**DEVICE TESTED**

- **Test Requested By**: FILTRATION MANUFACTURING, INC.
- **Manufacturer**: FILTRATION MANUFACTURING, INC.
- **Test Sample Procurement**: FURNISHED BY MANUFACTURER
- **Product Name**: PRACTICAL PLEAT
- **Model No.**: MERV 1 PLEATED
- **Dimensions**: 24" H X 24" W X 5" D (NOMINAL)

**DEVICE DESCRIPTION**

<table>
<thead>
<tr>
<th>Generic Device Classification / Type</th>
<th>PLEATED PANEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Of Pleats / Pockets</td>
<td>21 no.</td>
</tr>
<tr>
<td>Number Of Banks</td>
<td>N/A no.</td>
</tr>
<tr>
<td>Face Dimension (Nom. Height)</td>
<td>24 in.</td>
</tr>
<tr>
<td>Face Dimension (Nom. Width)</td>
<td>24 in.</td>
</tr>
<tr>
<td>Depth Dimension (Nom. Depth)</td>
<td>5 in.</td>
</tr>
<tr>
<td>Media Area (Net Effective)</td>
<td>3.50 m²</td>
</tr>
<tr>
<td>Type Of Media</td>
<td>SYNTHETIC</td>
</tr>
<tr>
<td>Type And Amount Of Adhesive</td>
<td>NONE</td>
</tr>
</tbody>
</table>

**TEST CONDITIONS**

- **Test Airflow Rate**: 2006 m³/hr
- **Test Aerosol Type**: KCI
- **Test Dust Type**: ASHRAE
- **Test Dust Feed Rate**: 71.0 mg/m³
- **Device Test Section Duct Size**: 24 x 24 in.
- **Final Device Resistance**: 250 Pa
- **Air Temperature**: 23.0 °C
- **Relative Humidity**: 50 %
- **Optical / Aerodynamic Particle Counter(s); OPC / APC**: CLIMET INST. / CI-500 (laser)

**TEST RESULTS - see attached performance curves**

| Initial Device Resistance | 40 Pa |
| Final Device Resistance   | 250 Pa|
| Composite Average Efficiency | 77 (0.3 - 1.0 µm), 92 (1.0 - 3.0 µm) |
| Minimum Efficiency Reporting Value (MERV) | MERV 14 @ 2006 m³/hr |
| Average ASHRAE Dust Weight Arrestance | 99 % |
| ASHRAE Dust Holding Capacity | 254 g |
ASHRAE STANDARD 52.2-2007 - PERFORMANCE CURVES
REMOVAL EFFICIENCY BY PARTICLE SIZE (0.3 to 10.0 µm; KCl)

PERFORMANCE CURVES

CLEAN DEVICE
Airflow Rate -vs- Initial Device Resistance

DUST FED -vs- RESISTANCE
Dust Increment - 30 g ASHRAE
ASHRAE STANDARD 52.2-2007 - PERFORMANCE CURVES
REMOVAL EFFICIENCY BY PARTICLE SIZE (0.3 to 10.0 µm; KCl)

REPORT NO. 14015
TEST NO. 1
SHEET NO. 3

DATE 05-30-2012
TEST SUPERVISOR M.A.M.
ADMINISTRATIVE APPROVAL

DUST FED -vs- ARRESTANCE
Dust Increment - 30 g ASHRAE

![Graph showing dust fed vs. arrestance]
PARTICLE SIZE -vs- REMOVAL EFFICIENCY
Incremental KCl Particle Size Removal Efficiency

PARTICLE SIZE -vs- REMOVAL EFFICIENCY
Composite Minimum KCl Particle Size Removal Efficiency