



NEW!



NSF 49, UL 61010, JIS K3800, SFDA YY-0569, EN 12469, SANS 12469

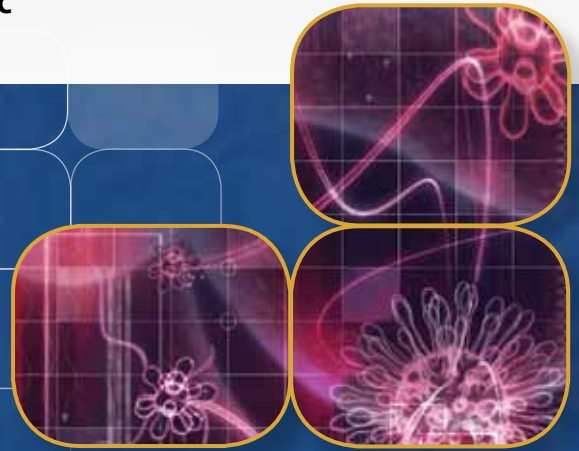
Labculture® Class II, Type A2
Biosafety Cabinet, Model LA2-4A2-E.

Labculture®

Labculture® • **RELIANT**

Class II, Type A2 and B2 Biological Safety Cabinets

The Most Certified Energy-Efficient, Safe, and Ergonomic
Biosafety Cabinet in the World



ESCO

WORLD CLASS. WORLDWIDE.

LABCULTURE® CLASS II TYPE A2 (LA2) and B2 (LB2) BIOSAFETY CABINETS,



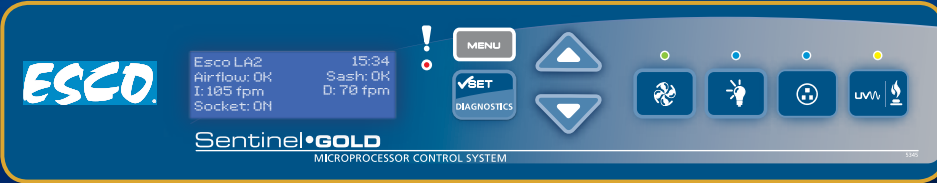
RS 232 Port and Zero Volt Relay Contact

- RS 232 Port to send operational information to Building Management System (BMS)
- Zero Volt Relay Contact to turn ON/OFF exhaust blower and signal the building alarm



Airflow Sensor

- Monitors real-time airflow for safety
- Alert the user if airflow is insufficient



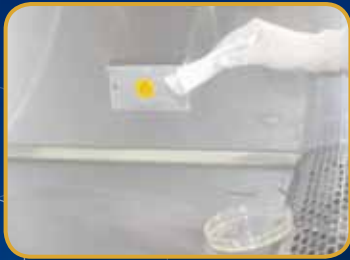
Sentinel™ Gold Microprocessor Controller

- Displays all safety information on one screen
- Centered and angled down for easy reach & viewing
- Selectable Quickstart mode for fast operation



Single-Piece Wall

- Large radius for easy cleaning
- Side-mounted electrical outlets and staggered service fixtures, for easy reach



Single-Piece Work Tray

- Recessed to contain spillage
- Curved grill to prevent blockage



Raised Arm Rest

- Helps prevent grille blocking
- Comfortable working posture



Angled Drain Pan

- Easy to clean
- Does not harbor contaminants

Available in 0.9, 1.2, 1.5, 1.8 and 2.4 meter models (3', 4', 5', 6' and 8'). Shown with optional telescoping stand.



NSF 49, UL 61010, IIS K3800, SFDA YY-0569, EN 12469, SANS 12469
 Esco Labculture Class II Type A2 (LA2) has passed more performance tests in more languages, for more certifications throughout more countries than any other biological safety cabinet in the world.

FEATURING ADVANCED MICROPROCESSOR CONTROLLER

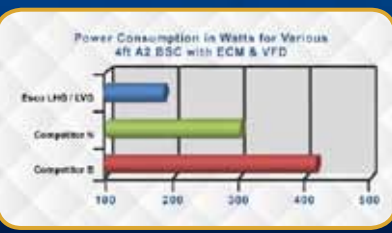
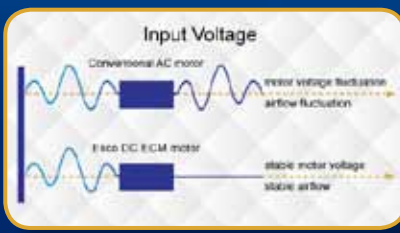


Pressure Switch (LB2 only)

- Temperature independent
- Fast response

Energy Efficient ECM Motor

- Powered by latest generation ECM motor **MADE IN USA**, that is more efficient than legacy ECM and VFD motors
- 70% Energy savings compared to AC motor
- Stable airflow, despite building voltage fluctuations & filter loading
- Night Setback mode to further reduce power consumption by 60%

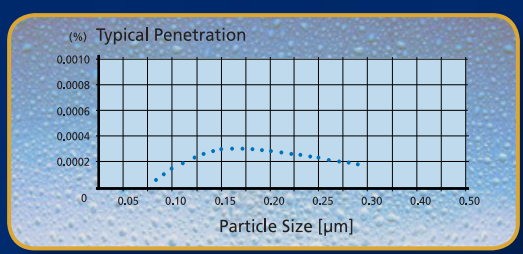


ULPA Filter

- 10x Filtration efficiency of HEPA filter
- Creates ISO Class 3 work zone instead of industry-standard ISO Class 5

Esco cabinets use ULPA filters (per IEST-RP-CC001.3) / H14 per EN 1822 instead of H13 HEPA filters used on many BSCs in the market.

