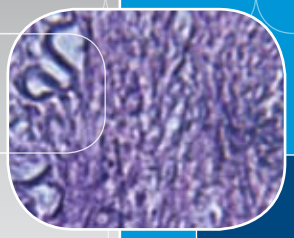
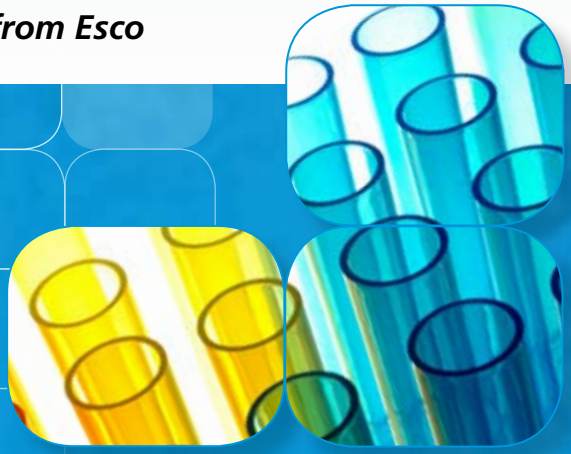


Labculture•PLUS®

Esco Labculture Plus tested to EN 12469 for safety and performance. Model LP2-4D1 with optional support stand.

Class II, Microbiological Safety Cabinets

The Industry's Premier Energy Efficient Solution from Esco



ESCO
WORLD CLASS. WORLDWIDE.

Main Features

- The industry's premier Green Microbiological Safety Cabinet solution.
- HPA (Health Protection Agency, Porton Down, UK) certified to EN 12469.
- New EC Fan Technology provides superior airflow stability and reduces operating costs.
- Dual fan design to enhance safety. If one fan fails, minimal protection is still maintained with only one fan running.
- Ergonomically angled front improves reach and comfort.
- Fully closable, motorized sash provides an airtight seal for better safety when cabinet is inoperative overnight.
- Frameless, shatterproof sash is easier to clean, offers larger, unobstructed viewing area.
- Transparent glass sides provide a comfortable work environment.
- New energy-efficient electronically ballasted instant start T5 lighting.
- Esco next-generation Sentinel™ microprocessor supervises all cabinet functions.
- A large easy-to-read digital display and ergonomically sized touchpad controls improve user interface.
- Unique Dynamic Chamber™ plenum with angled filter delivers superb airflow uniformity.
- Negative pressure plenum surrounds contaminated positive pressure plenum; no fabric bags are used.
- Multi-piece work surface removal simplifies cleaning.
- Raised armrest maintains safety by preventing blockage.
- Esco ISOCIDE™ antimicrobial coating on all painted surfaces minimizes contamination.

Esco Labculture Plus Class II Microbiological Safety Cabinet, Model LP2-4D1. (Shown with optional telescoping stand with leveling feet)

Green Product

EN 12469

- Dual, long-life ULPA (per IEST-RP-CC001.3) filters for supply and exhaust airflow.
- Independent exhaust sensor mounted exterior to work area.
- Single piece coved corner back wall construction.
- Improved lighting is brighter, more uniform and reduces glare.
- Optional UV lamp operates on programmable timer.
- HPV-compliant and approved for safe decontamination, tested with both BIOQUELL and STERIS patented processes.
- The front sash is motorized for convenient one-hand operation. The sash control is mounted on the front control panel.
- Integrated sash proximity contacts sense proper sash position, serve as an interlock for the UV lamp, and activate an alarm if the sash is improperly positioned.
- When fully lowered the sash seals automatically against a closed-cell peripheral gasket to isolate the interior and prevent escape of contaminants during decontamination.

Advanced Engineering

The Esco Labculture Plus microbiological safety cabinet includes a number of design and performance features not found on our popular Labculture series cabinets. These include:

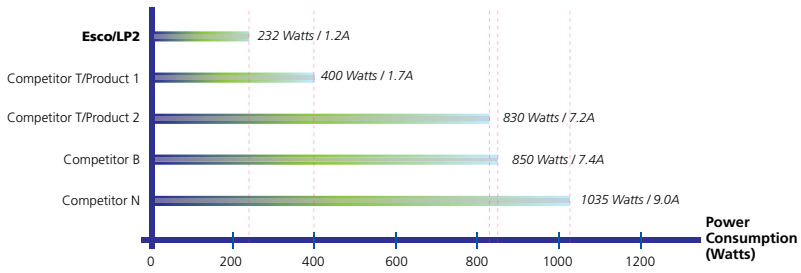
- An aerosol tight window for additional safety while the cabinet is inoperative.
- Dual fan design guarantees safety in the event of the failure of one fan.
- Motorized front sash for one-hand operation.
- Larger LCD display for easy monitoring of operational parameters.

Containment and Protection

The Esco Labculture Plus microbiological safety cabinet (D-Series) provides operator, product and environmental protection against Biosafety Levels 1, 2 and 3.

This cabinet can be used for handling Biosafety Level 4, provided that the operator wears positive pressure suit.

