



**Streamline's Tissue Culture Hood** is a low cost 2ft / 0.6m wide enclosure designed for hobbyist and small scale plant tissue culture work. The work zone depth of more than 20" / 0.5m provides a large working area.

The cabinet features quality construction with a heavy duty electrogalvanized steel body, finished with an abrasion resistant textured powder coating. The stainless steel work surface is durable and easy to clean.

The enclosure is fitted with an industrial-grade permanently lubricated centrifugal fan for high airflow volumes at low noise levels.

The **HEPA filter, rated at 99.9995% at 0.3 microns, provides better than ISO Class 4 in the working area** (former US Federal Standard Class 10 - 10 times "cleaner" than the normal Class 100). The filter covers the entire work zone ceiling for true laminar flow in the work space.

**A built-in warm 5000k fluorescent lamp** ensures optimum illumination for comfortable working conditions. Light tubes are mounted out of the air stream for better airflow uniformity.

The cabinet's glass sides are durable, scratch proof, easy to clean and provide the user with a good working environment without feeling "boxed in".

The enclosure also features a convenient cable pass-through mounted at the back of the work zone in case a power cord (or gas tubing) needs to be connected to a small device placed in the working area.

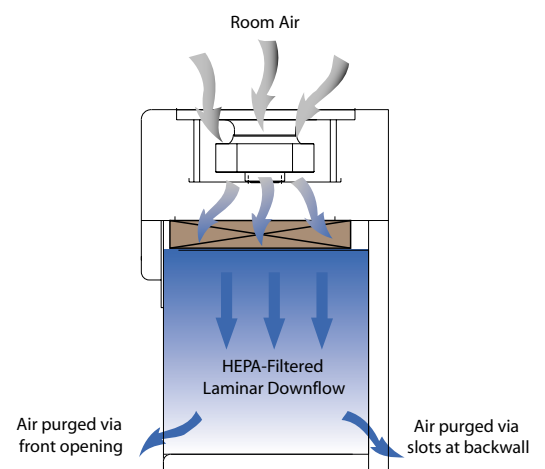
**Available now at a very economical cost, the Streamline Tissue Culture Hood delivers optimum performance for the home hobbyist at a very affordable price.**

*This is the first mass-produced cabinet targeted at the home / hobbyist / small scale tissue culture market that uses industrial grade components but yet available at an economical price.*

- Standard cabinet control system consists of separate rocker switches for blower and lights.
- **True vertical laminar airflow** with a large filter covering the entire work zone within the cabinet for better protection against cross contamination, as compared to conventional dead-air boxes.
- Air purge slots at the backwall of work zone prevents dead-air zones that may collect contaminants.
- High-quality polyurethane pre-filter and main H13 **HEPA filter with a typical efficiency of 99.9995% at 0.3 microns** provide the best product protection in the world; typical HEPA filter lifespan is more than 3 years depending on ambient operating conditions and total number of hours in usage.
- **12-month warranty** for Streamline® cabinets excluding consumables and accessories.

#### **Cabinet Airflow Profile**

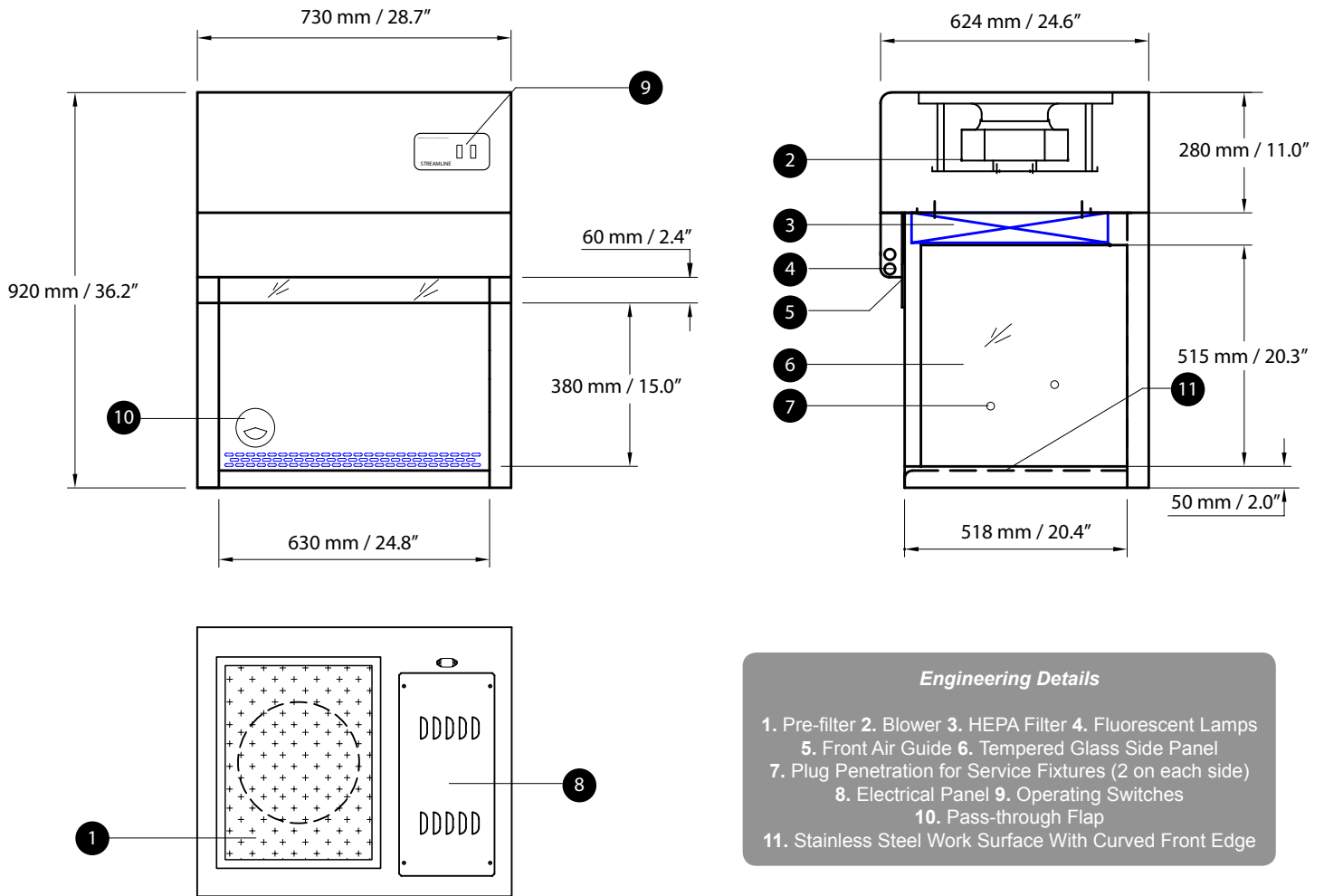
- Room air is taken in from the top of the cabinet through a washable polyurethane pre-filter, which serves to trap larger particles and increases the life of the main filter.
- Air is forced evenly across the HEPA filter; the result is a stream of clean laminar air within the cabinet work zone, which flushes all air contaminants from the interior.