HEPA filters only offer 99.99% typical efficiency at 0.3 micron, while ULPA filters provide 99.999% typical efficiency for particle sizes of 0.1 to 0.3 micron.



Dynamic Chamber

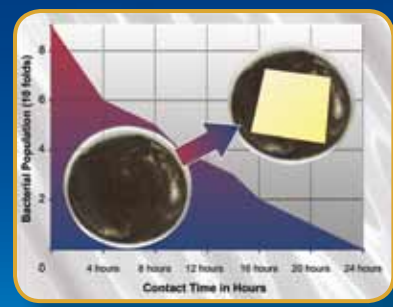
- Blower plenum and side walls are surrounded by negative pressure
- Prevent contaminants from escaping outside

- Positive pressure
- Negative pressure



ISOCIDE™ powder coat

- Silver-ion impregnated powder coat
- Inhibit microbial growth to improve safety

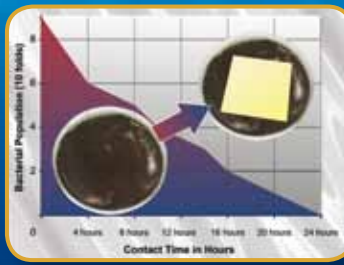


The Most Certified BSC in the World

	Biosafety Cabinets	Air Quality	Filtration	Electrical Safety
Standards Compliance	NSF / ANSI 49, USA* EN 12469, Europe** JIS K 3800, Japan** SFDA YY-0569, China	ISO 14644.1, Class 3, Worldwide JIS B9920, Class 3, Japan JIS B55295, Class 3, Japan US Fed Std 209E, Class 1 USA	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	UL-C-61010A-1, USA CSA22.2, No.1010-192, Canada EN-61010-1, Europe IEC61010-1, Worldwide

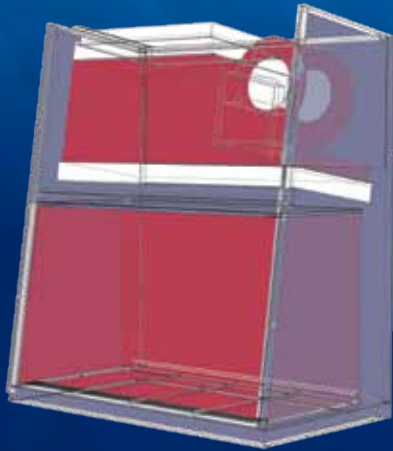
* The NSF / ANSI 49 certified models are: LA2-4A1-E, LA2-4A2-E, LA2-4A3-E, LA2-5A1-E, LA2-5A2-E, LA2-5A3-E, LA2-6A1-E, LA2-6A2-E, LA2-6A3-E, LB2-4B1-E, LB2-4B2-E, LB2-4B3-E, LB2-5B1-E, LB2-5B2-E, LB2-5B3-E, LB2-6B1-E, LB2-6B2-E and LB2-6B3-E.
Note: LA2 cabinets are certified to NSF, EN, JIS, and SFDA. LB2 cabinets are certified to NSF and SFDA.
** EN 12469 and JIS K 3800 are applicable to LA2 model only

LABCULTURE® RELIANT CLASS II TYPE A2 BIOSAFETY CABINETS,



ISOCIDE™ powder coat

- Silver-ion impregnated powder coat
- Inhibit microbial growth to improve safety



Dynamic Chamber

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- Prevent contaminants from escaping outside

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- Negative pressure



Single-Piece Wall

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4



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NSF 49, UL 61010,

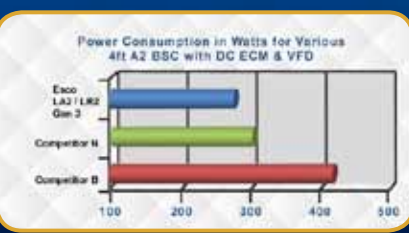
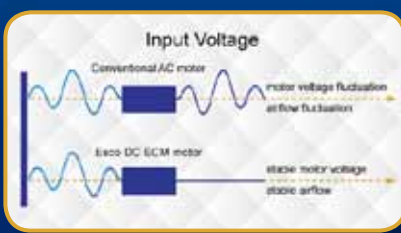
Labculture® | Labculture®•RELIANT

LA2 & LR2 Class II Type A2 / LB2 Class II Type B2 Biological Safety Cabinets

FEATURING SIMPLE SWITCHES AND GAUGE

Energy Efficient ECM Motor

- Powered by latest generation ECM motor **MADE IN USA**, that is more efficient than legacy ECM and VFD motors
- 70% Energy savings compared to AC motor
- Stable airflow, despite building voltage fluctuations & filter loading
- Night Setback mode to further reduce power consumption by 60%

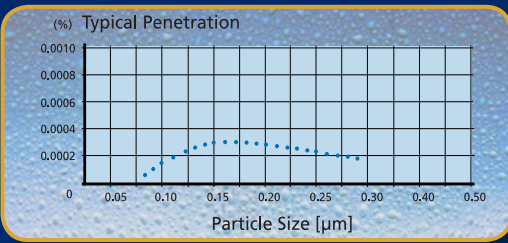


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Rocker Switches and Pressure Gauge

- Easy to use switches
- Displays filter loading status
- Manually adjustable UV timer



Adjustable UV Timer

- Easily adjustable to desired minutes or hours
- Prolongs UV lamp, for not turning it ON overnight



Certification				
Standards Compliance	Biosafety Cabinets	Air Quality	Filtration	Electrical Safety
	NSF / ANSI 49 NSF*	ISO 14644.1, Class 3, Worldwide JIS B9920, Class 3, Japan JIS B55295, Class 3, Japan US Fed Std 209E, Class 1 USA	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	UL-C-61010A-1, USA CSA22.2, No.1010-192, Canada EN-61010-1, Europe IEC61010-1, Worldwide

* The NSF / ANSI 49 certified models are: LR2-4S1-E, LR2-4S2-E, LR2-4S3-E, LR2-5S1-E, LR2-5S2-E, LR2-5S3-E, LR2-6S1-E, LR2-6S2-E, and LR2-6S3-E.



