

## PRODUCT OVERVIEW

- Available in 14GA Galvanized, T304 or T316 Stainless Steel
- Optional 2" or 4" pre-filter section available
- Designed for filters that use gasket seals.
- Access Doors on both sides for ease of filter change.
- Swing Arms with Spring Loaded Clamps are used to secure each corner of the filter to ensure full periphery gasket compression and a reliable seal.
- Flange for installation to ductwork
- Custom designs available to meet individual application specific requirements.
- Ideal for use in
  - Food Processing
  - Pharmaceutical
  - Biotechnology
  - Renovating Existing Equipment
  - Replace any HEPA housing



## **AEROSTAR** HEPA BOLT-SEAL HOUSING

### WHY SPECIFY THE AEROSTAR HEPA BOLT-SEAL HOUSING?

- Economy multistage unit designed to hold HEPA filters in 99.97% and 99.99% efficiency at 0.3-micron size particles with a gasket.
- Optional pre-filter section is available to accommodate 2" or 4" pre-filters. Standard housing depth is 26-1/4"
- Each filter is positively locked using four corner bolts with a spring loaded clamp.
- The housing is constructed with 14 gauge-galvanized steel, and the housing components are permanently fastened for added strength.
- For housings that are wider than 24", center stability bars have been added for rigidity.
- To prevent contamination and air by-pass, the housing is fully seam welded with a broken channel for the filters instead of an aluminum extrusion.
- Studs and wing nuts are used to secure the door and provide a positive seal between the housing and gasket on doors interior.
- For the filter installation no clips or extra gasketing is necessary. The housing has a flange for easy installation and custom flanges are available.



# HEPA BOLT-SEAL HOUSING

## PERFORMANCE DATA

FILTER HOUSING CAPACITY (CFM)*								
HEIGHT	WIDTH							
	.5	1	1.5	2	2.5	3	3.5	4
.5	—	1000	—	2000	—	3000	—	4000
1	1000	2000	3000	4000	5000	6000	7000	8000
1.5	—	3000	4500	6000	7500	9000	10500	12000
2	2000	4000	6000	8000	10000	12000	14000	16000
2.5	—	5000	7500	10000	12500	15000	17500	20000
3	3000	6000	9000	12000	15000	18000	21000	24000

\* Based on 500 fpm duct velocity. Systems may be designed for 600 fpm when using FG HV Series HEPA

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 12000 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.

## OPTIONS

- Weather Cover
- 14 gauge aluminized steel
- T304 / T316 stainless steel
- Double Wall Insulation
- Intake Weather Louver
- Intake Weather Hood
- Vertical flow application
- Static / DOP port(s)
- Magnehelic / Photohelic Gauges
- High temperature gasket
- Lifting lugs
- Transitions
- Custom flanged housing

## ENGINEERING SPECIFICATIONS

- Filter Housing
  - HEPA filter housing shall be Aerostar HEPA Bolt-Seal Side Access Housing as manufactured by Filtration Group.
  - 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 prevent contamination 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 for ease of filter removal.
  - There shall be 1-1/2" horizontal and 2" vertical flanges 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 Bolt Seal locking mechanism 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 upstream side of the HEPA filters, protecting it from contaminants.
- Doors
  - Doors shall be 14 gauge galvanized steel and mounted to both sides of the housing.
  - Hand torqued door latches shall provide a positive seal between the housing and the gasketing on the door.