- The purified air travels across the work zone in a vertical, unidirectional stream and leaves the main work chamber across the entire open front of the cabinet. Some portion of the air is purged via the slots at the work zone backwall, thus eliminating any possibilities of contaminants accumulating in work zone corners.

# Streamline Tissue Culture Hood Specifications

Streamline Lab Catalogue Revision No: TCH.v1.10.2004  
 Specifications subject to change without notice.  
 ©2004 Streamline Laboratory Products.



- Engineering Details**
1. Pre-filter
  2. Blower
  3. HEPA Filter
  4. Fluorescent Lamps
  5. Front Air Guide
  6. Tempered Glass Side Panel
  7. Plug Penetration for Service Fixtures (2 on each side)
  8. Electrical Panel
  9. Operating Switches
  10. Pass-through Flap
  11. Stainless Steel Work Surface With Curved Front Edge

General Specifications	TCH-2AX
External Dimensions (Width x Depth x Height)	730 x 624 x 920 mm 28.7" x 24.6" x 36.2"
Internal Work Zone (Width x Depth x Height)	630 x 518 x 515 mm 24.8" x 20.4" x 20.3"
Air Volume (At Initial Velocity)	587-705 cmh / 345-414 cfm
Laminar Airflow Velocity	Average of 0.50-0.60 m/s or 98-118 fpm measured 150mm / 6" from filter face for 35 air changes / minute
Standards Compliance	Individually performance tested and certified at factory under controlled conditions for: General requirements: IEST-RP-CC002.2 and AS1386.5 Air cleanliness: ISO 14644.1 Class 3, IEST-G-CC1001, IEST-G-CC1002 and other equivalent air cleanliness requirements Filter performance: IEST-RP-CC034.1, IEST-RP-CC007.1, IEST-RP-CC001.3 and EN1822 Electrical safety: IEC 61010-1 / EN 61010-1 / UL 61010A-1 / CSA C22.2 No. 1010.1-92
Air Cleanliness Within Working Area	ISO 14644.1 Class 4, US Federal Standard 209E Class 10 / M2.5, AS 1386 Class 2.5, JIS B9920 Class 4, BS5295 Class D, Class M100,000 as per KS 27030.1 and other equivalent cleanliness classifications of the VDI 2083 and AFNOR X44101
Main Filter Type	HEPA filter with integral metal guards and filter frame gaskets; fully compliant with EN1822 and IEST-RP-CC001.3 requirements Typical efficiency: 99.9995% at 0.3 microns / 99.9988% at 0.12 microns / 99.9987% at MPPS
Pre-Filter	Washable non-woven polyurethane fibers with an efficiency of 20%
Noise Level	Typically <67 dBA at initial blower speed setting measured as per IEST -RP-CC002.2 (figure subject to acoustic properties of test environment)
Light Intensity	>1200 lux / >111 foot candles, measured at work surface level (zero background) as per IEST-RP-CC002.2
Main Body Construction	1.2mmt / 0.05" / 18 gauge electro-galvanised steel with white oven-baked epoxy powder-coated finish
Side Window Construction	Colourless and transparent UV-absorbing 4 mm / 0.16" tempered glass
Work Surface Construction	1.2mmt / 0.05" / 18 gauge stainless steel grade 304
Power Supply Options	Choose from the following options and specify option number when ordering (e.g. TCH-2A <u>2</u> for a 110-130VAC 60HZ) 1. 220-240VAC 50HZ 2. 110-130VAC 60HZ 3. 220-240VAC 60HZ 4. 110-130VAC 50HZ 5. 100-110VAC 50HZ / 60HZ
Net Weight (Approximate)	100 kgs / 220 lbs

## Streamline Laboratory Products

32 Maxwell Road · #03-07 Whitehouse · Singapore 069115  
 Tel: +65 6785 1020 · Fax: +65 6785 1027  
 Email: mail@streamline-lab.com · www.streamline-lab.com

Your local distributor: