

# FILTRATION PRODUCTS, INC.



#### GENERAL

FlowCell Series C filters are an extended surface, bag style filter designed for use in most commercial HVAC systems. These medium to high efficiency, high capacity filters are the ideal solution for installations with constant volume airflows and high particulate concentrations. FlowCell bag filters are available with a wide range of face dimensions, number of pockets, and filter depths to fill a wide array of requirements.

#### INSTALLATION CONSIDERATIONS

FlowCell Series C bag filter are available in a choice of lofted fiberglass or micro-fine synthetic media. The micro- fine synthetic media has a melt- blown facing followed by a high loft meltblown media with a spun bond scrim backing. Pockets are ultrasonic or RF welded to create individual pockets that maintain a controlled form under all rated airflow conditions. Ribbon Separators are welded inside the pockets to create an aerodynamic channel smoothing out the air flow and reducing air flow resistance. The sonic welding process completely bonds all pocket edges with a quad seal weld. Pockets are held in position with crimped media retainers made of galvanized steel.

FlowCell Series C filters having upstream access may be installed in NOVABurke Holding Frames, C-Trac Filter Framing Modules, or similar hardware. NOVABurke Holding Frames are riveted or bolted together to form filter banks and may be installed for upstream or downstream servicing. NOVABurke C-Set Framing Modules are the method of choice for medium to large built-up filter arrays.

#### RIGID TO BAG CONVERSION FRAME

In many older environments the filter framing system was built to facilitate a Rigid Filter. We manufacture this product as a RigiFlow filter. We have developed a conversion frame that allows the filter framing system to facilitate a bag for FlowCell type filter. Please request the Rigid To Bag Conversion Frame submittal drawing.

### LEED (LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN) CERTIFICATION AND SUPERIOR FILTRATION PRODUCTS AIRFILTERS AND HOUSINGS

Energy costs can total over 10 times the initial cost of a standard pleated filter, and 4 to 5 times the initial cost of a higher efficiency final filter, over the life-cycle of the filter. While no individual product may be LEED certified, the use of high efficiency, low pressure drop FlowCell filters can help with LEED certification in several areas. For example, by reducing current loads on the HVAC system motor a credit may be earned for fulfilling LEED-EB & NC Energy and Atmosphere/Prerequisite 2. Further credits may be available for Materials and Resources/Prerequisite 1.1, Energy and Atmosphere/Credit 1 & 5, Indoor Environmental Quality/Credit 3, 4.1, and

5.1.

Contact us to see what methods we have available to help vou fulfill vour LEED Certification

## **IMPORTANT FEATURES**

- High Capacity Pockets, Low Pressure Drop, and Long Life Cycle
- MERV rated filters can be used to earn LEED credits
- Available in a wide range of depths, face sizes, and number of pocket configurations
- FlowCell filters are optimized for maximum efficiency with minimal pressure drop, and lowered building energy costs
- Available in ASHRAE and MERV rated synthetic or glass micro-fiber media
- Pockets formed to maintain open pocket integrity for a lower pressure drop and high dust holding capacity.

• Mechanical components do not extend past the perimeter in order to control air bypass We offer five varieties of synthetic media:

- Yellow 90-95% MERV 14
- Pink 80-85% MERV 13
- Orange 60-65% MERV 12
- White 50-55% MERV 11
- Green 40-45% MERV 10

We rely on 100% mechanical media to meet our respective MERV ratings.

