



# LAMINAR FLOW CABINETS



# CONTENTS

**Intro** **3**

**Laminar Flow Cabinet**  
**Features** **4**

**Laminar Flow Cabinet**  
**-AD Series** **5**

**Models**  
**- Vertical Laminar Flow Cabinet** **6**  
**- Horizontal Laminar Flow Cabinet** **7**

**Warranty** **8**

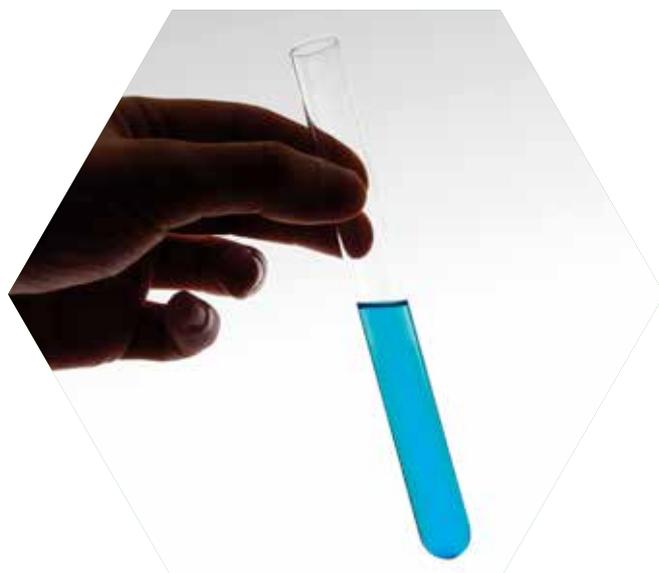
# Laminar Flow Cabinets

Laminar flow cabinets are particle free, sterile working environments that allow product protection. Ambient air is taken in via a blower across a pre-filter; this air is then forced through a High Efficiency Particulate Arrestor (HEPA) filter that captures particles at an efficiency of 99.99% at 0.3 microns. The air that exits the HEPA filter is clean and unidirectional. As the cabinets are positively pressured, there is no chance of contaminants entering the cabinets. Laminar flow cabinets or clean benches as they are also known, were developed in parallel to clean room technology. It is therefore a mini clean room that allows the manipulation of smaller sized products.

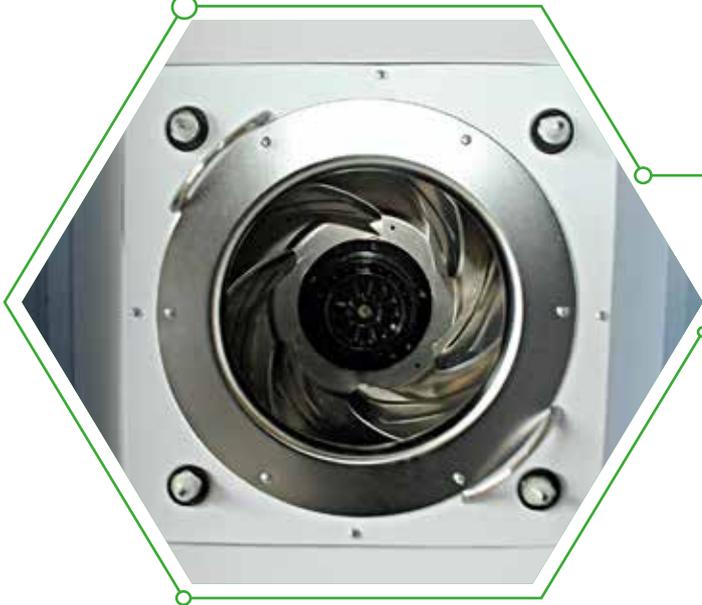
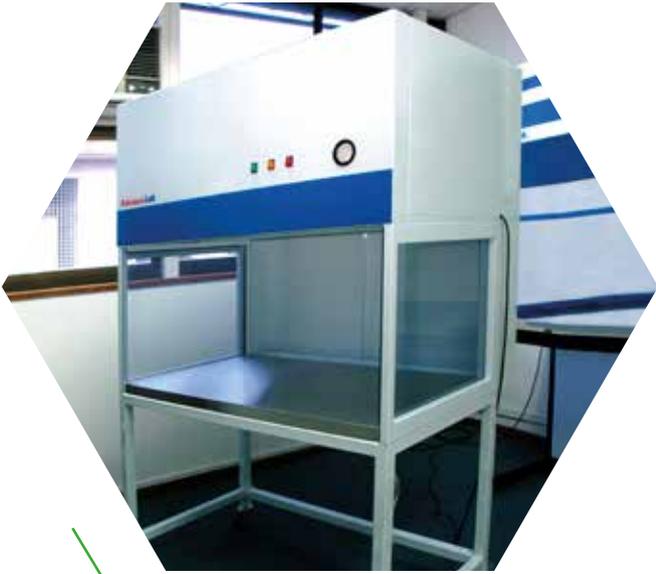
Common industry segments that use laminar flow cabinets include:

