TRI-CELL™ ASHRAE

MEDIUM AND HIGH EFFICIENCY ASHRAE RATED RIGID AIR FILTERS

Trusted High Efficiency
TRI-CELL ASHRAE Filters are available in a variety of styles to meet your needs - from high temperature applications (up to 900°F), to the harsh environment of machine intake applications, to the sensitive environment in healthcare facilities. Tri-Dim has a TRI-CELL filter for your demanding applications.

**Media Pack** - Utilizes glass microfibers that are configured to maximize service life. The TRI-CELL media is water resistant and can endure intermittent exposure to water with only a temporary rise in resistance. The TRI-CELL media pack also features aluminum separators that have been rolled and tapered and placed between each pleat to enhance stability and to insure maximum airflow at a minimal resistance.

**Frame** - Standard frame is constructed of 24 gauge galvanized steel. Frame styles available are single header, double header. All frames are available in either nominal 12” and 6” depths.

**Construction** - Tri-Dim uses an adhesive seal around the perimeter of the media pack to create a positive seal, between the media pack and the frame, that eliminates the bypass of dirty air. Some competitive filters use a piece of fiberglass as the sealing mechanism. This fiberglass media can shed filter fibers and does not assure a positive seal. All metal framed TRI-CELL ASHRAE filters have a metal cross-brace on the downstream side of the media pack and the joints in the frame are pop-riveted together.

Faceguards are available for more rigorous applications for added rigidity and increased protection of the media pack. The optional faceguards can be added to either the downstream, upstream or on both faces of the media pack.
**Efficiency** - Uses a glass microfiber media that allows for high ‘real world’ efficiency. Most synthetic high efficiency filters use an electrostatic enhanced media to increase the efficiency. Many tests and studies have documented that filters with an electrostatic enhancement suffer from efficiency degradation, that is the removal efficiency starts high but as the electrostatic enhancement in the media dissipates the removal efficiency drops dramatically (see chart to right). This can be a very serious issue in sensitive applications. No matter what the application this should be a concern that the filters purchased are not delivering the efficiency as specified. The media utilized in the TRI-CELL ASHRAE is time tested and is the most reliable high efficiency media available. This media does not rely on any electrostatic enhancements but relies on mechanical filtration.

The media is also bidirectional allowing for ‘reverse’ installation. This has no effect on the filters performance.

**Other TRI-CELL Filters**

**TRI-CELL MIF - Machinery Intake Filters** are specifically designed for the rotating machinery industry. The TRI-CELL MIF’s robust construction enables it to withstand the extraordinary operating parameters associated with centrifugal compressors, gas turbines and engines where severe pulsing and surging can occur, in either airflow direction. The TRI-CELL MIF is available in MERV 11 (60-65%) and MERV 14 (90-95%) efficiencies and in either single or double header configurations.

**TRI-CELL HT - High Temperature Filters** are designed for applications that demand high efficiency in a high temperature environment, such as automotive finishing ovens. The TRI-CELL HT is manufactured to handle the demands of these extreme environments and are available in 500°F, 750°F and 900°F models in MERV 11 (60-65%) and MERV 14 (90-95%) efficiencies and in either single or double header configurations.
TRI-CELL ASHRAE SPECIFICATIONS

Media
Glass Microfiber

Frame Construction
Galvanized Steel
Consult factory for other frame construction options

Seal
Perimeter Adhesive Seal

Efficiency and Initial Resistance

<table>
<thead>
<tr>
<th>Depth</th>
<th>MERV 11 (60-65%)</th>
<th>MERV 13 (80-85%)</th>
<th>MERV 14 (90-95%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;</td>
<td>0.25&quot; WG (62 PA)</td>
<td>0.34&quot; WG (85 PA)</td>
<td>0.39&quot; WG (97 PA)</td>
</tr>
<tr>
<td>12&quot;</td>
<td>0.34&quot; WG (85 PA)</td>
<td>0.51&quot; WG (127 PA)</td>
<td>0.58&quot; WG (144 PA)</td>
</tr>
</tbody>
</table>

Recommended Final Resistance
1.5" WG (373 PA)

Options
Factory Installed Gasketing
Faceguards
High Temperature Version
Machinery Intake Version

Meets ANSI/UL-900 Requirements

Tri-Dim Filter Corporation is committed to continual product development – all descriptions, specifications and performance data are subject to change without notice. Tri-Dim products are manufactured to exacting criteria - there can be a ±5% variance in filter performance. Tri-Dim® and Tri-Dek® are Registered Trademarks of Tri-Dim Filter Corporation. Tri-Pleat™ is a Trademark of Tri-Dim Filter Corporation.

LEED CREDITS

Indoor Environmental Quality
IEQ Credit 1.4: IAQ Best Management Practices: Reduce Particulates in Air Distribution

Requirement - Have in place filtration media with a minimum efficiency reporting value (MERV) greater than or equal to 13 for all outside air intakes and inside air recirculation returns during the performance period. Establish and follow a regular schedule for maintenance and replacement of these filters according to the manufacturer’s recommended interval.

Additional LEED Credits may exist.

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