- The airflow ratio of 67% recirculation to 33% exhaust increases operator protection beyond the 70% / 30% ratio of conventional microbiological safety cabinets.
- Inflow of room air enters the front air grille to establish operator protection; room air does not enter the work zone, preventing product contamination.
- Raised armrest prevents the likelihood of inflow grille blocking by operator's arms.
- The downflow (supply) filter is tilted proportionally to the cabinet front angle to direct more air forward to the front air grille.
- The inflow velocity, downflow velocity, airflow path and intake geometry are precision tuned and tested to create an optimum air curtain at the front aperture; this curtain maintains personnel and product protection even in the unlikely event of a severe inflow or downflow imbalance that would compromise protection in a conventional cabinet.



Energy Efficiency Comparison Chart

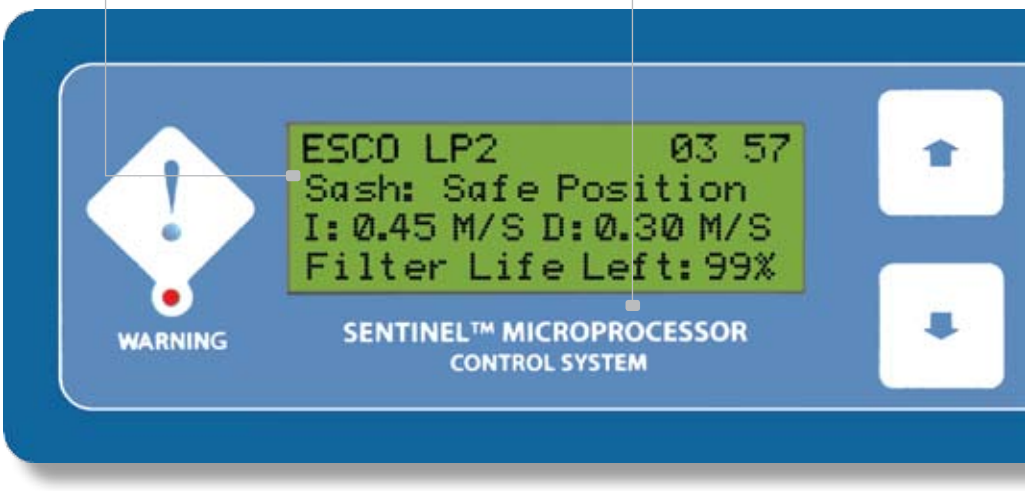
Esco Labculture Plus Cabinets offer the best energy efficiency of any microbiological safety cabinet on the world market for lowest total lifecycle costs. Its dual EC Fan system operates at 232 Watts (1.2m cabinet, dual exhaust filter) and saves up to US$500 per year per cabinet compared with competing models. Lower operating watts also reduces building heating load.

Operator, Product and Environmental Protection

Labculture Plus Class II Model LP2-4D1 provides protection from airborne contaminants to the operator, product and the environment. Model LP2-4D1 shown with optional telescoping height support stand.

Enlarged, multi-line digital read-out with alpha-numeric display indicates all input, status and alarm functions.

Indicators for filter life and UV life are reverse scaled from 100% to 0% and displayed on the LCD panel.



When programmed ON

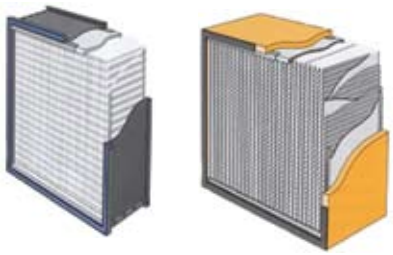
- *the start-up sequence confirms status with Air Safe and local time display.*
- *the Personal Identification Number (PIN) access restricts unauthorized adjustments.*
- *an airflow alarm warns of deviations from normal velocities.*

Integrated Filtration System

Independent supply and exhaust filters provide 99.999% typical efficiency for particle sizes of 0.1 to 0.3 microns. Labculture Plus filters meet the IEST-RP-CC001.3 recommended practice for ULPA performance (USA), and EN 1822 for H14 performance (EU).

- ULPA filters (per IEST-RP-CC001.3), are tested to a typical efficiency of >99.999% for 0.1 to 0.3 micron particles; these provide better filtration capability than conventional H13 HEPA filters that have a typical efficiency of > 99.99% for 0.3 micron particles.
- Filter assembly is constructed in accordance with EN1822 requirements.
- The supply filter provides ISO Class 3 (per ISO14644.1) clean air to the work surface in a gentle vertical laminar flow for product protection.
- Modern separatorless mini-pleat filter construction maximizes the filter surface area to extend filter life and eliminates possible filter media damage by thin and sharp aluminum separators used in conventional HEPA filter construction.
- The exhaust filter traps biohazard particles acquired from the work surface before air is exhausted to the room, offering personal and environmental protection.