- Electronics
- Manufacturing
- Testing
- Biotechnology
- Tissue Culture
- Agro-biotech
- Pharmaceutical

Advancelab manufactures laminar flow cabinets with unique design features that further enhance performance and ensure that maximum product protection is achieved.



# Laminar Flow Cabinet Features



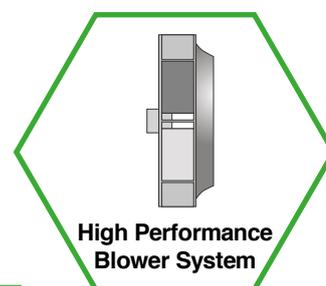
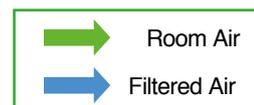
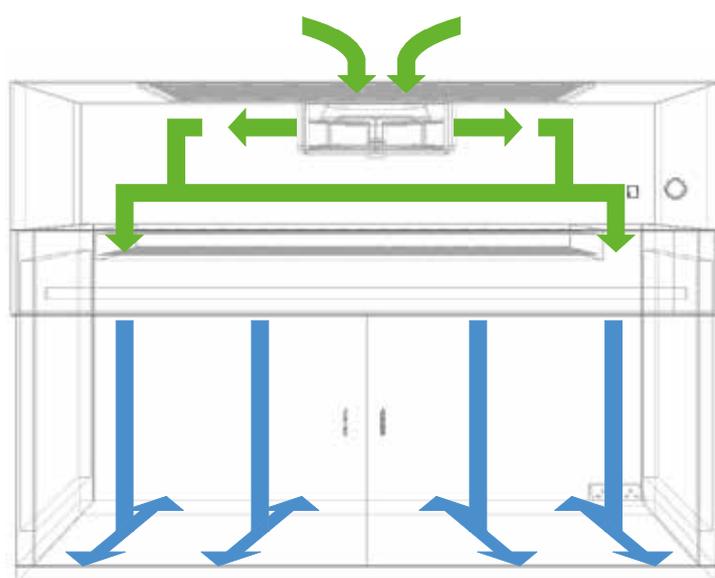
- Industrial grade electrogalvanised steel construction with epoxy powder coated finish
- Imported HEPA filters with intergral face-guards for protection
- Ultra quiet and efficient blower systems mounted using proprietary mounting technology
- Packaged pre filters to extend the life of main HEPA filters
- Built in fluorescent lights external to airflow to minimize turbulence
- Variable speed controllers for fine tuning of airflow
- Independent laboratory type tested to US Fed Std 209E (Class 100) and latest ISO 14644-1 equivalent



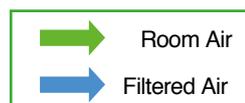
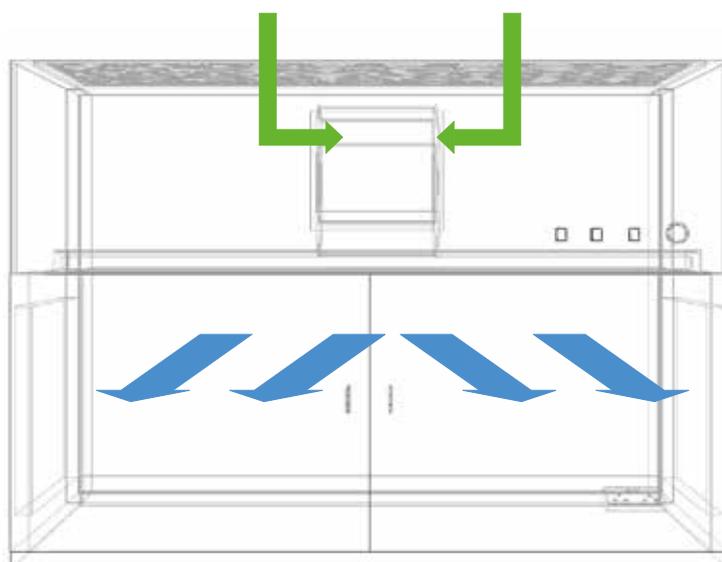
# Laminar Flow Cabinets