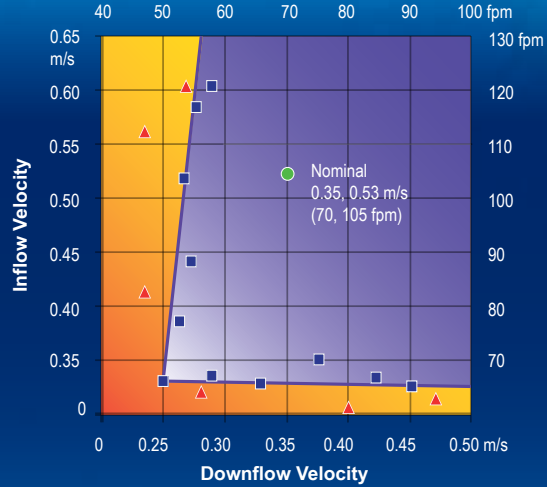
For Biohazard

LA2 and LR2 CLASS II TYPE A2 BIOSAFETY CABINETS

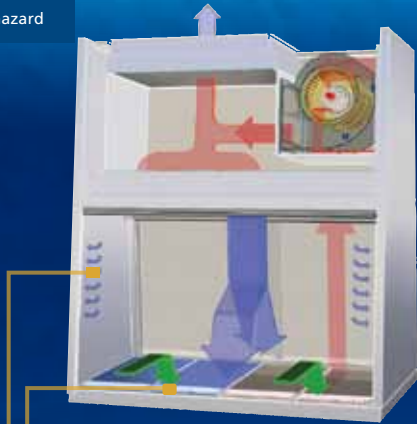
Cabinet Filtration System

- Ambient air is pulled through front grille to create inflow, without going into the work surface. Inflow is joined by half of the downflow, to create front air curtain that is fine-tuned to create a large performance envelope. The combined air stream travels through the back air column towards the blower.
- Approximately 1/3 of the air in the common plenum is exhausted through the ULPA filter to the room. The remaining 2/3 of the air is passed through the downflow ULPA filter and into the work area as a vertical laminar flow air to create ISO Class 3 work surface and prevents cross contamination.
- Near the work surface, the downflow splits. About half goes to the front grille, and half goes to the rear grille. A small portion enters the side capture zones to prevent dead air corners (small blue arrows).
- The design was optimized to give large performance envelope, that provides operator and product protection at wide Inflow and Downflow variation from the Nominal point.

The Performance Envelope Concept

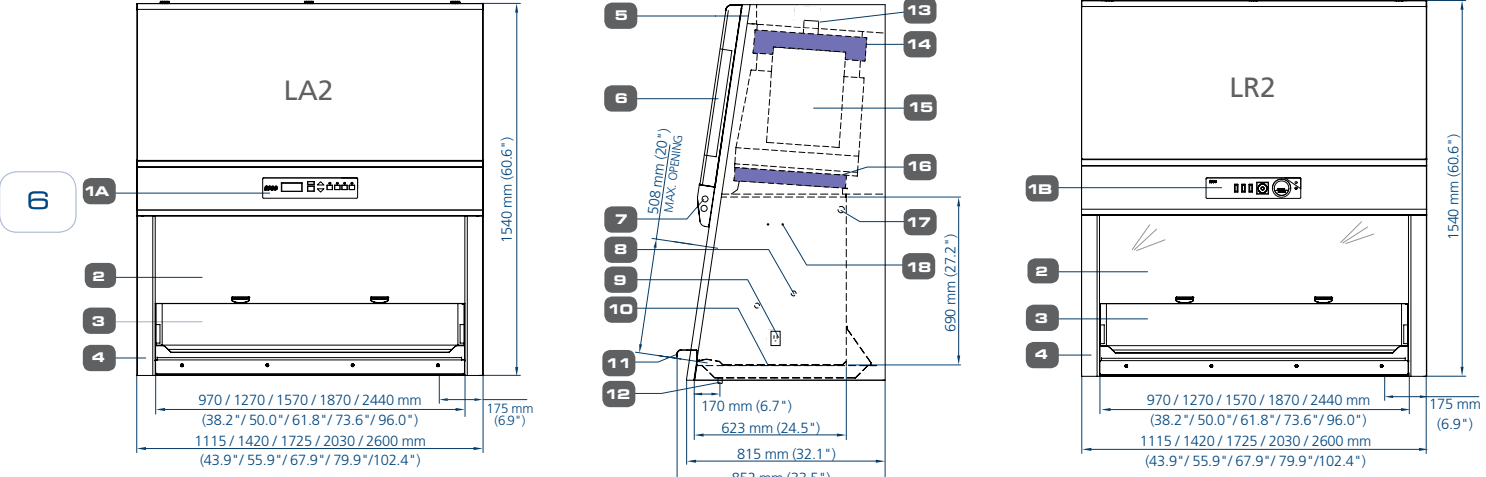


- Nominal Airflow
- Personnel / Product Protection
- Area of Personnel / Product Protection
- ▲ No Personnel / Product Protection
- Area of no Personnel / Product Protection



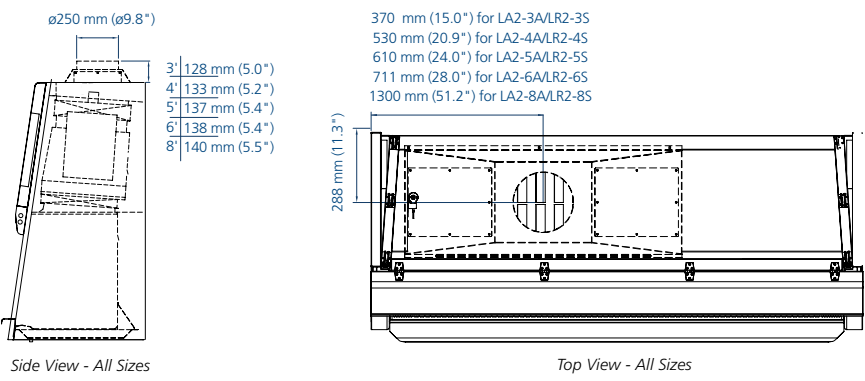
- Dynamic air barrier, where inflow and downflow converge
- Side capture zones
- ULPA-filtered air
- Unfiltered / potentially contaminated air
- Room air / Inflow air

Model LA2 and LR2 Biological Safety Cabinet Engineering Drawing



- 1A. (LA2 and LB2) Sentinel™ Gold Microprocessor Controller
- 1B. (LR2) Simple Switches Controller
- 2. Tempered Glass Sash Window
- 3. Stainless Steel Back Wall
- 4. Side Panel
- 5. RS232 Port, Zero Volt Relay Contact
- 6. Electrical Panel
- 7. Fluorescent Lamp
- 8. Service Fixture Retrofit Kit Provision (2 on each side)
- 9. Electrical Outlet Retrofit Kit Provision
- 10. Stainless Steel Single Piece Work Tray
- 11. Arm Rest
- 12. Drain Valve
- 13. Airflow Sensor
- 14. Exhaust H14 Filter
- 15. Energy-efficient DC ECM Blower
- 16. Downflow H14 Filter
- 17. UV Light Retrofit Kit Provision
- 18. IV Bar Retrofit Kit Provision

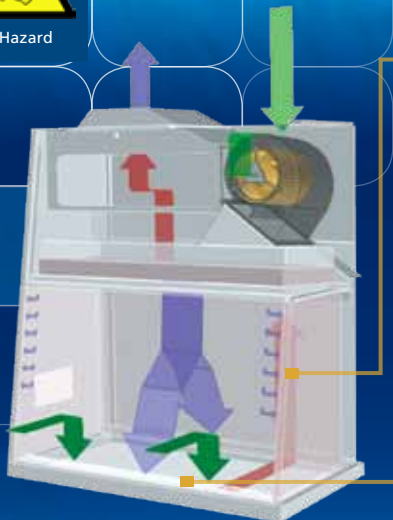
Optional Exhaust Collar Positions for Thimble-Ducting (LA2 and LR2 Models)