Mini-pleat Separatorless Filter (left) vs. Conventional Aluminium Separator Filter (right)



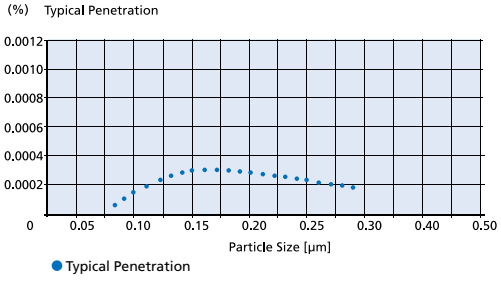
Esco cabinets use Swedish Camfil Farr® mini-pleat filters without aluminum separators to increase filter efficiency, minimize the chance of leakage, and to prolong filter life. Filters include a lightweight aluminum frame for structural stability and elimination of swelling common to conventional wood frames.

- The exhaust filter media is protected from mechanical damage by an integrated metal screen guard, which is absent from conventional HEPA filters.

Sentinel Microprocessor Control, Alarm, Monitoring System

The Esco Sentinel microprocessor-based control system supervises operation of all cabinet functions.

- Continuous monitoring of cabinet airflow is displayed on a bright, easy-to-read LCD panel. The large display monitors operational parameters.
- The control panel is located at the center of the cabinet, and angled down for easy access by the operator.
- Two integrated, temperature-compensated true airflow velocity sensors provide independent measurement of inflow and downflow velocities despite room temperature fluctuation.
- All electronic parts are contained inside a plug-and-play module that permits easy exchange if required.
- Sentinel functions are factory set to default (ON or OFF), depending on worldwide destination and local preferences. Default settings can be user activated through the touchpad data entry access.
- Automatic start-up sequence will prepare the cabinet for normal operation and advise when safe conditions are established.

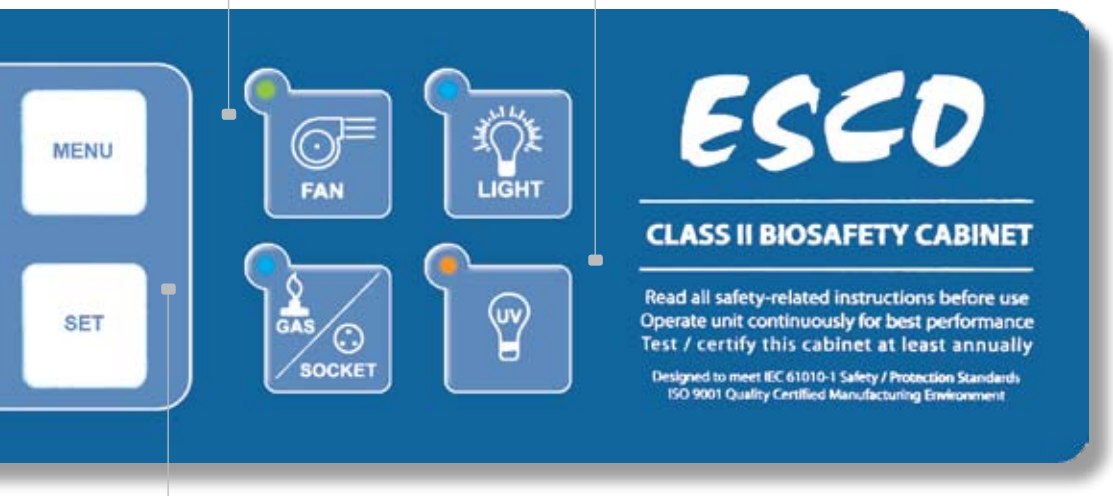


Esco Filter Efficiency

Independent supply and exhaust filters provide 99.999% typical efficiency for particle sizes of 0.1 to 0.3 microns. Labculture Plus Class Series filters meet the IEST-RP-CC001.3 recommended practice for ULPA performance (USA), and EN 1822 for H14 performance (EU).

Color coded indicator lamps display green for fan operation; blue for fluorescent lights and electrical outlet; and orange for UV lamp ON caution.

Programmable automatic UV light timer simplifies operation, enhances contamination control, extends UV lamp life and saves energy.



Enlarged touchpad data entry buttons with tactile feedback permit control settings and access to diagnostics, default settings and hierarchical menus.

Esco Next-Generation Sentinel Microprocessor Control System

- *The Sentinel microprocessor-based control and alarm system supervises all cabinet functions.*
- *Setpoints and other applications are user activated through touch-pad programming access detailed in the Operations Manual.*
- *A key switch located on the cabinet prevents unauthorized use of the cabinet.*
- *The motorized sash is controlled by an up/down button.*

- An administrator controlled PIN (Personal Identification Number) can be set to restrict access to main menu.
- The airflow alarm can be activated or deactivated depending on user preference and nature of the work.

Consult your Esco Operating Manual or contact Esco or your Sales Representative for information on user-preference programming capabilities built into the Sentinel microprocessor platform.

Redundant Fan System

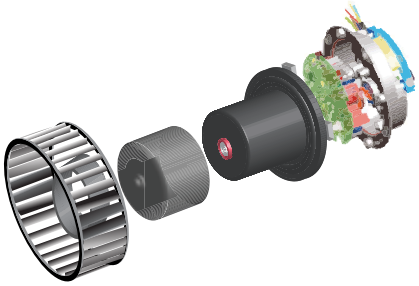
The Labculture Plus fan system is designed for high performance operation, redundancy, maximum energy efficiency and minimal maintenance.