## AD Series

### Vertical Laminar Flow Cabinets

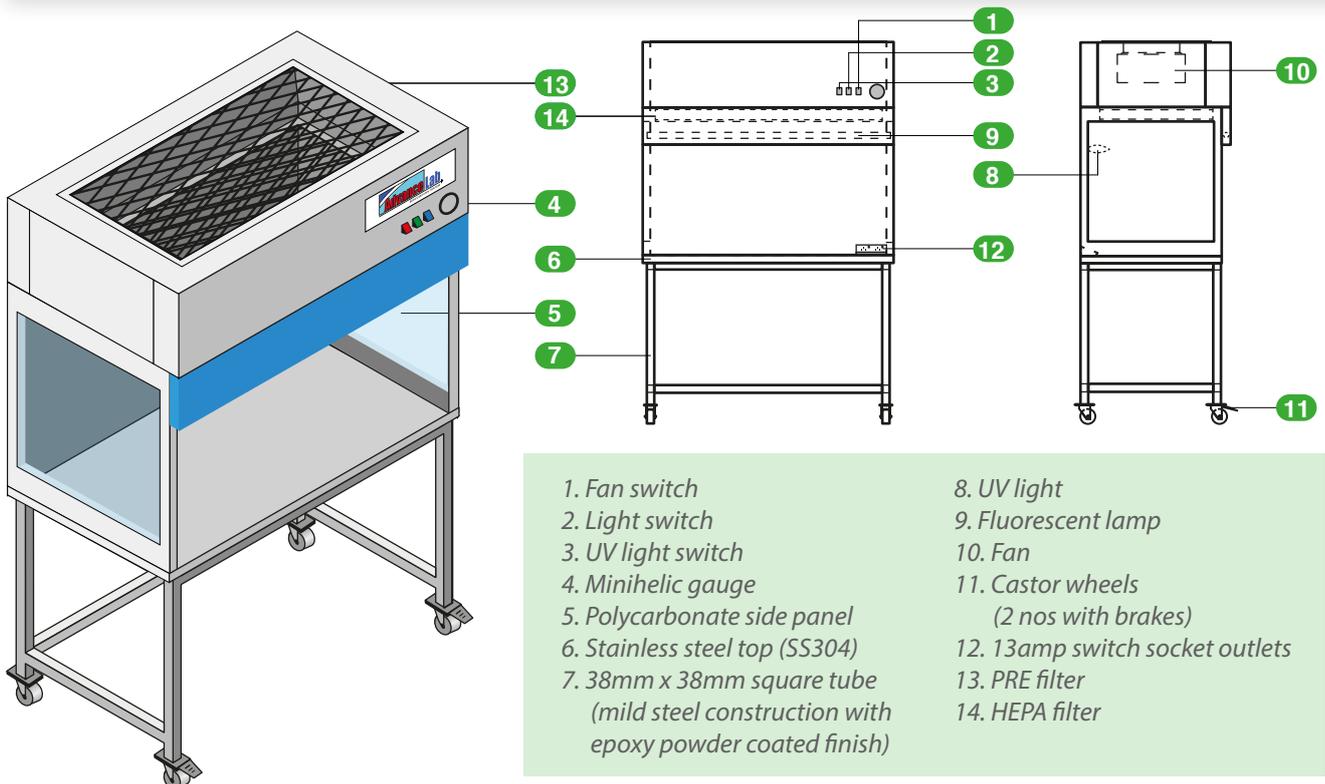


### Horizontal Laminar Flow Cabinets



# Vertical Laminar Flow Cabinets

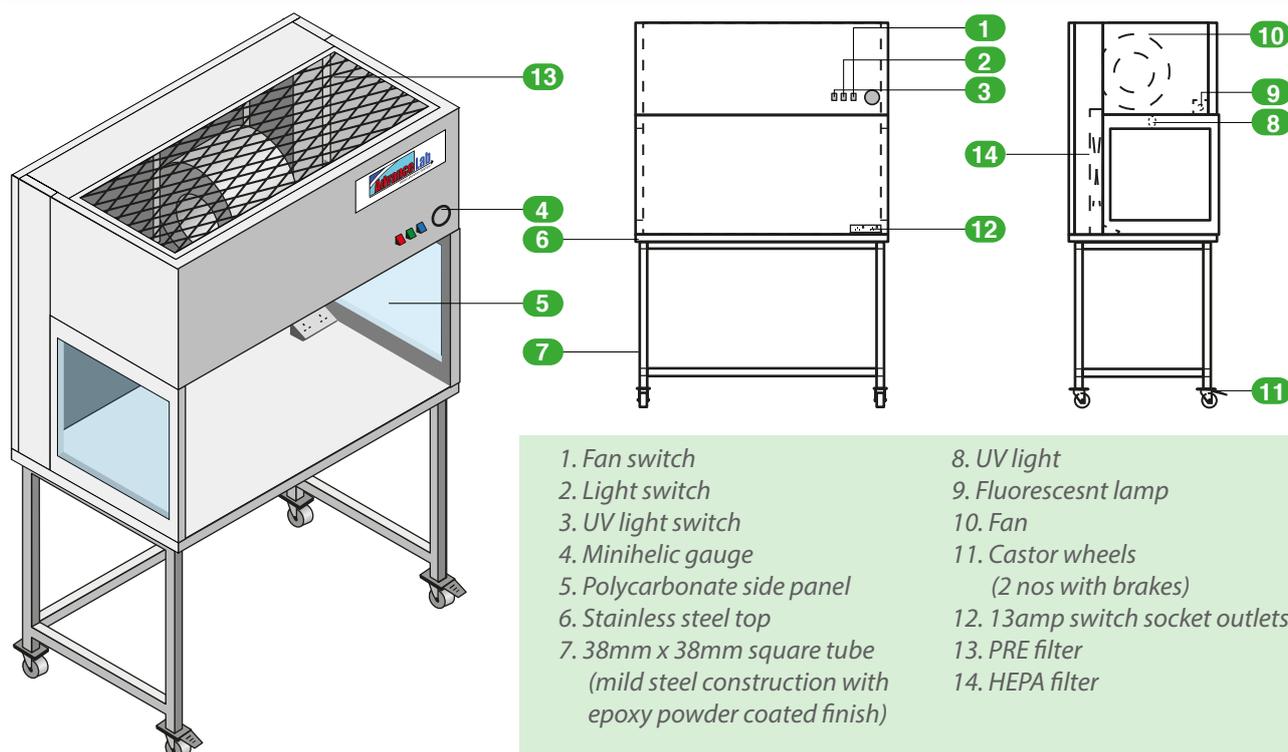
MODEL	AD03V	AD04V	AD05V	AD06V
Dimensions, mm (LxWxH)	1050 x 800 x2050	1350x 800 x 2050	1650 x 800 x 2050	1950 x 800 x 2050
Air Volume, cmh at 0.45 m/s	900	1200	1500	1800
Cleanliness	US Fed Standard 209E Class 100 or ISO 14644-1 equivalent			
Certification	External laboratory type tested to US Fed Standard 209E or equivalent ISO 14644-1 Individually factory tested			
Filtration Elements	<ul style="list-style-type: none"> <li>• Pre Filter: 50 - 60% arrestance</li> <li>• Main Filter: HEPA filter with 99.99% at 0.3 microns</li> </ul>			
Noise levels	< 65 dBA at initial setting			
Light Intensity	> 700 Lux			
Construction	<ul style="list-style-type: none"> <li>• Main: Eletrogalvanised steel construction with epoxy powder coat finish</li> <li>• Side windows: Transparent Perspex or polycarbonate</li> <li>• Worktop: Stainless steel grade 304</li> </ul>			
Initial Face Velocity	0.45 m/s			
Power	220-240V; Single Phase; 50/60 Hz			
Options:	<ul style="list-style-type: none"> <li>• UV light kit</li> <li>• Front cover, 2 pieces polycarbonate</li> <li>• Stand</li> <li>• Digital controller</li> </ul>			