LB2 Class II Type B2 Biosafety Cabinets



For Biohazard and Chemical Hazard



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

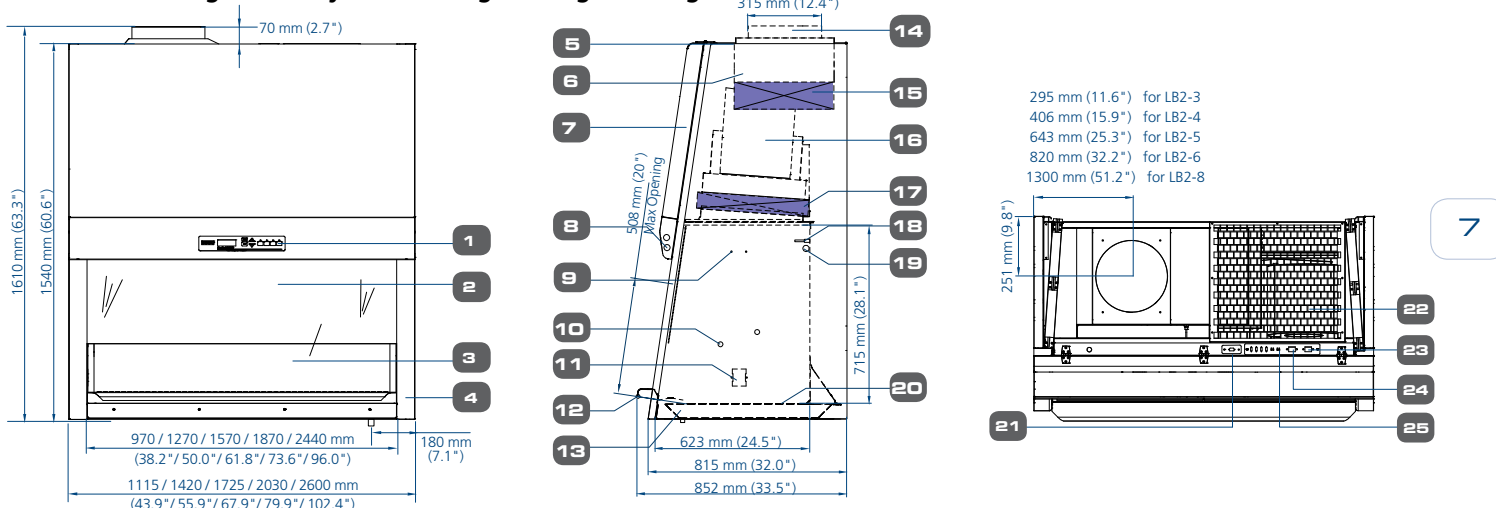
Cabinet Filtration System

Side capture zones

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

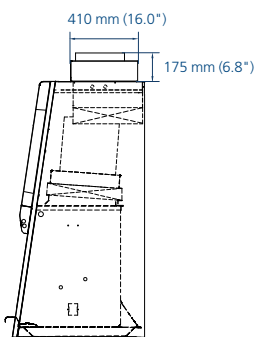
- Ambient air is pulled through the front grille to prevent contamination of the work surface and work product. The inflow does not mix with the clean air within the cabinet work zone.
- Ambient air is taken in through a pre-filter at the top of the cabinet, and passes through the downflow ULPA filter, entering the work zone as laminar flow. 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. The downflow combined with the inflow air enters the common air plenum.
- All air in the common plenum is HEPA-filtered and exhausted via a dedicated ducting system to the external environment.

Model LB2 Biological Safety Cabinet Engineering Drawing

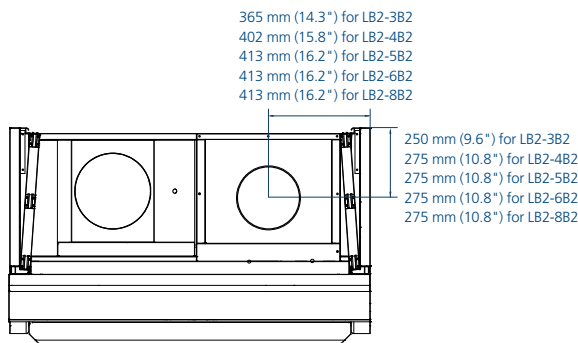


- | | | | |
|---|--|------------------------------------|---|
| 1. Sentinel™ Gold Microprocessor Controller | 7. Electrical Panel | 13. Drain Valve | 19. UV Light Retrofit Kit Provision |
| 2. Tempered Glass Sash Window | 8. Fluorescent Lamp | 14. Exhaust Ducting | 20. Single Piece Stainless Steel Work Tray |
| 3. Stainless Steel Back Wall | 9. IV Bar Retrofit Kit Provision | 15. Exhaust H14 Filter | 21. RS232 Port |
| 4. Side Panel | 10. Service Fixture Retrofit Kit Provision | 16. Energy-efficient DC ECM Blower | 22. Pre-filter |
| 5. Pressure Switch Port | 11. Electrical Outlet | 17. Downflow H14 Filter | 23. Cabinet Power Inlet |
| 6. Exhaust Sensor | 12. Arm Rest | 18. Downflow Sensor | 24. Zero Voltage Relay Contact for Exhaust System |
| | | | 25. Zero Voltage Relay Contact for Remote Alarm |

Optional Inlet Collar Position (LB2 Models)