- Dual permanently lubricated direct-drive external rotor motor/fans provide safety in the event of a motor failure.
- The external rotor motor design allows for optimum cooling of the motor during extended operations and extends the motor bearing life.
- The inflow and downflow balance is precisely established by two independent fans.
- The EC Fan maintains constant, stable airflow despite building supply voltage fluctuations.
- Built-in RFI and electrical noise filters eliminate interference with adjacent instrumentation.
- An integral fan hour meter tracks operating life and aids in predictive maintenance planning.
- To prevent fan damage, a paper-catch grille traps papers or towels that may drop down on the drain pan, preventing them from being pulled into the column by fan suction.

Cabinet Construction

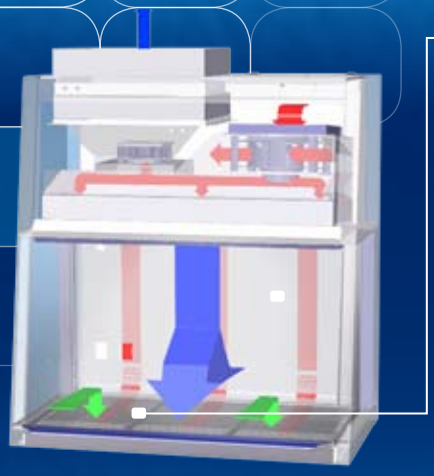
Robust construction and enhanced safety features qualify the cabinet for the most demanding laboratory applications. The cabinet is fully assembled and ready to install and operate when shipped.

- The interior and back wall are formed from a single piece of stainless-steel with large radius corners to simplify interior cleaning.
- The cabinet work zone has no welded joints to collect contaminants or rust.
- All stainless steel work surfaces are accessible for cleaning.
- Multi-piece tray components are easily lifted and removed to encourage surface decontamination.
- A recessed central area and stainless steel drain pan channels spills and prevent liquids from entering the lower filtration and fan systems.



Green, Energy Efficient EC Fans

- *Esco Labculture Plus cabinets use dual German made ebm-papst® centrifugal fans with EC motors. The dual fan design enables inflow and downflow velocities to be precisely balanced therefore delivering maximum product, operator and environmental protection.*
- *With EC technology, AC from the mains is converted into DC via proprietary electronics which enables up to 90% efficiency to be reached across a very wide speed and load range, or as little as 1/3 the energy of industry standard fans.*
- *EC systems generate less heat than conventional motors for cooler working conditions and higher bearing life expectancy, therefore delivering superior reliability.*
- *EC systems are quieter and improve working conditions in the laboratory.*
- *EC systems can be operated at higher RPM's therefore delivering greater torque than conventional fans. This enables constant airflow to be delivered at higher pressure losses, thus lengthening filter life and reducing maintenance costs.*



ULPA-filtered air
Unfiltered / potentially contaminated air
Room air / Inflow air

Cabinet Filtration System

Dynamic air barrier, inflow and forward-directed downflow air converge

- Ambient air is pulled through the perforations located towards the work zone front to prevent contamination of the work surface and work product. The inflow does not mix with the clean air within the cabinet work zone. Inflow air travels through a return path toward the common air plenum (fan plenum) at the top of the cabinet.
- Approximately 33% of the air in the common plenum is exhausted through the ULPA filter to the room. The remaining 67% of the air is passed through the downflow ULPA filter and into the work area as a vertical laminar flow air stream bathing the work surface in clean air.
- The uniform, non-turbulent air stream protects against cross contamination within and throughout the work area.
- Near the work surface, the downflow air stream splits with a portion moving toward the front air grille, and the remainder moving to the rear air grille. A small portion of the ULPA filtered downflow enters the intake perforations at the side capture zones at a higher velocity (small blue arrows).
- A combination of inflow and downflow air streams forms an air barrier that prevents contaminated room air from entering the work zone, and prevents work surface emissions from escaping the work zone.
- Air returns to the common air plenum where the 33% exhaust and 67% recirculation process is continued.

Dynamic Chamber™ Plenum Design

Negative pressure *Positive pressure*

The Esco double-wall design creates a Dynamic Chamber plenum which surrounds contaminated areas with negative pressure, preventing the possibility of contamination from leaks in filter seal, gasket or cabinet structure.

- External surfaces are coated with Esco Isocide antimicrobial coating to protect against surface contamination and inhibit bacterial growth. Isocide eliminates 99.9% of surface bacteria within 24 hours of exposure.
- There are no screws in the front or sides to trap contaminants or complicate cleaning.

Comfortable Ergonomic Design

The cabinet is engineered for comfort, utility value and safety.

