

General

Super-Flow® V extended surface area & low pressure drop minipleat filters are designed for use in most commercial and industrial HVAC systems where medium to high efficiency filtration is required. Super-Flow® V filters are available in average efficiency ranges: 65%, 85%, 95% and 98% per ASHRAE Standard 52.1 test methods and 95% DOP. They may be operated at face velocities from 0 to 750 fpm. Super-Flow® V filters are UL 900 Class 2 listed.

Construction

Super-Flow® V filters are constructed of multiple minipleat panels bonded to flame-retardant plastic panels on top and bottom to make an unusually strong assembly that is both corrosion and moisture resistant. Aerodynamic extruded vertical supports minimize air entry turbulence. Super-Flow® V filters are totally rigid making them ideal for variable air volume (VAV) systems, as well as applications downstream of supply fans.

Low Pressure Drop

Super-Flow® V minipleat filters have an exceptionally low clean pressure drop unmatched by most any filter of the same efficiency. This affords low

fan energy costs during much of the life of the filter system. In addition, they are the filters of choice for packaged air conditioning systems that do not have the fan capacity of larger central systems.

Longer service life means material and labor cost savings and less disruption of systems caused by filter change-out shutdowns. High dust holding capacity is a key benefit of a filter with increased media area.

Physical Data

Media: Moisture-resistant microfine fiberglass

Filter Pack: Minipleat panels

Media Support: Adhesive

Top and Bottom Panels: Flame-retardant plastic

Vertical Supports: Aerodynamic extruded vertical supports

Operating limits: 160°F and 100% RH continuous duty

Actual Header Size: Nominal size less 5/8" (e.g. a nominal 24" x 24" filter is actually 23-3/8" x 23-3/8")

Actual Depth: 11-1/2"

Important Features

- Lowest clean pressure drop for energy savings and applicability to small fan systems
- Longer service life because of a very high ratio of media to nominal face area
- Aerodynamic vertical supports minimize air entry turbulence
- Minipleat panels provide rigidity for VAV systems and resistance to turbulent air flow
- May be operated from 0 to 750 fpm face velocity in either air flow direction
- Moisture resistant for humid air applications
- MERV 11-15



Efficiency %	Model Number	Nominal Size HxWxD Inches	250 FPM		375 FPM		500 FPM		625 FPM		750 FPM		Media Area (Sq Ft)	Wt. Each (Lbs.)
			CFM	PD	CFM	PD	CFM	PD	CFM	PD	CFM	PD		
95% DOP	SFVD-95A12	24 x 24 x 12	1000	0.28	1500	0.55	2000	0.75	2500	1.0	*	*	196	18
95% DOP	SFVD-95B12	20 x 24 x 12	800	0.28	1200	0.55	1600	0.75	2000	1.0	*	*	162	14
95% DOP	SFVD-95C12	12 x 24 x 12	500	0.28	750	0.55	1000	0.75	1250	1.0	*	*	98	9
98%	SFV-98A12	24 x 24 x 12	1000	0.25	1500	0.45	2000	0.60	2500	.08	*	*	196	17
98%	SFV-98B12	20 x 24 x 12	800	0.25	1200	0.45	1600	0.60	2000	.08	*	*	162	13
98%	SFV-98C12	12 x 24 x 12	500	0.25	750	0.45	1000	0.60	1250	.08	*	*	98	8
95%	SFV-95A12	24 x 24 x 12	1000	0.14	1500	0.25	2000	0.36	2500	0.51	3000	0.67	196	17
95%	SFV-95B12	20 x 24 x 12	800	0.14	1200	0.25	1600	0.36	2000	0.51	2400	0.67	162	13
95%	SFV-95C12	12 x 24 x 12	500	0.14	750	0.25	1000	0.36	1250	0.51	1500	0.67	98	8
85%	SFV-85A12	24 x 24 x 12	1000	0.07	1500	0.18	2000	0.27	2500	0.40	3000	0.58	196	17
85%	SFV-85B12	20 x 24 x 12	800	0.07	1200	0.18	1600	0.27	2000	0.40	2400	0.58	162	13
85%	SFV-85C12	12 x 24 x 12	500	0.07	750	0.18	1000	0.27	1250	0.40	1500	0.58	98	8
65%	SFV-65A12	24 x 24 x 12	1000	0.05	1500	0.15	2000	0.25	2500	0.38	3000	0.50	196	17
65%	SFV-65B12	20 x 24 x 12	800	0.05	1200	0.15	1600	0.25	2000	0.38	2400	0.50	162	13
65%	SFV-65C12	12 x 24 x 12	500	0.05	750	0.15	1000	0.25	1250	0.38	1500	0.50	98	8

Performance Data Notes:

1. PD represents clean pressure drop in inches w.g. The recommended final pressure drop for all models is 2.0 inch w.g.
2. Operation down to zero air flow is satisfactory for all models
3. Efficiency is average and is based on ASHRAE Standard 52.1 test methods for 65%, 85%, 95% and 98% filters. 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 filter header is 5/8 inch under on height an width. Actual depth is 11-1/2 inch
6. 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 models.

Installation Considerations

Super-Flow®V filters may be installed in Flanders Astrl Holding Frames, K-Trac Filter Framing Modules, Sureseal Side Access Housings or in similar existing hardware. Astrl Holding Frames are riveted together to form a filter bank. 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.

Super-Flow®V filters are furnished with a peripheral header on the air entering side and with foam gaskets on the “H” dimension for the 24 x 24 model and “W” dimension on the 12 x 24 and 20 x 24 models.

Guide Specifications

1.0 General

- 1.1 Medium and high efficiency extended surface low pressure drop minipleat filters shall be Super-Flow®V models 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 consist of multiple minipleat panels bonded to flame-retardant plastic panels on top and bottom and aerodynamic design extruded aluminum struts.

3.0 Performance

- 3.1 Initial and final resistances shall not exceed the scheduled values.
- 3.2 The average efficiency shall be as determined by ASHRAE Standard 52.1 test methods.
- 3.3 ASHRAE efficiency 98% models shall be MERV 15, 95% model shall be MERV 14, 85% model shall be MERV 13, 75% model shall be MERV 11 by ASHRAE Standard 52.2.
- 3.4 Filters shall be UL 900 Class 2 listed.