| Flow   | Cell "C" 95                                  | 5% MERV                                | 14 Bag F                    | ilters ~ Specifi                  | cations a                                 | nd Pressu                                    | re Drop                                      | at Flow R                                    | late   |  |
|--|--|--|-----------------------------|-----------------------------------|---|--|--|--|--|--|
| Nominal<br>Depth<br>(Inches)                 | Nominal<br>Width<br>(Inches)                 | Nominal<br>Height<br>(Inches)          | Number<br>of<br>Pockets     | Media Area<br>(Sq. Ft.)           | 375 FPM                                   |  | 500 FPM                                      |  | 625 FPM                                      |  |
|  |  |  |                             |                                   | CFM                                       | PD   | CFM  | PD   | CFM  | PD   |
| 15<br>15                                     | 24<br>12                                     | 24<br>24                               | 12<br>6                     | 65<br>33                          | 1500<br>750                               | 0.30<br>0.30                                 | 2000<br>1000                                 | 0.45<br>0.45                                 | 2500<br>1250                                 | 0.65<br>0.65                                 |
| 22<br>22<br>22<br>22<br>22<br>22<br>22<br>22 | 24<br>12<br>24<br>12<br>24<br>12<br>24<br>12 | 24<br>24<br>24<br>24<br>24<br>24<br>24 | 6<br>3<br>8<br>4<br>10<br>5 | 48<br>24<br>64<br>32<br>79<br>40  | 1500<br>750<br>1500<br>750<br>1500<br>750 | 0.42<br>0.42<br>0.36<br>0.36<br>0.34<br>0.34 | 2000<br>1000<br>2000<br>1000<br>2000<br>1000 | 0.60<br>0.60<br>0.51<br>0.51<br>0.48<br>0.48 | 2500<br>1250<br>2500<br>1250<br>2500<br>1250 | 0.79<br>0.79<br>0.67<br>0.67<br>0.64<br>0.64 |
| 30<br>30<br>30<br>30<br>30<br>30             | 24<br>12<br>24<br>12<br>24<br>12             | 24<br>24<br>24<br>24<br>24<br>24<br>24 | 6<br>3<br>8<br>4<br>10<br>5 | 65<br>33<br>87<br>43<br>108<br>54 | 1500<br>750<br>1500<br>750<br>1500<br>750 | 0.36<br>0.36<br>0.25<br>0.25<br>0.24<br>0.24 | 2000<br>1000<br>2000<br>1000<br>2000<br>1000 | 0.52<br>0.52<br>0.37<br>0.37<br>0.35<br>0.35 | 2500<br>1250<br>2500<br>1250<br>2500<br>1250 | 0.73<br>0.73<br>0.52<br>0.52<br>0.49<br>0.49 |
| 36<br>36<br>36<br>36                         | 24<br>12<br>24<br>12                         | 24<br>24<br>24<br>24                   | 6<br>3<br>8<br>4            | 78<br>39<br>104<br>52             | 1500<br>750<br>1500<br>750                | 0.32<br>0.32<br>0.23<br>0.23                 | 2000<br>1000<br>2000<br>1000                 | 0.47<br>0.47<br>0.33<br>0.33                 | 2500<br>1250<br>2500<br>1250                 | 0.66<br>0.66<br>0.47<br>0.47                 |

| FlowCell "C" 85% MERV 13 Bag Filters ~ Specifications and Pressure Drop at Flow Rate |                  |                   |              |           |         |      |         |      |         |      |
|--|------------------|-------------------|--------------|-----------|---------|------|---------|------|---------|------|
| Nominal<br>Depth   | Nominal<br>Width | Nominal<br>Height | Number<br>of | (Sq. Et.) | 375 FPM |      | 500 FPM |      | 625 FPM |      |
| (Inches)   | (Inches)         |                   | Pockets      |           | CFM     | PD   | CFM     | PD   | CFM     | PD   |
| 15   | 24               | 24                | 12           | 65        | 1500    | 0.30 | 2000    | 0.44 | 2500    | 0.59 |
| 15   | 12               | 24                | 6            | 33        | 750     | 0.30 | 1000    | 0.4  | 1250    | 0.59 |
| 22   | 24               | 24                | 6            | 48        | 1500    | 0.32 | 2000    | 0.47 | 2500    | 0.63 |
| 22   | 12               | 24                | 3            | 24        | 750     | 0.32 | 1000    | 0.47 | 1250    | 0.63 |
| 22   | 24               | 24                | 8            | 64        | 1500    | 0.24 | 2000    | 0.36 | 2500    | 0.51 |
| 22   | 12               | 24                | 4            | 32        | 750     | 0.24 | 1000    | 0.36 | 1250    | 0.51 |
| 22   | 24               | 24                | 10           | 79        | 1500    | 0.22 | 2000    | 0.34 | 2500    | 0.48 |
| 22   | 12               | 24                | 5            | 40        | 750     | 0.22 | 1000    | 0.34 | 1250    | 0.48 |
| 30   | 24               | 24                | 6            | 65        | 1500    | 0.30 | 2000    | 0.42 | 2500    | 0.57 |
| 30   | 12               | 24                | 3            | 33        | 750     | 0.30 | 1000    | 0.42 | 1250    | 0.57 |
| 30   | 24               | 24                | 8            | 87        | 1500    | 0.22 | 2000    | 0.33 | 2500    | 0.46 |
| 30   | 12               | 24                | 4            | 43        | 750     | 0.22 | 1000    | 0.33 | 1250    | 0.46 |
| 30   | 24               | 24                | 10           | 108       | 1500    | 0.20 | 2000    | 0.31 | 2500    | 0.43 |
| 30   | 12               | 24                | 5            | 54        | 750     | 0.20 | 1000    | 0.31 | 1250    | 0.43 |
| 36   | 24               | 24                | 6            | 78        | 1500    | 0.27 | 2000    | 0.38 | 2500    | 0.51 |
| 36   | 12               | 24                | 3            | 39        | 750     | 0.27 | 1000    | 0.38 | 1250    | 0.51 |
| 36   | 24               | 24                | 8            | 104       | 1500    | 0.20 | 2000    | 0.30 | 2500    | 0.41 |
| 36   | 12               | 24                | 4            | 52        | 750     | 0.20 | 1000    | 0.30 | 1250    | 0.41 |

