Aircare’s Perchloric Fume Cupboard and Scrubber uses a constant air volume (CAV) Labrocare® model fume cupboard combined with a wet scrubber mounted immediately above it to remove acidic particulates from the exhausting airstream.

Cleaning is accomplished as the contaminated air passes through the scrubber chamber which is filled with wet, high-surface-area, polypropylene packing material called Pall Rings. When the airstream encounters the sprayed-in water flowing across the Pall rings, acidic particles are absorbed into the water. The water and the particulates drain down across the back of the fume cupboard baffles and into a sump beneath the work surface. From the sump, the spent water is either drained away as waste or recirculated by an optional recirculation system.

**Standard Operation**

When the fume cupboard is turned ON by touching the Fan button, a solenoid automatically initiates the water spray heads, which continuously wet the Pall rings.

After passing through the Pall Ring bed, the exhaust airstream passes through a mist eliminator pad which removes the remaining moisture from the airflow, so the air exhausted up through the fan and out the stack is essentially moisture-free.
Cross Section

Non-Recirculating Scrubber. Scrubber water runs down internal baffles and drains through sump waste outlet.

Fluorescent light

Internal glass baffle

Sink 40mm waste outlet

Perchloric sump with 40mm waste outlet

Specifications

<table>
<thead>
<tr>
<th>Fume Cupboard Sizes</th>
<th>1200mm width</th>
<th>1500mm width</th>
<th>1800mm width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matching Scrubber</td>
<td>515 x 400 x 750H</td>
<td>660 x 400 x 750H</td>
<td>810 x 400 x 750H</td>
</tr>
<tr>
<td>Overall Ht. from floor</td>
<td>2670mm</td>
<td>2670mm</td>
<td>2670mm</td>
</tr>
<tr>
<td>Overall Depth</td>
<td>760mm</td>
<td>760mm</td>
<td>760mm</td>
</tr>
<tr>
<td>Design Face Velocity @500mm</td>
<td>0.5 m/sec</td>
<td>0.5 m/sec</td>
<td>0.5 m/sec</td>
</tr>
<tr>
<td>Labrocare® CAV Flow Rate</td>
<td>265 Litres/sec</td>
<td>340 Litres/sec</td>
<td>415 Litres/sec</td>
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<tr>
<td>Airflow Requirement</td>
<td>16m3/min</td>
<td>21m3/min</td>
<td>25m3/min</td>
</tr>
<tr>
<td>Norm. Static Pressure</td>
<td>200Pa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Top</td>
<td>Toughened 10mm Glass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Single skin 0.5uPVC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sash Mat'1</td>
<td>5mm Toughened Glass</td>
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<tr>
<td>Water Spray Capacities</td>
<td>9.2 Lt/min</td>
<td>13.8Lt/min</td>
<td>13.8Lt/min</td>
</tr>
<tr>
<td>Control System</td>
<td>Advanced Air® Fixed Volume Controller with LCD type display</td>
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<td></td>
</tr>
<tr>
<td>Removal Efficiency</td>
<td>85%–95% at low micron droplet size (20 micron)</td>
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</tr>
</tbody>
</table>

Options

- Re-circulation tank systems are available for scrubber water where drainage to sewer is not practical.
- Hand Shower, (recommended for Perchloric fume cupboards).
- Steel powder-coated under-bench frame—locates fume cupboard work surface at standard 900mm bench height.
- Scaffold System, adjustable stainless steel rods with polypropylene connectors.
- Electrical, plumbing, and gas services can be added as specified.
- Double-glass sash system.