- The 8.5° angled viewing window and narrow profile front grille improves reach into the work area.
- The instant-start 5000k fluorescent lamp operates on an electronic ballast to reduce heat, improve comfort and conserve energy.
- The lamp delivers uniform lighting to the work surface for greater comfort, reduced glare and improved productivity; see Specifications.
- The front armrest is raised above the work zone to improve comfort and to minimize blockage of forward airflow perforations.
- The optional adjustable support stand provides work surface height control.
- The frameless sash eliminates blockage of operator's line of sight.
- A generous sash opening allows for easier access into the work zone, provides ample room for transferring of small equipment; see Specifications.
- The sliding window can be fully opened to insert and remove larger instrumentation and equipment.

Electrical Safety and Certification

All components meet or exceed applicable safety requirements.

- Each cabinet is individually factory tested for electrical safety.
- Documentation specific to each cabinet serial number is maintained on file.
- Tested to EN 12469, the renowned world standard for microbiological safety cabinets.
- Contact Esco or your Sales Representative for site preparation information; see Electrical Specifications.

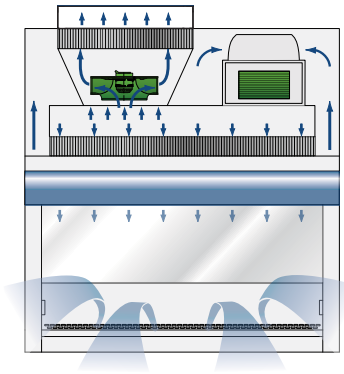
Warranty

The Labculture Plus is warranted for 3 years excluding consumable parts and accessories.

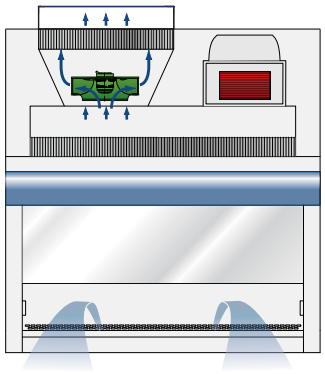
- Each cabinet is shipped with a comprehensive User Manual complete with a report documenting all test procedures.
- Additional IQ/OQ documentation is available upon request.
- Contact your local Sales Representative for specific warranty details or documentation requests.

Dual Fan System

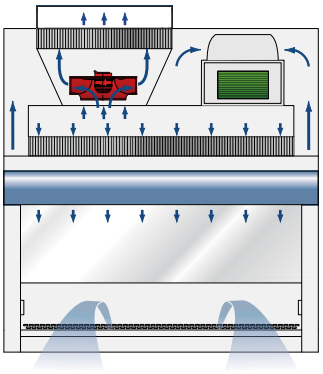
Provides the maximum possible level of safety by enabling safe cabinet shut down in the event of a single fan failure.



1A: *Under normal operation with both fans operating (1a) the supply fan creates a negative pressure surrounding the contaminated positive pressure plenum and pushes air across the supply and exhaust filters. The exhaust fan boosts the air pressure through the exhaust filter to create better inflow and operator protection. Supply and exhaust fans automatically operating at reduced speeds extend fan life.*



1B: *If the supply fan fails (1b), downflow to the work area is suspended. The exhaust fan still provide inflow to the cabinet to help maintain containment. The control panel warns of downflow failure.*



1C: *If the exhaust fan fails (1c), the supply fan continues to provide inflow to the cabinet and downflow to the work area. The control panel warns of inflow failure.*

Robust Cabinet Construction and Enhanced Safety Features

- *Rear interior stainless steel work zone with industry-exclusive coved corners makes cleaning easy.*
- *Helpful for certifiers, the hinged maintenance assembly opens to a fixed position on integrated, gas spring struts providing front service access.*
- *All key components with the exception of the motor/fan assembly are mounted outside the air stream and away from contaminated air to permit service without decontamination. These include fluorescent lamps, UV lamps, electrical harnesses, electronic boards and microprocessor control.*
- *Panels enclosing potentially hazardous areas or components such as microbiological contamination or electrical shock are color-coded red to warn service technicians.*
- *The telescoping Dynamic Chamber™ plenum minimizes physical lifting and accelerates filter change when required.*
- *Work area containment is maintained even when removable components are lifted out for cleaning.*
- *The lower drain trough is a single-piece fabrication with wide open angles.*

Comprehensive Performance Testing At Esco

Every Labculture Plus model manufactured by Esco is individually tested, documented by serial number and validated with the following test methods.

- *Inflow/downflow velocity*
- *PAO Aerosol challenge for filter integrity*
- *Light, noise and vibration*
- *Airflow pattern visualization*
- *Electrical safety to IEC61010-1*
- *Additional KI-Discus containment and microbiological testing is performed on statistical sampling basis.*

Options and Accessories

Esco offers a variety of options and accessories to meet local applications. Contact Esco or your local Sales Representative for ordering information.