FlowCell "C" 60-65% MERV 11 Bag Filters ~ Specifications and Pressure Drop at Flow Rate

| Nominal<br>Depth                             | Nominal<br>Width                 | Nominal<br>Height                      | Number<br>of                | Media Area                        | 375 1                                     | PM   | 500  | FPM  | 625  | FPM  |
|--|----------------------------------|--|-----------------------------|-----------------------------------|---|--|--|--|--|--|
| (Inches)                                     | (Inches)                         | (Inches)                               | Pockets                     | (Sq. Ft.)                         | CFM                                       | PD   | CFM  | PD   | CFM  | PD   |
| 15<br>15                                     | 24<br>12                         | 24<br>24                               | 12<br>6                     | 65<br>33                          | 1500<br>750                               | 0.18<br>0.18                                 | 2000<br>1000                                 | 0.28<br>0.28                                 | 2500<br>1250                                 | 0.39<br>0.39                                 |
| 22<br>22<br>22<br>22<br>22<br>22<br>22<br>22 | 24<br>12<br>24<br>12<br>24<br>12 | 24<br>24<br>24<br>24<br>24<br>24<br>24 | 6<br>3<br>8<br>4<br>10<br>5 | 48<br>24<br>64<br>32<br>79<br>40  | 1500<br>750<br>1500<br>750<br>1500<br>750 | 0.19<br>0.19<br>0.16<br>0.16<br>0.15<br>0.15 | 2000<br>1000<br>2000<br>1000<br>2000<br>1000 | 0.30<br>0.25<br>0.25<br>0.24<br>0.24         | 2500<br>1250<br>2500<br>1250<br>2500<br>1250 | 0.41<br>0.41<br>0.37<br>0.37<br>0.34<br>0.34 |
| 30<br>30<br>30<br>30<br>30<br>30             | 24<br>12<br>24<br>12<br>24<br>12 | 24<br>24<br>24<br>24<br>24<br>24<br>24 | 6<br>3<br>8<br>4<br>10<br>5 | 65<br>33<br>87<br>43<br>108<br>54 | 1500<br>750<br>1500<br>750<br>1500<br>750 | 0.18<br>0.18<br>0.15<br>0.15<br>0.14<br>0.14 | 2000<br>1000<br>2000<br>1000<br>2000<br>1000 | 0.29<br>0.29<br>0.23<br>0.23<br>0.22<br>0.22 | 2500<br>1250<br>2500<br>1250<br>2500<br>1250 | 0.39<br>0.39<br>0.34<br>0.34<br>0.32<br>0.32 |
| 36<br>36<br>36<br>36                         | 24<br>12<br>24<br>12             | 24<br>24<br>24<br>24<br>24             | 6<br>3<br>8<br>4            | 78<br>39<br>104<br>52             | 1500<br>750<br>1500<br>750                | 0.18<br>0.18<br>0.14<br>0.14                 | 2000<br>1000<br>2000<br>1000                 | 0.26<br>0.26<br>0.22<br>0.22                 | 2500<br>1250<br>2500<br>1250                 | 0.36<br>0.36<br>0.31<br>0.31                 |