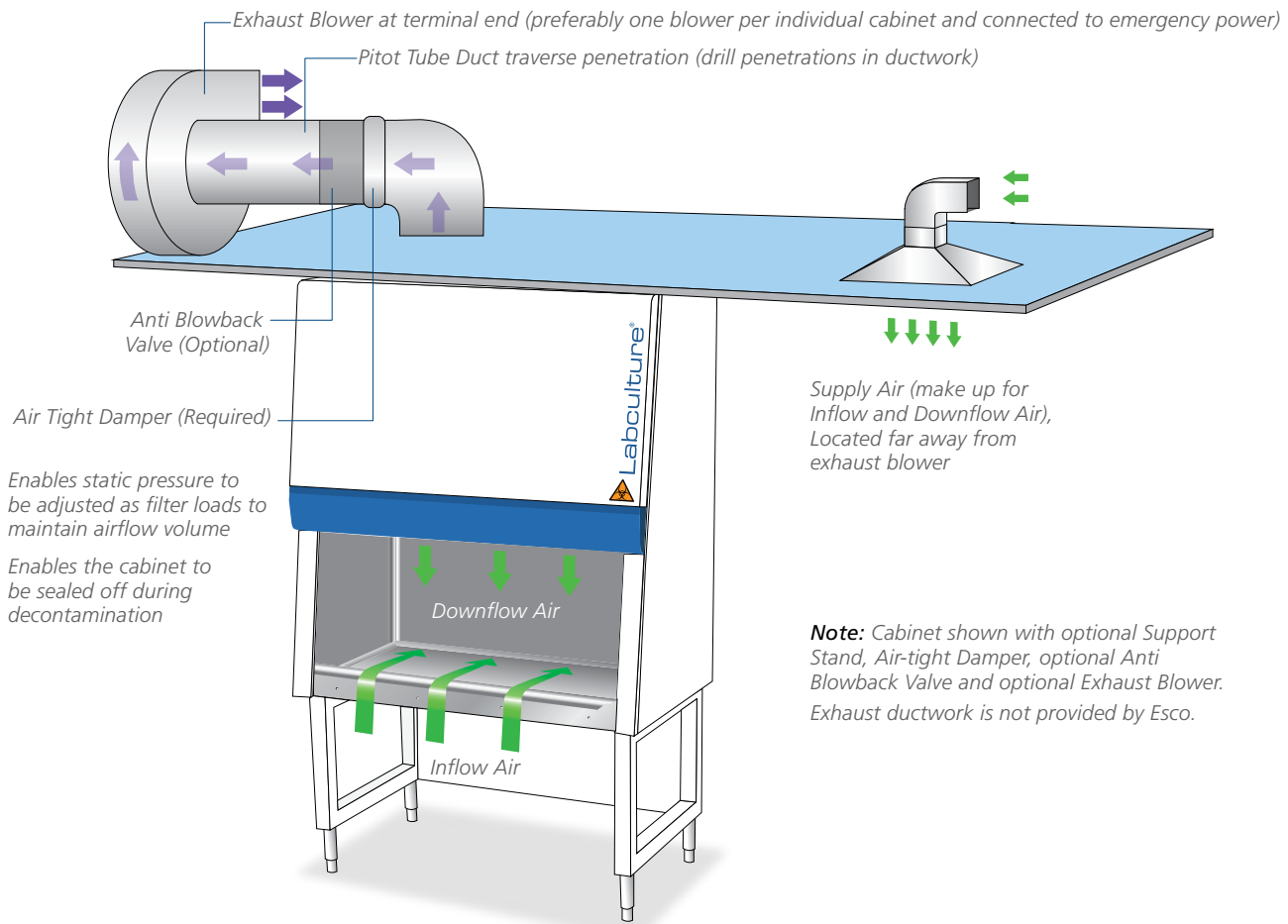
Side View - All Sizes



Top View - All Sizes



Recommended B2 Cabinet Installation



8

LA2 and LB2 Sentinel Gold Microprocessor Control System

LCD simultaneously displays time, airflow & sash status, inflow and downflow velocities, and status remarks on one screen, without scrolling.

Multi Language on LA2: English, French, Spanish.

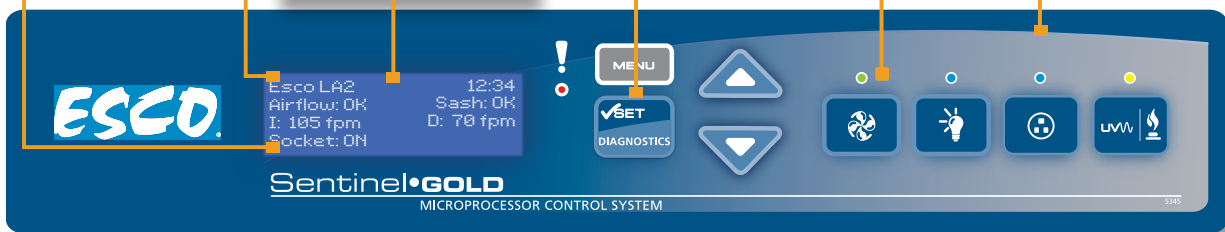
LB2 Display

Esco LB2	12:34
Sash: OK	Exhaust: OK
D: 60 fpm	E: 0882 cfm
Socket: ON	

Diagnostics button, to easily check the cabinet operating parameters and assist servicing. Also serves as audible alarm mute button.

Large touchpad control buttons provides good tactile feedback.

Color coded LED: green for fan; blue for FL lights and outlets; and orange for UV lamp.



Comprehensive Performance Testing At Esco



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

- Inflow and downflow velocity.
- PAO aerosol challenge for filter integrity.
- Airflow pattern visualization.
- Electrical safety to IEC61010-1.
- Additional KI-Discus containment and microbiological testing are performed on statistical sampling basis.



