 750	.43	2000 1000	.68	2500 1250	.95	125 57	18 9
	80 - 85%	24x24x12 24x12x12	1000 500	.20	1500 750	.36	2000 1000	.57	2500 1250	.78	105 47	18 9
	60 - 65%	24x24x12 24x12x12	1000 500	.12	1500 750	.26	2000 1000	.47	2500 1250	.68	105 47	18 9
6	90-95%	24x24x6 24x12x6	1000 500	.40	1500 750	.65	6" Depth Filters Not Recommended For These Velocities.				60 27	11 8
	80 - 85%	24x24x6 24x12x6	1000 500	.35	1500 750	.55					50 22	11 8
	60 - 65%	24x24x6 24x12x6	1000 500	.2	1500 750	.35					50 22	11 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.
2. 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.
3. Performance tolerances conform to Section 7.4 of ARI Standard 850.
4. Actual face size is 5/8" under on height and width. Actual filter depth is 5-7/8" or 11-1/2".
5. Performance values shown in this publication may be averages or estimates intended to generally represent product styles. Always contact factory for latest actual test data on specific Flanders Precisionaire models.



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 wherever 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 practices 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 PrecisionCell Filters with gasketed headers, add suffix "GU" (upstream), "GD" (downstream) and "GS" (sides) to the model number.

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 Filter shall be sealed to the frame with fire retardant solid urethane.

- 2.4 The enclosing frame shall be assembled in a rigid manner and shall incorporate a single or double header as required by job conditions.
- 2.5 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 and 52.2 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.