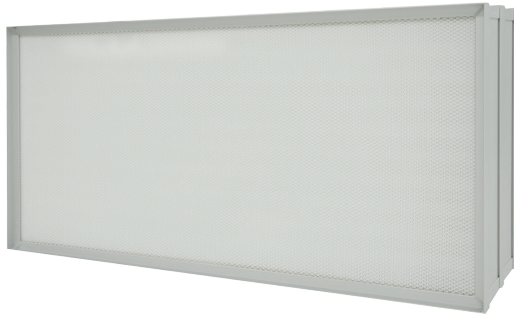


DimplePleat[®]

100% SEPARATORLESS HEPA FILTERS



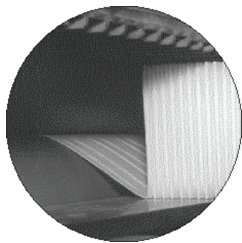
Benefits

- Embossed media allows for maximum utilization of media for long life
- Separatorless design with no hotmelt, strings, or other pleat-spacing materials
- Lightweight and compact
- Pack depths available in 2", 3", and 4"
- Available in a variety of efficiencies

The DimplePleat[®] media pack is a completely separatorless style that requires no secondary material to hold adjacent folds of media apart, which gives the media pack its shape and strength. DimplePleat filters are used in a variety of cleanroom applications, including semiconductor fabrication, pharmaceutical production, life science, aerospace, digital memory, and food processing. With DimplePleat's proven technology, you get a good balance of filtration efficiency and low operating costs.

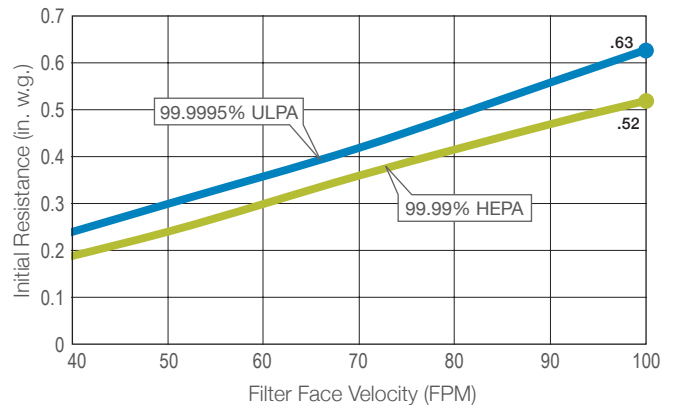
Media Manufacturing

DimplePleat media is made with borosilicate microfibers via traditional paper-making processes, but with one key difference. When the media water content is at the precisely ideal quantity, embossments are imprinted on the media. The media is then oven-dried, so that it can be folded into a pack. The pack is then placed in an extruded clear anodized frame, where UL-classified polyurethane seals the media pack to the frame. The DimplePleat filter is available with gasket, fluid, or knife-edge seals to fit any sealing application.

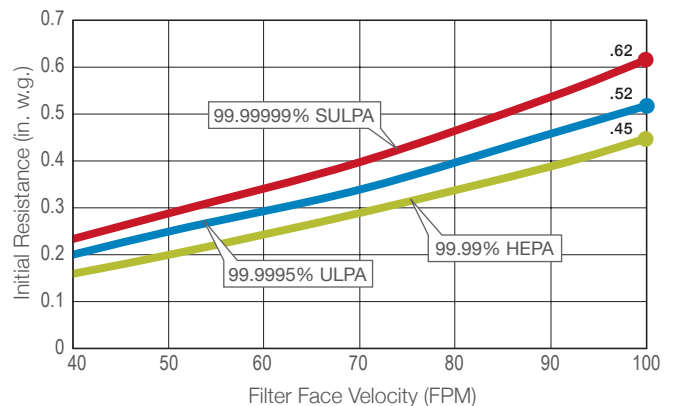


DimplePleat[®] HEPA and ULPA Filter Media Initial Resistance vs. Filter Face Velocity

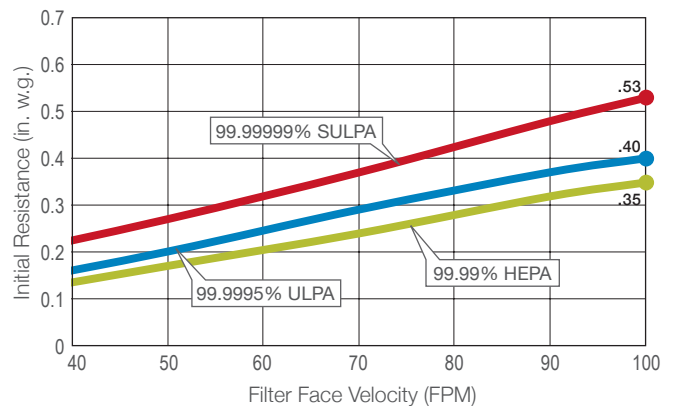
2" Filters



3" Filters



4" Filters



Submittal Options Configuration Nomenclature

0 007 2 19 06 SU 5 2 0 0 G G 2
 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)