Labculture® | Labculture®•RELIANT

LA2 & LR2 Class II Type A2 / LB2 Class II Type B2 Biological Safety Cabinets

Accessories for LA2, LB2 and LR2 Biological Safety Cabinets

Cabinet	Stainless Steel Side Wall		LA2-3A2-E 2010706	LA2-4A2-E 2010691	LA2-5A2-E 2010692	LA2-6A2-E 2010693	LA2-8A2-E 2011205
			LB-2-3B2-E 2010709	LB-2-4B2-E 2010694	LB-2-5B2-E 2010695	LB-2-6B2-E 2010696	LB-2-8B2-E 2011206
			LR2-3S2-E 2010701	LR2-4S2-E 2010702	LR2-5S2-E 2010703	LR2-6S2-E 2010704	LR2-8S2-E 2011006
Exhaust Ducting	Anti-blowback Valve 10 inches (LA2 & LR2 only)	EG Powder Coated	ABBV-10P 5170352				
		304 Stainless Steel	ABBV-10S 5170354				
	Anti-blowback Valve 12 inches (LB2 only)	EG Powder Coated	ABBV-12P 5170353				
		304 Stainless Steel	ABBV-12S 5170355				
	Exhaust Damper		B2-DAMPER 5170104				
	Exhaust Collar (LA2 & LR2 only)		ECO-LA23-MK3-LH 5170097	ECO-LA24-MK3-LH 5170099	ECO-LA25-MK3-LH 5170101	ECO-LA26-MK3-LH 5170102	ECO-LA28-MK3-LH 5170536
	Inlet Collar (LB2 only)		ICO-LB23 5170320	ICO-LB24 5170263	ICO-LB25 5170316	ICO-LB26 5170322	ICO-LB28 5170692
Pre-filter (LB2 only)		PF-2 6090001					
UV Lamp	UV-15A-L 5170251		UV-30A-L 5170255			UV-15A-L (x2) 5170251	
	IV Bar 5170276		IV-955 5170276	IV-1260 5170277	IV-1265 5170278	IV-1870 5170279	
Electrical Outlet	GFCI		EO-GFCI 5170071				
Service Fixture	EU SF-Universal-40 mm		SF-2U40 51700018				
Support Stands, Ships Flat	Fixed Stand with Leveling Feet, 28" height		SAL-3A0 Gen 2 5130170	SAL-4A0 Gen 2 5130134	SAL-5A0 Gen 2 5130171	SAL-6A0 Gen 2 5130172	SAL-8A0 Gen 2 5131124
	Fixed Stand with Leveling Feet, 34" height		SAL-3B0 Gen 2 5130174	SAL-4B0 Gen 2 5130175	SAL-5B0 Gen 2 5130176	SAL-6B0 Gen 2 5130177	SAL-8B0 Gen 2 5131125
	Fixed Stand with Caster Wheels, 28" height		SPC-3A0 Gen 2 5130155	SPC-4A0 Gen 2 5130152	SPC-5A0 Gen 2 5130162	SPC-6A0 Gen 2 5130154	SPC-8A0 Gen 2 5131122
	Fixed Stand with Caster Wheels, 34" height		SPC-3B0 Gen 2 5130165	SPC-4B0 Gen 2 5130166	SPC-5B0 Gen 2 5130167	SPC-6B0 Gen 2 5130168	SPC-8B0 Gen 2 5131123
	Telescopic Stand with Leveling Feet, 1" adjustment		STL-3A0 5130050	STL-4A0 5130051	STL-5A0 5130052	STL-6A0 5130053	STL-8A0 5130054
	Telescopic Stand with Caster Wheels, 1" adjustment		STC-3A0 5130055	STC-4A0 5130056	STC-5A0 5130057	STC-6A0 5130058	STC-8A0 5130059
	Motorized Height Stand with Caster Wheels		SPM-3A2 5130093	SPM-4A2 5130047	SPM-5A2 5130100	SPM-6A2 5131141	
Misc	Arm Rest Padding		MEWREST 5170127				
	Foot Rest		FT-REST 5170492				
	Laboratory Chair		ME-LD-AR360 1150006				
	IQ OQ Protocol		9010179				



ABBV_



B2-DAMPER



ECO-L_2_-MK3-LH



UV_-A-L



IV_



EO-GFCI



SF-2U_



SAL_ A0 Gen 2



SAL_ A0 Gen 2



SPC_ B0 Gen 2



STL_ A0



STC_ A0



SPM_ A2



SAL_ B0 Gen 2

Class II Type A2 Biological Safety Cabinets

TECHNICAL SPECIFICATIONS						
Labculture® Class II A2	LA2-3A2-E 2010706	LA2-4A2-E 2010691	LA2-5A2-E 2010692	LA2-6A2-E 2010693	LA2-8A2-E 2011205	
Labculture® Reliant Class II A2	LR2-3S2-E 2010701	LR2-4S2-E 2010702	LR2-5S2-E 2010703	LR2-6S2-E 2010704	LR2-8S2-E 2011006	
Nominal Size	0.9 meter (3')	1.2 meter (4')	1.5 meter (5')	1.8 meter (6')	2.4 meters (8')	
External Dimensions * (W x D x H)	1115 x 852 x 1540 mm (44.0" x 33.5" x 60.6")	1420 x 852 x 1540 mm (56.0" x 33.5" x 60.6")	1725 x 852 x 1540 mm (68.0" x 33.5" x 60.6")	2030 x 852 x 1540 mm (80.0" x 33.5" x 60.6")	2600 x 852 x 1540 mm (102.4" x 33.5" x 60.6")	
Internal Dimensions (W x D x H)	970 x 623 x 670 mm (38.2" x 24.5" x 26.4")	1270 x 623 x 670 mm (50.0" x 24.5" x 26.4")	1570 x 623 x 670 mm (61.8" x 24.5" x 26.4")	1870 x 623 x 670 mm (73.6" x 24.5" x 26.4")	2440 x 623 x 670 mm (96.0" x 24.5" x 26.4")	
Usable Work Area	0.45 m ² (4.8 sq.ft.)	0.6 m ² (6.5 sq.ft.)	0.75 m ² (8.1 sq.ft.)	0.9 m ² (9.7 sq.ft.)	1.2 m ² (13 sq.ft.)	
Tested Opening	229 mm (9")	229 mm (9")	229 mm (9")	203 mm (8")	203 mm (8")	
Working Opening	274 mm (10.8")	274 mm (10.8")	274 mm (10.8")	248 mm (9.8")	248 mm (9.8")	
Average Airflow Velocity	Inflow	0.53 m/s (105 fpm)				
	Downflow	0.35 m/s (70 fpm)	0.35 m/s (70 fpm)	0.35 m/s (70 fpm)	0.33 m/s (65 fpm)	0.33 m/s (65 fpm)
Airflow Volume	Inflow	424 m ³ /h (251 cfm)	555 m ³ /h (328 cfm)	686 m ³ /h (406 cfm)	724 m ³ /h (426 cfm)	945 m ³ /h (560 cfm)
	Downflow	628 m ³ /h (363 cfm)	822 m ³ /h (476 cfm)	1016 m ³ /h (588 cfm)	1210 m ³ /h (700 cfm)	1579 m ³ /h (914 cfm)
	Exhaust	424 m ³ /h (251 cfm)	555 m ³ /h (328 cfm)	686 m ³ /h (406 cfm)	724 m ³ /h (426 cfm)	945 m ³ /h (560 cfm)
	Required Exhaust with Optional Thimble Exhaust Collar	529 m ³ /h (311 cfm)	764 m ³ /h (450 cfm)	1116 m ³ /h (657 cfm)	1164 m ³ /h (685 cfm)	1540 m ³ /h (913 cfm)
	Static Pressure for Optional Thimble Exhaust Collar	32 Pa / 0.12 in H ₂ O	49 Pa / 0.19 in H ₂ O	62 Pa / 0.24 in H ₂ O	79 Pa / 0.31 in H ₂ O	100 Pa / 0.40 in H ₂ O
ULPA Filter Typical Efficiency	>99.999% for particle size between 0.1 to 0.3 microns per IEST-RP-CC001.3 / H14 per EN 1822					
Sound Emission**	NSF / ANSI 49	62.5 dBA	63 dBA	63.5 dBA	64 dBA	64.5 dBA
Fluorescent Lamp Intensity		> 1230 lux (> 114 foot-candles)	> 1400 lux (> 130 foot-candles)	> 1070 lux (> 100 foot-candles)	> 1230 lux (> 114 foot-candles)	> 1230 lux (> 114 foot-candles)
Cabinet Construction	Main Body	Electro-galvanized steel with white oven-baked epoxy-polyester Isocide™ antimicrobial powder-coated finish, 1.5 mm (0.06") / 16 gauge thick				
	Work Zone	Stainless steel Type 304 with No.4 finish, 1.5 mm (0.06") / 16 gauge thick				
Electrical	Full Load Amps 115 V	9 A	11 A	11.5 A	12 A	13 A
	Heat Load	853 BTU/Hr	972 BTU/Hr	1177 BTU/Hr	1297 BTU/Hr	1774 BTU/Hr
Nominal Power Consumption		250 W	285 W	345 W	380 W	520 W
Net Weight***		243 Kg (536 lbs)	283 Kg (624 lbs)	350 Kg (772 lbs)	426 Kg (939 lbs)	580 Kg (1279 lbs)
Shipping Weight***		292 Kg (644 lbs)	345 Kg (761 lbs)	410 Kg (904 lbs)	486 Kg (1072 lbs)	640 Kg (1411 lbs)
Shipping Dimensions, Maximum (W x D x H)***		1200 x 950 x 1900 mm (47.2" x 37.4" x 74.8")	1550 x 950 x 1900 mm (61.0" x 37.4" x 74.8")	1950 x 950 x 1900 mm (76.8" x 37.4" x 74.8")	2150 x 950 x 1900 mm (84.6" x 37.4" x 74.8")	2720 x 950 x 1900mm (107.1" x 37.4" x 74.8")
Shipping Volume, Maximum***		2.17 m ³ (77 cu.ft.)	2.80 m ³ (99 cu.ft.)	3.52 m ³ (124 cu.ft.)	3.88 m ³ (137 cu.ft.)	4.91 m ³ (173 cu.ft.)