Support Stands

- Fixed height, available 711 mm (28.0") or 864 mm (34.0"),
  - With leveling feet, ±38.1 mm (1.5")
  - With casters

- Adjustable height, hydraulic range from 737 mm (29.0") to 838 mm (33.0")
  - Electrical lift
  - With casters

- Telescoping height, nominal range from 737 mm (29.0") to 838 mm (33.0")
  - Adjustable in 25.4 mm (1.0") increments

Electrical Outlets and Utility Fixtures

- Electrical outlet, ground fault, North America

- Electrical outlet, Europe / Worldwide

- Petcock (air, gas, vacuum)
  - North America (American) style
  - Europe / Worldwide style DIN 12898, DIN 12919, DIN 3537

Cabinet Accessories

Germicidal UV Lamps

- Controlled by automatic UV lamp timer through Sentinel™ microprocessor control panel
- Emission of 253.7 nanometers for most efficient decontamination
- Lamp is positioned away from operator line of sight for safety and proper exposure to interior surfaces

Note: UV lamp intensity reduces over time and its effectiveness is subject to factors such as relative humidity in the cabinet, ambient air temperature and microbial species in the work zone.

Ergonomic Foot Rest

- Angled, helps maintain proper posture
- Adjustable height
- Anti-skid coating, chemical resistant finish

PVC Armrest

- Chemically treated, improves operator comfort, easy to clean, 711 mm (28.0") standard size.

Ergonomic Lab Chair

- Laboratory grade construction, meets Class 100 cleanliness; alcohol resistant PVC materials
- Adjustable 395-490 mm (15.6"-19.3")

Microscope Viewing Device

- Mounting and viewing pouch integrated into sash.
- Factory installed; specify when ordering.

IV Bar with Hooks

- Stainless steel construction.
- Available for all standard cabinets.

Microbiological Testing

Esco performs testing in accordance with more than 10 of the world's most recognized standards for local, regional and international criteria. Testing in our microbiology laboratory is conducted according to NSF49, EN12469, and JIS K3800. An NSF-accredited biohazard cabinet field certifier is available in-house full-time to supervise all testing work, using harmless Bacillus atrophaeus (formerly Bacillus Subtilis) bacteria that is used to challenge the cabinet, then incubated for 48 hours and the Colony Forming Units (CFU) are counted to determine the testing results.

Increased microbiological challenge tests with objects inside the cabinet work zone, Bunsen burner, external airflow disturbance, and Human-As-Mannequin test adapted from Fume Hood development were performed to simulate real-world conditions.

Personnel Protection Test

The test objective is to evaluate the safety of the cabinet for the personnel operating on potentially hazardous samples in the cabinet work zone.

- A nebulizer containing 55 mL of 5 to 8 x 10^8 spores/mL B.atrophaeus spores is placed inside the work zone, 10 cm (4") behind the front opening sash.
- Target slit air samplers and impingers are placed outside the work zone to capture possibly escaping B.atrophaeus spores, then the sample is incubated.
- Acceptance: The number of Bacillus atrophaeus CFU recovered from the agar plates shall not exceed 10 CFU per test.

Product Protection Test

The test objective is to determine cabinet protection to the product/samples inside the cabinet work zone from environmental contaminants.

- A nebulizer containing 55 mL of 5 to 8 x 10^6 spores/mL B.atrophaeus is placed at 10 cm (4") in front of sash window.
- Target agar plates are placed throughout the entire work surface.
- Acceptance: The number of Bacillus atrophaeus CFU recovered from the agar plates shall not exceed 5 CFU per test.

Cross Contamination Test

The test objective is to evaluate cabinet protection from cross contamination of samples placed simultaneously inside the work zone.

- A nebulizer containing 55 mL of 5 to 8 x 10^4 spores/mL is placed against one of the work zone sidewalls.
- Target agar plates are placed 360 mm (14") away from the same side wall.
- Acceptance: The number of Bacillus atrophaeus CFU recovered on agar plates shall not exceed 2 CFU per test.

HPV Test Compliant: Safer Hydrogen Peroxide Decontamination Compatibility

Esco microbiological safety cabinets are Hydrogen Peroxide Vapor (HPV) compliant and decontaminatable cabinets tested with both BIOQUELL and STERIS patented processes. HPV is a safer and more efficient alternative to conventional decontamination using formaldehyde (CH_20):

