PRODUCT OVERVIEW

• Side Service Housings for MERV Rated Filters constructed of 16 GA Galvanized Steel with Extruded Aluminum Filter Tracks with Integral Gasketing

• Adaptable to a Variety of Filter Designs
  – Single Stage 2” Filter
  – Single Stage 4” Filter
  – Dual Stage 2” & 4” Filter
  – Dual Stage 2” & 1” Header Filter
  – Dual Stage 4” & 1” Header Filter

• Housings may be combined in series to form longer filter trains such as HEPA Bolt, Crank Seal and Carbon Sorb Housings

• Ideal for Use in
  – Equipment Protection
  – Gun Ranges
  – Health Care
  – General HVAC Renovations

WHY SPECIFY THE AEROSTAR INNER SEAL HOUSING?

• Welded construction provides a robust finished product suitable for multiple applications.
• Hinged access doors are mounted on both sides of the housing for ease of filter change-outs.
• Doors are secured with hinged studs and aluminum star knobs.
• Door Gaskets Ensure No Bypass around the filters.
• Housing Constructed for operational pressures of +/− 6”-WG
  -Higher Pressure Designs are Available
• Extruded Aluminum Filter Tracks with Integral Gasket provides downstream seal to installed filters

OPTIONS:
• Weather Cover
• Double Wall Insulated Construction
• Magnehelic or Photohelic Gages
• T304 and T316 SST Construction
• Duct Transitions
• Factory Drilled Flanges
• Vertical Air Flow
• Bottom Access
• High Temp Door Gaskets
• Intake Weather Hood
• Intake Fixed Louver
The Inner Seal Housing Guide

PERFORMANCE DATA

FILTER HOUSING CAPACITY (CFM) BASED ON 2000 CFM/24 X 24 FILTER

<table>
<thead>
<tr>
<th>HEIGHT</th>
<th>.5</th>
<th>1</th>
<th>1.5</th>
<th>2</th>
<th>2.5</th>
<th>3</th>
<th>3.5</th>
<th>4</th>
<th>4.5</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5</td>
<td>1000</td>
<td>2000</td>
<td>3000</td>
<td>4000</td>
<td>5000</td>
<td>6000</td>
<td>7000</td>
<td>8000</td>
<td>9000</td>
<td>10000</td>
</tr>
<tr>
<td>2</td>
<td>2000</td>
<td>4000</td>
<td>6000</td>
<td>8000</td>
<td>10000</td>
<td>12000</td>
<td>14000</td>
<td>16000</td>
<td>18000</td>
<td>20000</td>
</tr>
<tr>
<td>2.5</td>
<td>3000</td>
<td>4500</td>
<td>6000</td>
<td>7500</td>
<td>9000</td>
<td>10000</td>
<td>12000</td>
<td>14000</td>
<td>16000</td>
<td>18000</td>
</tr>
<tr>
<td>3</td>
<td>3000</td>
<td>6000</td>
<td>9000</td>
<td>12000</td>
<td>15000</td>
<td>18000</td>
<td>21000</td>
<td>24000</td>
<td>27000</td>
<td>30000</td>
</tr>
</tbody>
</table>

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: 21,000 CFM = 3 x 3.5. Note: There is more than one size for most CFM; choose the one that will best fit your space.

TO DETERMINE NUMBER OF FILTERS: Example housing is 3H x 3.5W. First determine number of filters in a row (width). Example: Width = 3.5 is 3-24 x 24 filters wide and 1-12 x 24 wide. Second, multiply each size by the number of rows (height). Example: Height = 3. There are 9-24 x 24 filters and 3-12 x 24.

In selecting a housing, Filtration Group offers a broad range of track style and configurations to meet specific needs.

The following construction options are available:

THE INNER SEAL 02 & 04 (DEPTH=8.5”)
- Slim profile—for “limited” space applications
- One 2” or 4” track
- Holds any 2” OR 4” filter
- High efficiency achieved with 4” mini-pleat

THE INNER SEAL 21 (DEPTH=22.25”)
- General use housing
- Two tracks—2” track and 1” track
- The 2” track for prefilter and 1” track for final filter with a 13/16” or 7/8” header
- The standard in the industry for high efficiency or gas phase applications

THE INNER SEAL 24 (DEPTH=12”)
- Slim profile—prefiltered applications
- Two tracks—2” track and 4” track
- The 2” track for a prefilter and 4” track for particulate or gas phase filter
- High efficiency dual stage filtration for

THE INNER SEAL 41 (DEPTH=22.25”)
- High capacity housing
- Two tracks—4” track and 1” track
- The 4” track for prefilter and 1” track for final filter with a 13/16” or 7/8” header
- For high dirt loading applications

ENGINEERING SPECIFICATIONS

1.0 Scope
1.1 This specification details the requirements for side access filter housings designed to accommodate 2” or 4” Prefilter, 2” and 4” Filters or 2” or 4” Prefilter and 1” Single Header Final Filter as scheduled.

2.0 Construction
2.1 Side access filter housings shall be Inner Seal as manufactured by Filtration Group.
2.2 Side access filter housings shall be constructed from minimum 16 GA galvanized steel. Panels and posts shall be permanently fastened to maintain tolerances. No holes shall be drilled or punched to assure a leak free field installation. All metal to metal joints shall be welded and caulked.
2.3 Housing design must be such that filter installation is done without any additional clips or holding frames.

2.4 The track shall include an integral replaceable gasket to seal filters on the downstream side. The track shall be designed to accept a 2” deep prefilter and 1” header type secondary filter.
2.5 Doors shall be 16 GA galvanized steel and mounted on both sides of the housing for ease in filter installation and replacement. Swing aside door studs and aluminum star knobs shall be permanently mounted. Perimeter door gasket shall be oil and moisture resistant high density PVC foam.

3.0 Performance
3.1 Leakage upstream to downstream shall be less than 0.5% at 125% of rated air flow and verified by an independent test lab.