| FlowCell "C" 50-55% MERV 10 Bag Filters ~ Specifications and Pressure Drop at Flow Rate |  |  |                             |                                   |   |  |  |  |  |  |
|---|--|--|-----------------------------|-----------------------------------|---|--|--|--|--|--|
| Nominal<br>Depth  | Nominal<br>Width                             | Nominal<br>Height                      | Number<br>of                | Inecia Area                       | 375 F                                     | 375 FPM  |  | 500 FPM                                      |  | FPM  |
| (Inches)  | (Inches)                                     | (Inches)                               | Pockets                     | (Sq. Ft.)                         | CFM                                       | PD   | CFM  | PD   | CFM  | PD   |
| 15<br>15  | 24<br>12                                     | 24<br>24                               | 12<br>6                     | 65<br>33                          | 1500<br>750                               | 0.18<br>0.18   | 2000<br>1000                                 | 0.28<br>0.28                                 | 2500<br>1250                                 | 0.35<br>0.35                                 |
| 22<br>22<br>22<br>22<br>22<br>22<br>22<br>22  | 24<br>12<br>24<br>12<br>24<br>12             | 24<br>24<br>24<br>24<br>24<br>24       | 6<br>3<br>8<br>4<br>10<br>5 | 48<br>24<br>64<br>32<br>79<br>40  | 1500<br>750<br>1500<br>750<br>1500<br>750 | 0.19<br>0.19<br>0.16<br>0.16<br>0.15<br>0.15         | 2000<br>1000<br>2000<br>1000<br>2000<br>1000 | 0.30<br>0.30<br>0.25<br>0.25<br>0.24<br>0.24 | 2500<br>1250<br>2500<br>1250<br>2500<br>1250 | 0.37<br>0.37<br>0.33<br>0.33<br>0.31<br>0.31 |
| 30<br>30<br>30<br>30<br>30<br>30<br>30  | 24<br>12<br>24<br>12<br>24<br>12<br>24<br>12 | 24<br>24<br>24<br>24<br>24<br>24<br>24 | 6<br>3<br>8<br>4<br>10<br>5 | 65<br>33<br>87<br>43<br>108<br>54 | 1500<br>750<br>1500<br>750<br>1500<br>750 | 0.16<br>0.16<br>0.14<br>0.14<br>0.14<br>0.14<br>0.14 | 2000<br>1000<br>2000<br>1000<br>2000<br>1000 | 0.26<br>0.26<br>0.21<br>0.21<br>0.20<br>0.20 | 2500<br>1250<br>2500<br>1250<br>2500<br>1250 | 0.35<br>0.35<br>0.31<br>0.31<br>0.29<br>0.29 |
| 36<br>36<br>36<br>36  | 24<br>12<br>24<br>12                         | 24<br>24<br>24<br>24<br>24             | 6<br>3<br>8<br>4            | 78<br>39<br>104<br>52             | 1500<br>750<br>1500<br>750                | 0.15<br>0.15<br>0.14<br>0.14                         | 2000<br>1000<br>2000<br>1000                 | 0.24<br>0.24<br>0.20<br>0.20                 | 2500<br>1250<br>2500<br>1250                 | 0.32<br>0.32<br>0.29<br>0.29                 |

FlowCell "C" 50-55% MERV 10 Bag Filters ~ Specifications and Pressure Drop at Flow Rate

Physical Data

MEDIA: Standard medias Microfine Synthetic with lofted fiberglass media also available.

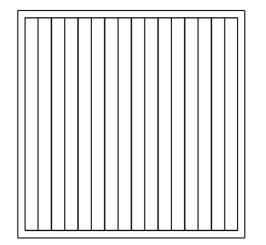
INFLATION CONTROL: Inflation is controlled and optimized through the use of ultrasonic welded pocket ribbons. Ribbons eliminate the need for seconary sealing methods.

POCKET CONSTRUCTION: Pockets are 100% stake through crimped to prevent media pull through.

FRAMES: 24 and 30 gauge corrosion resistant galvanized steel frames and componants standard.

VERSTILITY: A wide range of cartridge sizes and depths, media square footage measurements and efficiencies are availabe to meet most operating environments and requirements.

EFFICIENCY: Average efficiency ranges of 55%, 65%, 85% and 95% per ASHRAE Standard 52.1 test methods. MERV 10, 11, 13, and 15 per ASHRAE 52.2 test methods.





- "PD" denotes clean pressure drop in inches of water gauge. Factory recommended final pressure drop for all models of Flow Cell bag filters is 1.0" of water gauge. System design or other conditions may dictate a lower pressure drop at change-out.
- Filter sizes as stated are nominal sizes. Actual filter face sizes are 5/8" under in both height and width for 12x24 and 24x24 filters. On all other sizes of filters the filter face is 1/2" under in both the height and width. All filter depths are 1/4" under stated nominal dimensions.
- Superior Filtration Products performance tolerances conform to Section 7.4 of API Standard 850.
- Performance values as shown may be averages or exstimates to generally
- represent product styles and models. Superior Filtration Products uses an ongoing research and developement model. As such design characteristics, specifications, and performance data may change without notice.



FILTRATION PRODUCTS, INC.

160 North 400 West the

## North Salt Lake, Utah 84054