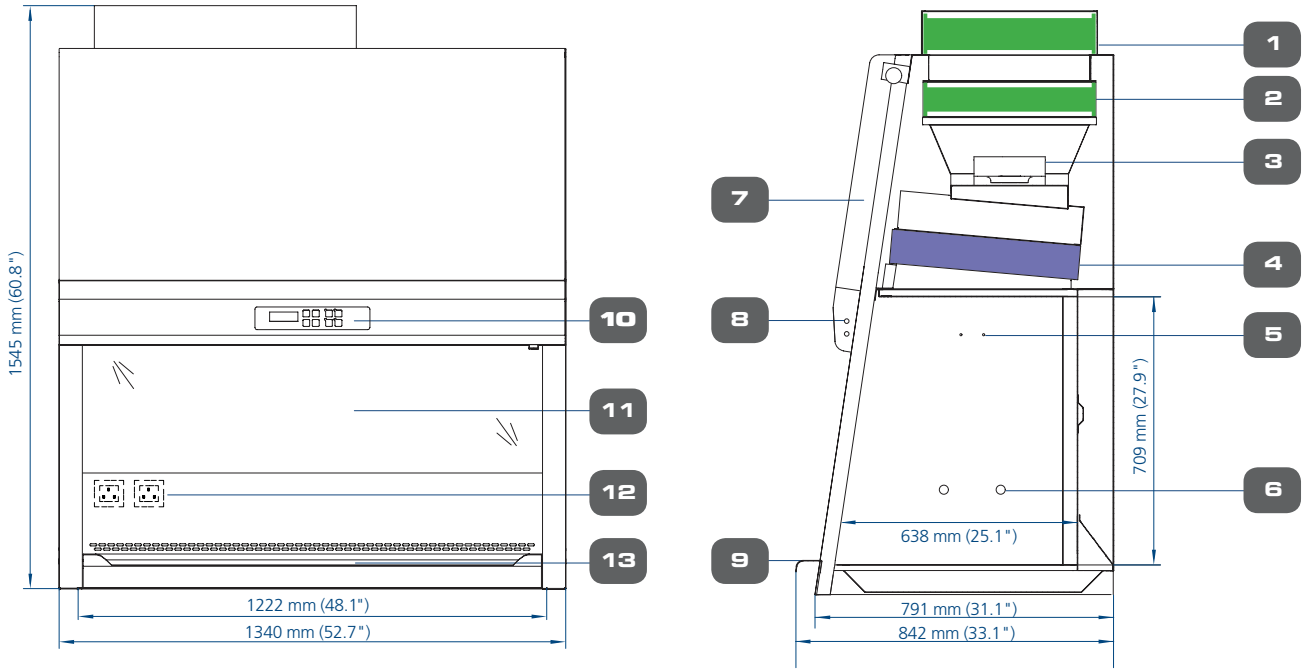
- HPV is non-carcinogenic and odorless, while formaldehyde is carcinogenic, toxic and has pungent smell.
- If there is a gap on the cabinet sealing, escaping HPV to the lab will decompose to become oxygen and water. Escaping formaldehyde, however, is harmful to people in the lab. Therefore HPV decontamination can be performed while people are working inside the lab, while formaldehyde decontamination must be performed with no one present in the lab. The HPV method improves safety, productivity, and reduces the time to seal the cabinet.
- HPV biological efficacy is independent of environmental variables, whereas formaldehyde efficacy is dependent on such variables.
- HPV has a better penetration capacity, resulting in a full decontamination of the cabinet. The formaldehyde method is known to result in incomplete decontamination.
- HPV is more effective and rapid against microbiological organisms compared to formaldehyde.
- HPV requires approximately 4-7 hours for set-up, decontamination, and tear-down, compared to a total of 12-15 hours needed to complete a formaldehyde decontamination process.
- HPV decontamination effectiveness is independent of temperature and humidity. Formaldehyde requires temperature above 20°C and relative humidity above 65%.
- For information on the BIOQUELL and STERIS HPV methodologies, contact Esco or your Sales Representative and ask for our HPV Decontamination Whitepapers.

KI-Discus Containment Test According to EN 12469:2000 (Operator Protection)

Esco is currently one of the few companies in the world equipped to perform the KI-Discus test for our customers. The KI-Discus test is defined in the European Standard for microbiological safety cabinets, EN12469:2000, as a test method for validating the operator/personnel protection capabilities of the cabinet.

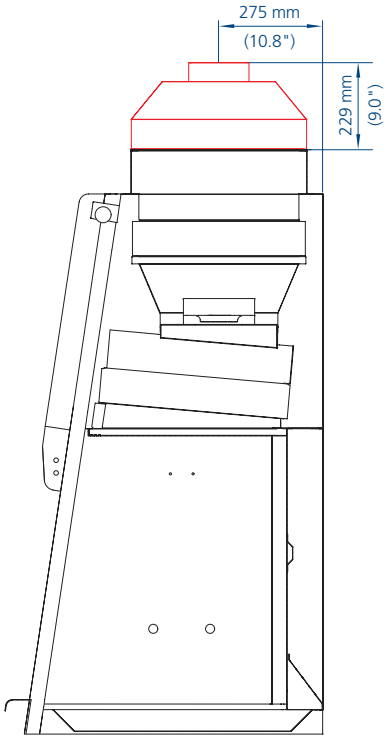
- The KI-Discus test shows excellent correlation with the microbiological test method for operator protection, and is useful for validating the actual containment performance of the cabinet on-site.
- The KI-Discus takes only 45 minutes as opposed to 2 days for microbiological testing.
- Esco Labculture Plus LP2 models are factory tested on a sampling basis using the KI-Discus method for operator safety.

