

# FILTRATION GROUP

## CARBON SORB HOUSING



- Available in 16 gauge galvanized steel or 304L stainless steel
- Designed for 2" or 4" prefilters combined with 3/4" carbon trays
- Variety of adsorbents or a mix of adsorbents are available (activated carbon/potassium permanganate)
- 2 doors for easy access
- No clips or extra gasketing necessary
- Flange for installation to ductwork
- Custom made available to meet end user requirements



### DESCRIPTION

**T**he Aerostar Carbon Sorb Housing is a multistage unit designed to remove particulate and gaseous contaminants. The housing will hold 2" or 4" pleated pre-filters and 3/4" refillable carbon trays. For optimum performance it will hold 12 trays per 24" of height achieving a low-pressure drop. Standard housing depth is 36" for 2" pre-filters and 38" for 4" pre-filters; other depths are available upon request. Designed for minimum air by-pass, constructed with 16 gauge-galvanized steel, the housing components are permanently fastened for added strength. Corner gussets are positioned along the upstream side and for housings that are wider than 24", center stability bars have been added for extra rigidity.

### BENEFITS

The strength and versatility of the Aerostar Carbon Sorb Housing design make it ideal for all applications. Doors are mounted on both sides of the housing for ease of filter change-outs. Positive tension door locks provide a tight seal between the housing and the gasketing on the door. No clips or extra gasketing are necessary for the filter installation. The housing has a flange for easy installation and custom flanges are available.

### APPLICATIONS:

The Aerostar Carbon Sorb housing can replace any existing filter housing. It can be used in any application where there is a need for air filtration of particulate and gaseous contaminants such as schools, museums, libraries, office buildings, hospitals and industrial applications.



**PERFORMANCE DATA**

FILTER HOUSING CAPACITY (CFM)*										
HEIGHT	WIDTH									
	.5	1	1.5	2	2.5	3	3.5	4	4.5	5
.5	—	1000	—	2000	—	3000	—	4000	—	5000
1	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
1.5	—	3000	4000	6000	7000	9000	10000	12000	13000	15000
2	2000	4000	6000	8000	10000	12000	14000	16000	18000	20000
2.5	—	5000	7000	10000	12000	15000	17000	20000	22000	25000
3	3000	6000	9000	12000	15000	18000	21000	24000	27000	30000

\* Based on a 24 x 24 filter @ 1200 cfm  
 NOTE: 12 carbon trays per 24" of height.

**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 20000 cfm = 2 1/2 x 4. 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 2 1/2 h x 4 w. First determine number of filters in a row (width). Example: Width = 4 is 4 - 24x24x2 pleated filters and 48 carbon trays (12 carbon trays per 24" of height). Second, multiply each size by the number of rows (height). Example: Height = 2 1/2. There are 8-24x24x2, 4-12x24x2 pleated filters and 120-24x24x1 carbon trays in this carbon housing configuration.

**ENGINEERING SPECIFICATIONS**

**FILTER HOUSING** Carbon filter housing shall be Aerostar Carbon Sorb 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. Perimeter gaskets and track seal gaskets shall be used to prevent any leakage. The gasket shall be oil and moisture resistant high density PVC foam gasket.

**CONSTRUCTION** Housing shall be 16 gauge-galvanized steel. Panels and posts shall be permanently fastened to maintain tolerances. Corner gussets shall be positioned along the upstream side. 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 fields installation.

**DOORS** shall be 16 gauge galvanized steel and mounted to both sides of the housing for ease of filter removal. Hinges and latches shall be permanently mounted to maintain factory tolerances in the field. Positive tension door locks shall provide a tight seal between the housing and the gasketing on the door. The gasket shall be oil and moisture resistant high density PVC foam gasket.

**OPTIONS**

- Weatherproofing, pitched roof with rain guard over the door
- Post filters tracks
- 304L stainless steel
- Insulation
- Double Wall Insulation
- Vertical Flow Application
- Bottom Access
- Custom Flanged Housing
- High Temperature Gasket
- Static Port(s)
- Magnehelic Gauge
- Photohelic Gauge
- Lifting Lugs
- Transitions

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**FILTRATION GROUP**

**FILTRATION GROUP**  
 Phone: 877-FGI-TEAM (344-8326)  
 Fax: 800-518-1162  
 www.filtrationgroup.com  
 e-mail: aerostar@filtrationgroup.com