(1) FRAME HARDWARE	(2) MEDIA	(3) PACK STYLE	(4) FRAME MATERIAL	(5) FRAME STYLE	(6) SEALANT	(7) GASKET MATERIAL	(8) GASKET LOCATION	(9) FACEGUARD	(10) FACEGUARD LOCATION	(11) FILTER HEIGHT	(12) FILTER WIDTH	(13) FILTER DEPTH	(14) UL CODE
(1) Frame Hardware: 0 – None T – Extractor Clips U – U Shaped Handle							(8) Gasket Location: 0 – None 2 – Air Leaving Side 1 – Air Entering Side 3 – Both Sides						
(2) Media: 007 – 99.97% / 99.99% on 0.3 µm 008 – 99.999% on 0.3 µm 012 – 99.99999% on 0.12 µm				(5) Frame Style: 009 – 99.9995% on 0.12 µm H14 – 99.995% on MPPS			(9) Faceguard: 0 – None E – Expanded Stainless Steel A – Anodized Alum., 40% Open Perf. F – Expanded CRS (White Paint) B – Alum. Perf. (White Paint) S – Stainless Steel, 40% Open C – CRS Perf., 40% Open (White Paint)						
(3) Pack Style: 2 – 2" DimplePleat Pack 3 – 3" DimplePleat Pack				(4) Frame Material: 4 – 4" DimplePleat Pack 6 – 6" DimplePleat Pack			(10) Faceguard Location: 0 – None 1 – Upstream 2 – Downstream 3 – Both						
(4) Frame Material: 02 – 16 ga. Type 409 Stainless Steel 03 – 16 ga. Type 304 Stainless Steel				(5) Frame Style: 05 – 0.063" Fabricated Aluminum 19 – Extruded Aluminum (Anodized)			(11 & 12) Size (Height and Width): Standard Size Designations B – 8" R – 60" C – 12" S – 72" E – 18" U – 11 3/4" G – 24" V – 15 3/8" N – 30" W – 17 3/8" P – 36" X – 29 3/8" H – 42" Y – 23 3/8" Q – 48" Z – 24 3/8" Odd Size Fractional Designations A – 0" J – 1/2" B – 1/16" K – 9/16" C – 1/8" L – 5/8" D – 3/16" M – 11/16" E – 1/4" N – 3/4" F – 5/16" P – 13/16" G – 5/8" Q – 7/8" H – 7/16" R – 15/16"						
(6) Sealant: SU – F.R. Polyurethane, 99.99% scanned PG – F.R. Polyurethane, 99.99%, Autocan, No Patches PA – F.R. Polyurethane, PAO Test 99.99%							(13) Filter Frame Depth: A – 3 1/16" 3 – 3 7/8" D – 5 7/8" 4 – 4 7/8" T – 6 3/8" 6 – 6 7/8" 2 – 2 7/8" Example: GC-D = 24 x 12 x 5 7/8" 21N44A-2 = 21 3/4 x 44 x 2 7/8"						
(7) Gasket Material: 0 – None B – Black Poly-B 1 – Neoprene P – Poron 5 – Silicone Gel W – White Poly-B 6 – Urethane Gel *Gaskets are 1/4" thick x 3/4" wide							(14) UL Code Blank – None U5 – UL 586 U9 – UL 900						

DimplePleat® Filter Specifications

1.0 General

1.1 Air filters shall be minipleat HEPA/ULPA grade filters with separatorless glass media, extruded anodized aluminum frame, polyurethane sealant, and either polydimethylsiloxane fluid seal or dry gasket seal.

1.2 Sizes shall be noted on drawings and/or other supporting materials.

2.0 Construction

2.1 The filtration media shall be fire-resistant borosilicate microfiberglass with a water repellent binder. The media pack shall be completely separatorless with no glue or strings to hold the pleats apart. During the media manufacturing process, raised impressions shall align against each other. When pleated, the impressions hold their shape and form the equally spaced pleats when folded into a media pack.

2.2 The media pack shall be sealed on all sides with a solid, fire-retardant, phosphorus-free polyurethane sealant to form a leak-free bond between the media pack and the filter frame. Polyurethane sealant shall be off white in color to closely match the color of the filtration media.

2.3 The filter frame shall be of anodized extruded aluminum and shall be designed for use in Gasket Seal or Fluid Seal systems.

2.4 Gasket systems filters shall be factory installed 1/4" thick by 3/4" wide, closed-cell neoprene affixed to the sealing surface. Filter frame sealing surface to have a flatness tolerance of ± 1/32".

2.5 Fluid Seal system filters shall have:

2.5.1 A continuous trough around the perimeter of the filter with continuous, integral indication of acceptance fluid seal fills level. The fluid seal trough shall be filled at the factory.

2.5.2 Fluid seal material shall be characterized for all salient mechanical, physical,

and chemical properties, such as Hardness/Penetration, Tack, and Migration of free silicone.

2.5.3 Fluid seal materials shall be characterized for chemical resistance to known industry accepted decontamination agents, cleaning agents, and filter testing reagents.

2.5.4 Fluid seal material shall be tested for chemical compatibility with all materials in contact during manufacturing including gloves, tools, mixing equipment, dispensing equipment, and packaging materials, as well as potential airborne contaminants and poisons.

2.5.5 Fluid seal material shall demonstrate resistance to accelerated life cycling testing.

2.5.6 Fluid seal shall withstand knife-edge insertion to partial depth without complete depth cutting or full length splitting.

3.0 Performance

3.1 The filter shall be tested for efficiency (99.99% @ 0.3µm or 99.9995% @ 0.12µm) when tested in accordance with IEST-RP-CC001 and IEST-RP-CC007.

3.2 Each filter shall be factory scanned in accordance with IEST-RP-CC034.

3.3 Each filter shall be tested for initial (clean) pressure drop at rated flow. Nominal initial resistance at 100 FPM (based on net media face area).

Pack Depth (in.)	Nom. Resistance 99.99% on 0.3 µm (in. w.g.)	Nom. Resistance 99.9995% on 0.12 µm (in. w.g.)
2	0.52	0.68
3	0.45	0.52
4	0.35	0.40

3.4 Filter shall be classified by Underwriters Laboratories as UL 900.



AAF Flanders has a policy of continuous product research and improvement. We reserve the right to change design and specifications without notice.