- 1. Fan switch
- 2. Light switch
- 3. UV light switch
- 4. Minihelic gauge
- 5. Polycarbonate side panel
- 6. Stainless steel top (SS304)
- 7. 38mm x 38mm square tube (mild steel construction with epoxy powder coated finish)
- 8. UV light
- 9. Fluorescent lamp
- 10. Fan
- 11. Castor wheels (2 nos with brakes)
- 12. 13amp switch socket outlets
- 13. PRE filter
- 14. HEPA filter

# Horizontal Laminar Flow Cabinets

MODEL	AD03H	AD04H	AD05H	AD06H
Dimensions, mm (LxWxH)	990 x 770 x 2005	1305 x 770 x 2005	1605 x 770 x 2005	1905 x 770 x 2005
Air Volume, cmh at 0.45 m/s	900	1200	1500	1800
Cleanliness	US Fed Standard 209E Class 100 or ISO 14644-1 equivalent			
Certification	External laboratory type tested to US Fed Standard 209E or equivalent ISO 14644-1 Individually factory tested			
Filtration Elements	<ul style="list-style-type: none"> <li>• Pre Filter: 50 - 60% arrestance</li> <li>• Main Filter: HEPA filter with 99.99% at 0.3 microns</li> </ul>			
Noise levels	< 65 dBA at initial setting			
Light Intensity	> 700 Lux			
Construction	<ul style="list-style-type: none"> <li>• Main: Eletrogalvanised steel construction with epoxy powder coat finish</li> <li>• Side windows: Transparent Perspex or polycarbonate</li> <li>• Worktop: Stainless steel grade 304</li> </ul>			
Initial Face Velocity	0.45 m/s			
Power	220-240V; Single Phase; 50/60 Hz			
Options:	<ul style="list-style-type: none"> <li>• UV light kit</li> <li>• Front cover, 2 pieces polycarbonate</li> <li>• Stand</li> <li>• Digital controller</li> </ul>			



1. Fan switch
2. Light switch
3. UV light switch
4. Minihelic gauge
5. Polycarbonate side panel
6. Stainless steel top
7. 38mm x 38mm square tube  
(mild steel construction with epoxy powder coated finish)
8. UV light
9. Fluorescent lamp
10. Fan
11. Castor wheels  
(2 nos with brakes)
12. 13amp switch socket outlets
13. PRE filter
14. HEPA filter

# Warranty

**Products Manufactured by Advancelab:** Advancelab(S) Pte.Ltd., warrants products that it manufactures to be free from defects for a period of 12 months for parts, commencing from the date of shipment. Advancelab's sole responsibility is to repair or replace, at its option, any part of the product that proves defective or malfunctioning during this time limit. This warranty is void if the equipment is abused or modified by the customer, is operated outside Advancelab's operating instructions or specifications, or is used in any application other than that for which it is specified. This warranty does not include routine maintenance or service procedures, breakage, shipping damage, nor damage from misuse, intentional or unintentional abuse, neglect, natural disasters, or acts of God.

**Freight Shortage or Damage:** Upon receipt of any equipment from Advancelab, customer shall immediately unpack and inspect for damage or shortage. The customer shall not accept a damaged package or a short shipment until the carrier makes a "damage or shortage" notation on both the carrier's and customer's copy of the freight bill or delivery receipt. Service title passes when the shipment is loaded, so customer is responsible for filing and collecting a freight claim. Any replacement products must be ordered and paid for separately.

