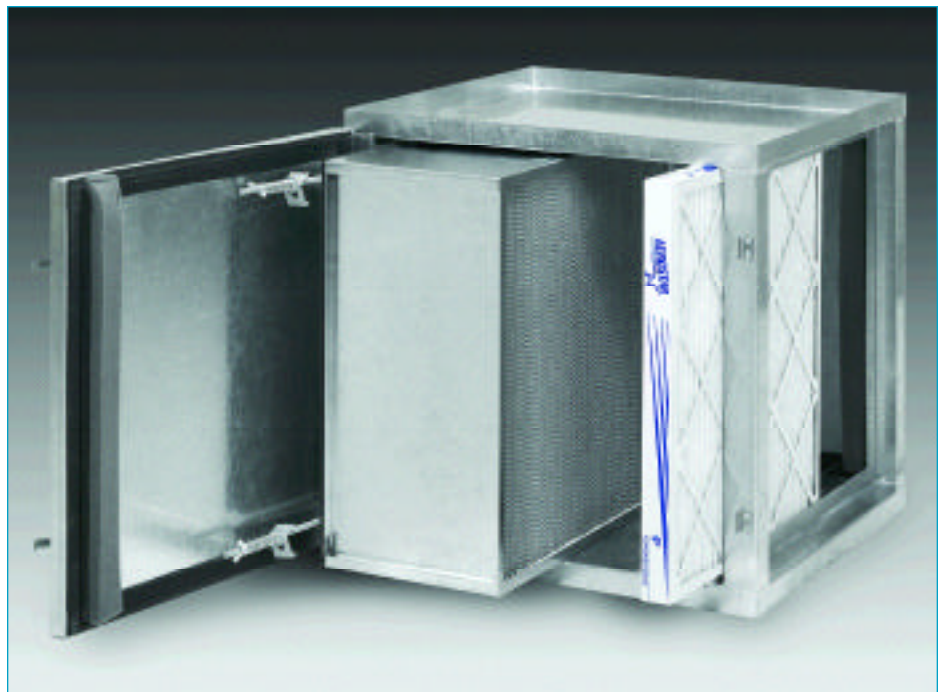


FILTRATION GROUP

HEPA BOLT-SEAL HOUSING



- Housing available in several materials
- Optional 2", 4" or 6" pre-filter section available
- Designed for filters that use gasket or fluid seals
- Locking mechanism for each filter
- 2 doors for easy access
- Flange for installation to ductwork
- Custom made available to meet end user requirements



DESCRIPTION

The Aerostar HEPA Bolt-Seal Housing is an economy multistage unit designed to hold HEPA filters in 95%, 99.97% and 99.99% efficiency at 0.3-micron size particles with either a gasket or fluid seal. An optional pre-filter section is available to accommodate 2", 4" or 6" pre-filters. Standard housing depth is 21 1/2" for HEPA filters only, 25" with 2" pre-filters, 27" with 4" pre-filters or 29" with 6" pre-filters. Other depth/configurations are available on request. Each filter must be locked using four corner bolts. The housing is constructed with 14 gauge-galvanized steel, and the housing components are permanently fastened for added strength. Hat sections are located on the top, bottom and back of the housing for structural support. For housings that are wider than 24", center stability bars have been added for rigidity.

BENEFITS

To hinder contaminations and air by-pass, the housing is fully seam welded with a broken channel for the filters instead of an aluminum extrusion. The strength and versatility of the

HEPA Bolt-Seal design make it ideal for all applications. Doors are mounted on both sides of the housing for ease of filter change-outs. Hand torqued door latches provide a positive seal between the housing and the gasketing on the door. For the filter installation no clips or extra gasketing is necessary. The housing has a flange for easy installation and custom flanges are available.

APPLICATIONS

Optimized for economy and performance, the Aerostar HEPA Bolt-Seal housing can replace any existing HEPA housing. It is designed for HEPA filters with 95%, 99.97% and 99.99% efficiencies and could be combined with 2", 4" or 6" pre-filters. This housing can be used in any application where there is a need for higher air filtration such as office buildings, hospitals, semiconductor, food pharmaceutical and biotechnology industries.



FILTRATION GROUP

HEPA BOLT-SEAL HOUSING

PERFORMANCE DATA (STANDARD CAPACITY, HEPA)

FILTER HOUSING CAPACITY (CFM)*								
HEIGHT	WIDTH							
	.5	1	1.5	2	2.5	3	3.5	4
.5	—	500	—	1000	—	1500	—	2000
1	500	1000	1500	2000	2500	3000	3500	4000
1.5	—	1500	2000	3000	3500	4500	5000	6000
2	1000	2000	3000	4000	5000	6000	7000	8000
2.5	—	2500	3500	5000	6000	7500	8500	10000
3	1500	3000	4500	6000	7500	9000	10500	12000

* Based on a 24 x 24 filter @ 1000 cfm

TO DETERMINE HOUSING SIZE: Find the cfm you are filtering and go to the left to the height column. Write down the number. Then go from the cfm up to the width row and write down that number. Example 6000 cfm = 3 x 2. Note there may be more than one size for most cfm; choose the one that will best fit your space.

TO DETERMINE NUMBER OF FILTERS: Example housing is 3 h x 2 w. First determine number of filters in a row (width). Example: Width = 2 is 2 - 24x24x2 HEPA filters. Second, multiply each size by the number of rows (height). Example: Height = 3. There are 6-24x24x11.5 HEPA filters in this configuration.

ENGINEERING SPECIFICATIONS

FILTER HOUSING HEPA filter housing shall be Aerostar HEPA Bolt-Seal Side Access Housing as manufactured by Filtration Group Inc. Housing shall be factory assembled and capable of accepting filters without the use of holding frames or clips. Housing shall be suitable for operation between +/- 5" w.g. To hinder contaminations and air bypass the housing shall be fully seam welded with a broken channel for the filters instead of an aluminum extrusion.

CONSTRUCTION Housing shall be constructed in 14 gauge-galvanized steel. Panels and posts shall be permanently fastened to maintain tolerances. Hat sections shall be located on the top, bottom and back of the housing for structural support. For housings that are wider than 24", center stability bars shall be added for rigidity. There shall be a 1" flange around the air entering and leaving sides to accommodate connection to ductwork and air handling equipment. No holes shall be drilled or punched to assure leak-free field installation.

LOCKING MECHANISM The locking mechanism (Bolt-Seal) shall secure a leak free seal between the filters and housing by an evenly distributed pressure of 20 foot pounds per filter. The Bolt-Seal mechanism shall be on the down-stream side of the HEPA filters, protecting it from contaminants.

DOORS shall be 14 gauge galvanized steel and mounted to both sides of the housing for ease of filter removal. Hand torqued door latches shall provide a positive seal between the housing and the gasketing on the door.

OPTIONS

- Weatherproofing, pitched roof with rain guard over the door.
- 14 gauge aluminized steel
- 304L stainless steel
- 316L stainless steel
- Insulation
- Double wall insulation
- Vertical flow application
- Bottom access
- Custom flanged housing
- Static port(s)
- DOP port(s)
- Magnehelic gauge
- Photohelic gauge
- High temperature gasket
- Lifting lugs
- Transitions

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