

SYNTHETIC MINI-PLEAT PANEL

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 Synthetic Mini-pleat Panel 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

Frame material for the Synthetic Mini-pleat Panel filter is rigid impact resistant and moisture proof polypropylene foam. The rigid foam board is formed into a U-channel and wrapped around the perimeter of the media pack. Frame and media pack are bonded together with a polypropylene adhesive.

It should be noted that the entire Mini-pleat panel filter is 100% polypropylene. Polypropylene is not affected by moisture and by nature and does not support the growth of microbial organisms such as bacteria, mold, fungi, etc.

4-inch



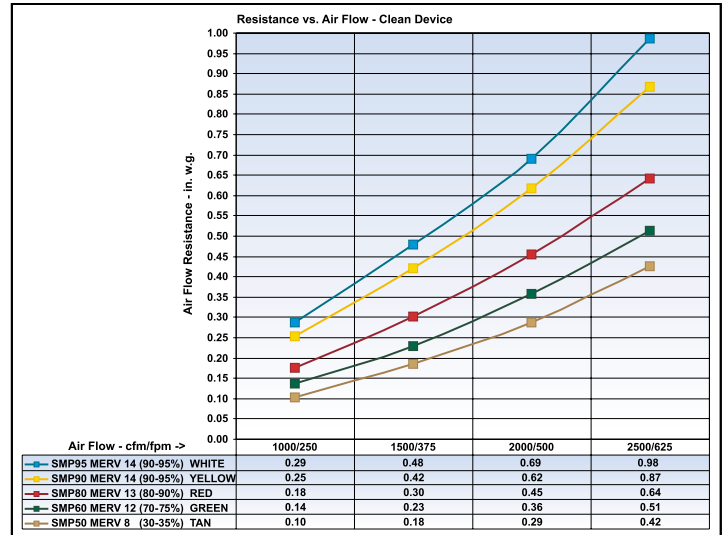
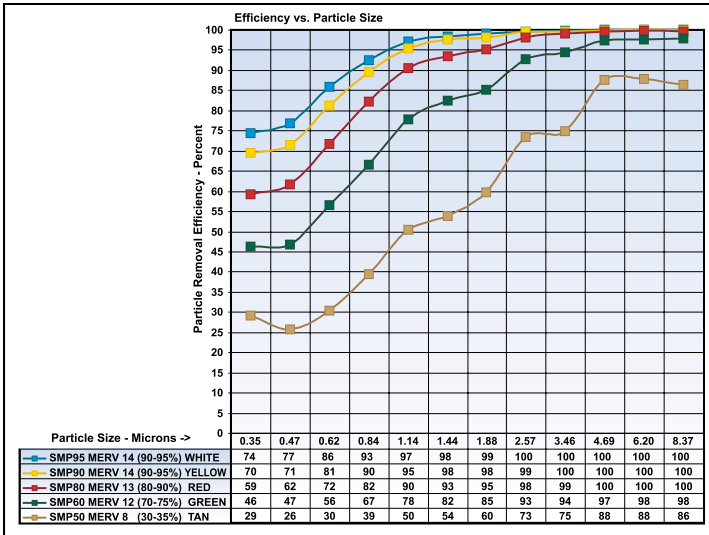
MERV 14 to MERV 8
90-95% to 30-35%

aeolus
CORPORATION

The Home of Air Quality!

111-C Creek Ridge Road, Greensboro, NC 27406
Phone (336) 272-1268 Fax (336) 272-1627
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4-inch



Testing to ASHRAE 52.2-1999 by an independent laboratory – Nominal 24 x 24 x 4-inch filters. Minimum composite efficiency at 1968 cfm rated air flow. Note: Numbers in parenthesis are approximate STANDARD 52.1-1992 results per table E-1 ANSI/ASHRAE STANDARD 52.2-1999.

AVAILABLE SIZES (NOMINAL)

24x24x4 20x24x4 20x25x4 20x20x4
 16x25x4 16x20x4 12x24x4

TECHNICAL DATA

Underwriters Laboratories Classification - UL900 Class 1 U.S. - Class 2 Canada
 Inherent antimicrobial properties due to inorganic construction.
 Continuous operating temperature up to 125° F (52°C).
 Can be operated up to 125% of rated air flow.
 Recommended final resistance is 1.50 in. w.g.

BENEFITS

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

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.
SMP95+24244	MERV 14	90-95% (*)	1968	0.68	119
SMP9524244	MERV 14	90-95% (*)	1968	0.61	119
SMP8524244	MERV 13	80-90% (*)	1968	0.45	119
SMP6524244	MERV 12	70-75% (*)	1968	0.35	119
SMP5024244	MERV 8	30-35% (*)	1968	0.28	110

(*) Approximate 52.1-1992 results per table E-1 ANSI/ASHRAE STANDARD 52.2-1999. Independent laboratory test - nominal 24x24x4 filter.



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