Generally, customers can improve the chance of collecting on a freight claim by following these procedures:

1. Formally requesting that the carrier inspect the shipment immediately upon suspecting damage or shortage to verify condition.
2. Notifying the carrier upon discovery of concealed damage and requesting an inspection within 15 days of receipt, both in person or phone and following up via mail.
3. Keeping the shipment as intact as possible, including retaining original packaging materials and keeping the product as close to the original receiving location as possible.
4. Holding salvage for disposition by the carrier.

**All Claims:** Advancelab (S) Pte.Ltd., expressly disclaims all other warranties, expressed or implied or implied by statute, including the warranties of merchantability or fitness for intended use. Advancelab is not responsible for consequential or incidental damages arising out of the purchase or use of the products supplied by Advancelab. Advancelab is not liable for damage to facilities, other equipment, products, property or personnel of others, or of their agents, suppliers, or affiliated parties, which is caused or alleged to have been caused by products supplied by Advancelab. In any event or series of events, Advancelab's total liability for any and all damages whatsoever is limited to the lesser of the actual damages or the original invoice cost of the items alleged to have caused the damage. The customer's sole and exclusive remedy for any cause of action whatsoever is repair or replacement of the non-conforming products or refund of the actual purchase price, at the sole option of Advancelab. All claims must be made in writing within 90 days of the date the product was shipped. Any claims not made within this time limit shall be deemed waived by the customer. Advancelab is not responsible for any additional costs of repair caused by poor packaging or in-shipment damage during return.

**Warranty Returns:** All warranty returns must be authorized in advance by Advancelab and approved by writing. Unless approved in advance for good reason, all returns must be in original condition, including all manuals, and must be packaged in original packaging materials. All returned goods are to be shipped to Advancelab, freight prepaid at customer's expense.



AdvanceLab has built a rock steady reputation for solutions where most fail. Since our establishment in 2003, we have positioned ourselves as the premier facility solution provider for the scientific industry; designing, building and delivering quickly and without fuss. We have also taken our brand of expertise globally; now with exports of laboratory casework, fume hoods, laminar flow cabinets and clean booths heading to 30 countries, covering all continents.



### Indonesia

PT. Advancelab Saintifik

Jl. Boulevard Raya Blok QJ 5 No. 23  
Kelapa Gading, Jakarta Utara, Indonesia  
Tel: +6221 45854570  
Fax: +6221 45854570  
Email: info-id@advancelab-global.com  
Website: www.advancelab.com.sg

### Malaysia

Advancelab Sdn Bhd

KL Office: Unit B-1-10, Block B, No. 2,  
Jalan PJU 1A/7A, Oasis Square, Ara  
Damansara, 47301 Petaling Jaya,  
Selangor Darul Ehsan, Malaysia.  
Tel: +603 7831 0188  
Fax: +603 78310588  
Email: info-my@advancelab-global.com  
Website: www.advancelab.com.sg

Johor Factory: No. 3388, Jalan  
Pekeliling Tanjung 27/2, Kawasan  
Perindustrian Indahpura, 81000  
Kulaijaya, Johor, Malaysia.  
Tel: +607 660 8877  
Fax: +607 660 8866  
Email: info-my@advancelab-global.com  
Website: www.advancelab.com.sg

### Myanmar

Advancelab Scientific & Engineering Co., Ltd

No(81/2), 7th Street, Than Thu Mar Road,  
(14/1)Quarter, South Okkalapa Township,  
Yangon, Myanmar.  
Tel: +95 (1) 572393  
Fax: +95 (1) 572393  
Email: info-mm@advancelab-global.com  
Website: www.advancelab.com.sg

### Singapore

Advancelab (S) Pte Ltd

No.52 Senang Crescent,  
Singapore 416619  
Tel: +65 6448 8255  
Fax: +65 6448 9833  
Email: info@advancelab.com.sg  
Website: www.advancelab.com.sg

### Thailand

Advancelab (Thailand) Co., Ltd.

9/28, Village No 13, Bang Ramat  
Sub-district, Taling Chan District,  
Bangkok Metropolis, Thailand  
Tel: +65 6448 8255  
Fax: +65 6448 9833  
Email: info-th@advancelab-global.com  
Website: www.advancelab.com.sg

Indonesia • Malaysia • Myanmar • Philippines • Singapore • Thailand



CABINETS

LAMINAR FLOW