Model LP2-4D1 Microbiological Safety Cabinet Technical Specifications

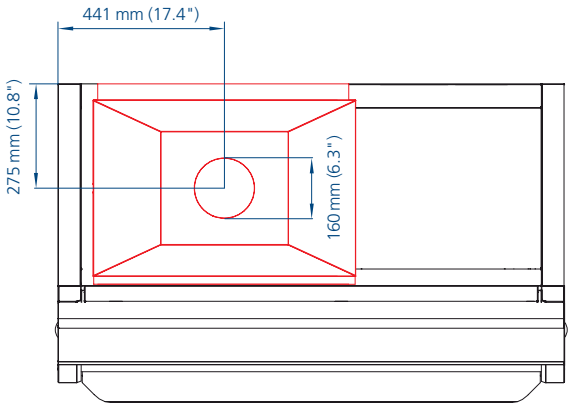


1. *2nd Exhaust filter*
2. *1st Exhaust filter*
3. *Fan*
4. *Downflow filter*
5. *IV bar Retrofit Kit provision*
6. *Service fixture retrofit kit provision for gas, air and vacum*
7. *Electrical & electronic panel*
8. *Fluorescent lamp*
9. *Stainless steel armrest*
10. *Esco Sentinel microprocessor control system*
11. *Motorized sash*
12. *Electrical outlet Retrofit Kit provision*
13. *Multi-piece stainless steel work surface*

Optional Exhaust Collar Positions for Thimble-Ducting for Model LP2-4D1



Side View



Top View

General Specification, Labculture Plus Class II Microbiological Safety Cabinets (D-Series)		
Model		**LP2-4D1**
Nominal Size		1.2 meters (4')
External Dimensions (W x D x H)	Without Base Stand	1340 x 790 x 1545 mm 52.8" x 31.1" x 60.8"
	With Optional Base Stand, 711mm (28")type	1340 x 790 x 2256 mm 52.8" x 31.1" x 88.8"
Internal Work Zone (W x D x H)		1222 x 638 x 709 mm 48.1" x 25.1" x 27.9"
Usable Work Area		0.6m² (6.5 sq.ft)
Tested Opening		200 mm (7.9")
Working Opening		211 mm (8.3")
Average Airflow Velocity	Inflow	0.42 m/s (83 fpm)
	Downflow	0.30 m/s (59 fpm)
Airflow Volume	Inflow	369 m³/h (217 cfm)
	Downflow	766 m³/h(451cfm)
	Exhaust	369 m³/h (217 cfm)
	EN 12469	<64 dBA
ULPA Filter Typical Efficiency Centralized	Downflow	> 99.999% at 0.1 to 0.3 microns as per IEST-RP-CC001.3 USA
	Exhaust	
Fluorescent Lamp Intensity		> 1000 Lux (93 foot-candles)
Cabinet Construction	Main Body	1.2 mm (0.05") 18 gauge electro-galvanized steel with white oven-baked epoxy-polyester Isocide antimicrobial powder coated finish
	Work Surface	1.5 mm (0.06") 16 gauge stainless steel, type 304, with 4B finish
	Side Walls	UV absorbing tempered glass, colorless and transparent
Electrical* 220-240V, AC, 50Hz, 1ø	Cabinet Power / Amp	232 W / 4A
	Outlet Amp Fuse	5A
	Full Load Amps	9A
	BTU/ Hr	1469
Net Weight**		298 kg / 657 lbs
Shipping Weight**		354 kg / 780 lbs
Shipping Dimensions, Maximum (W x D x H)**		1450 x 920 x 1720 mm 57.1" x 36.2" x 67.7"
Shipping Volume, Maximum**		2.29 m³ (81 cu.ft.)

** Additional voltages may be available; contact Esco for ordering information*
*** Cabinet only, excludes optional stand*

	Microbiological Safety Cabinets	Air Quality	Filtration	Electrical Safety
Standards Compliance	Type - tested to EN 12469:2000, Europe	ISO 14644.1 Class 3, Worldwide AS 1386 Class 1.5, Australia JIS B9920 Class 3, Japan	IEST-RP-CC034.1, USA IEST-RP-CC007.1, USA IEST-RP-CC001.3, USA EN 1822, Europe	IEC 61010-1, Worldwide EN 61010-1, Europe UL 61010-1, USA CAN / CSA- C22.2, No. 61010-1

- Biological Safety Products
- Cleanroom Products
- Containment / Pharma Products
- Ductless Fume Hoods / Carbon Filtration
- General Purpose Scientific Equipment
- Industrial Lab Equipment
- In-Vitro Fertilization Products
- PCR Products
- Pharmacy Products
- Lab Animal Research Products
- Lab Thermostatics Products
- Lab Ventilation / Chemical Fume Products / Lab Furniture
- Powder Handling Products

Since 1978, Esco has emerged as a leader in the development of controlled environment, laboratory and cleanroom equipment solutions. Products sold in more than 100 countries include biological safety cabinets, fume hoods, ductless fume hoods, laminar flow clean benches, animal containment workstations, cytotoxic cabinets, hospital pharmacy isolators, and PCR cabinets and instrumentation. With the most extensive product line in the industry, Esco has passed more tests, in more languages, for more certifications, throughout more countries than any biosafety cabinet manufacturer in the world. Esco remains dedicated to delivering innovative solutions for the clinical, life science, research and industrial laboratory community. www.escoglobal.com.

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