

v-cell

FIBER TECHNOLOGY

The patented fiber technology utilized in this filtration media is the latest in "Media Configuration." The media is non-shedding, gradient density, and 100% polypropylene. It is manufactured by building up progressively smaller and smaller continuous filament non-shedding fibers in a single thermally bonded web. Media fiber size varies from 40 plus microns in diameter on the air entering side to well into the sub-micron range on the air leaving side. This engineered media concept brings into play all the fundamental mechanical principles of particulate capture. Larger particles of dust are caught by larger fibers on the air entering side and progressively smaller particles caught in progressively smaller fibers through the depth of the media. The capture principals of impingement, straining, interception and diffusion are all utilized in harmony.

The "Media Configuration" of this process is a revolutionary single-web media designed and engineered for exceptional performance and durability. Media that has exceptional efficiency, durability, moisture resistance, low resistance to air flow and very good depth loading characteristics.

PACK DESIGN

The pleat pack is fabricated from 100% polypropylene media. Continuous 100% polypropylene spacer beads are thermally bonded to both sides of the media. Spacer beads are 3/8 of an inch apart for media support and are color coded to identify efficiency grade. Controlled spacing of pleat tips and spacers are thermally formed to produce a strong aerodynamic shape. This "Design Configuration" controlled spacing allows for the Mini-pleat V-Cell to operate with the principles of filtration in harmony and promoting diffusion of air properly over the entire pleated surface.

The "Design Configuration" of this pleating is a revolutionary Mini-pleat pack designed and engineered for the most demanding applications. A Mini-pleat pack with amazing durability and low aerodynamic pressure loss.

FRAME DESIGN

The frames for this Mini-pleat V-Cell filter are injection molded from 100% polypropylene and are impact resistant and moisture proof. The media packs and frame components are bonded together with a thermo-plastic adhesive.

It should be noted that the entire Mini-pleat V-Cell is polypropylene and is not affected by moisture and by nature does not support the growth of microbial organisms such as bacteria, mold, fungi, etc.



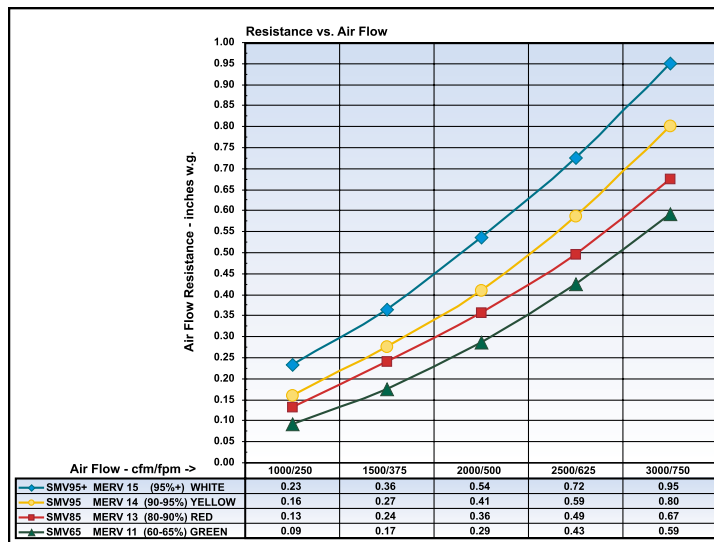
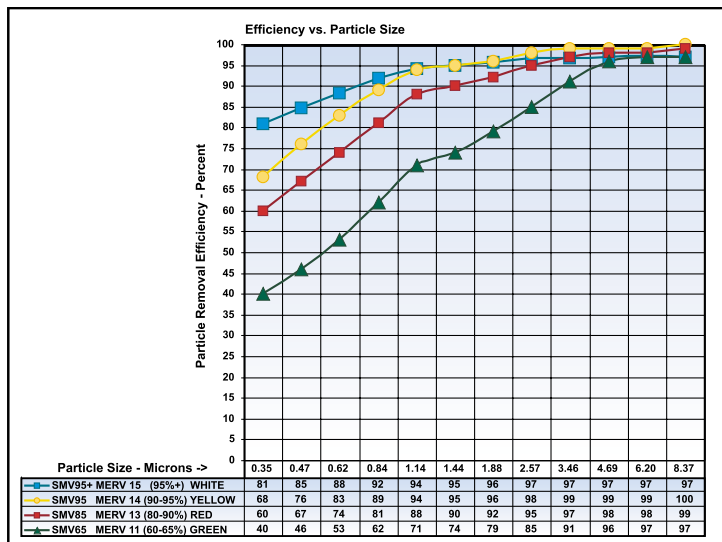
• **MERV 15** 95%+ • **MERV 14** 90-95% • **MERV 13** 80-90% • **MERV 11** 60-65%

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C O R P O R A T I O N

The Home of Air Quality!

v-cell



Testing to ASHRAE 52.2-1999 by an independent laboratory. Minimum composite efficiency at 1968 cfm rated air flow.

AVAILABLE SIZES (Nominal / W x H x D)

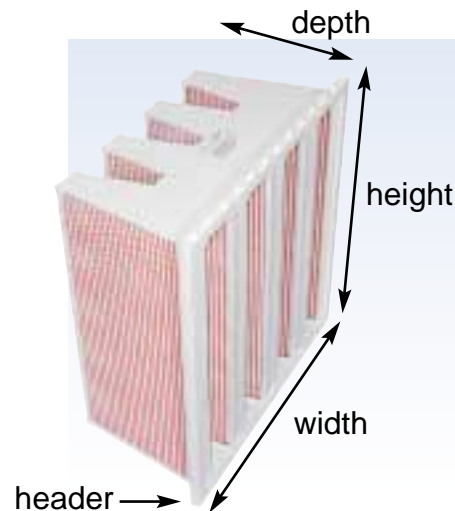
- 24x24x12
- 24x12x12
- 24x20x12

TECHNICAL DATA

- No metal or toxic off-gassing.
- Inherent antimicrobial properties due to inorganic construction.
- UL/CUL Class II listed and approved by UL Standard 900.
- Continuous operating temperature limitations: 125° F (52° C).
- Filters can be operated up to 125% of manufacturers rated airflow.
- Manufacturers recommended final resistance is 1.50" W.G.
- Independent Laboratory Breach Test results show filter integrity up to 25" W.G. pressure.

BENEFITS

- High efficiency
- High airflow capacity
- Durable, damage resistant media packs
- Light weight
- Resistant to most chemicals
- Can be incinerated for disposal
- Low airflow resistance
- Longer service life
- Moisture proof construction
- Will not corrode
- Will not support microbial growth



Item Part Number	ASHRAE 52.2-1999 Test Results	ASHRAE 52.1-1992 Test Results	Rated Air Flow CFM	Initial Pressure Drop IN. W.G.	Approximate Media Area SQ. FT.
SMV95+242412	MERV 15	95%+ (*)	1968	0.53	153
SMV95242412	MERV 14	90-95% (*)	1968	0.40	153
SMV85242412	MERV 13	80-90% (*)	1968	0.35	153
SMV65242412	MERV 11	60-65% (*)	1968	0.28	153

(*) Approximate 52.1-1992 results per table E-1 ANSI/ASHRAE STANDARD 52.2-1999. Independent laboratory test - nominal 24x24x12 single header filter.

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CORPORATION

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