*Depth includes the remove-able arm rest and front cover. When they are removed, depth is 790 mm (31.1").

Noise reading in open field condition / **anechoic chamber. Noise reading in **normal room varies** by room size, layout, and background noise, but may reach roughly 3-4 dBA above these values

***Cabinet only, excludes optional stand.

Class II Type A2 can be used to handle **minute** quantities of volatile toxic chemicals and **trace** amounts of radionucleotides when **thimble** ducted. Use this option if chemical vapor **re-circulation** into the work zone is permitted.

Power Rating	Voltage (VAC)	Frequency (Hz)	Example
2	115	60	LA2-4B2

Class II Type B2 Biological Safety Cabinets

TECHNICAL SPECIFICATIONS						
Labculture® Class II B2		LB2-3B2-E 2010709	LB2-4B2-E 2010694	LB2-5B2-E 2010695	LB2-6B2-E 2010696	LB2-8B2-E 2011206
Nominal Size		0.9 meter (3')	1.2 meter (4')	1.5 meter (5')	1.8 meter (6')	2.4 meters (8')
External Dimension* (W x D x H)	Without Base Stand	1115 x 852 x 1610 mm (44.0" x 33.5" x 63.3")	1420 x 852 x 1610 mm (56.0" x 33.5" x 63.3")	1725 x 852 x 1610 mm (68.0" x 33.5" x 63.3")	2030 x 852 x 1610 mm (80.0" x 33.5" x 63.3")	2600 x 852 x 1610 mm (102.4" x 33.5" x 63.3")
	With Optional Base Stand, 711 mm (28") type	1115 x 852 x 2321 mm (44.0" x 33.5" x 91.4")	1420 x 852 x 2321 mm (56.0" x 33.5" x 91.4")	1725 x 852 x 2321 mm (68.0" x 33.5" x 91.4")	2030 x 852 x 2321 mm (80.0" x 33.5" x 91.4")	2600 x 852 x 2321 mm (102.4" x 33.5" x 91.4")
Internal Dimensions (W x D x H)		970 x 623 x 715 mm (38.2" x 24.5" x 28.1")	1270 x 623 x 715 mm (50.0" x 24.5" x 28.1")	1570 x 623 x 715 mm (61.8" x 24.5" x 28.1")	1870 x 623 x 715 mm (73.6" x 24.5" x 28.1")	2440 x 623 x 715 mm (96.0" x 24.5" x 28.1")
Usable Work Area		0.45 m ² (4.8 sq.ft.)	0.6 m ² (6.5 sq.ft.)	0.75 m ² (8.1 sq.ft.)	0.9 m ² (9.7 sq.ft.)	1.2 m ² (13 sq.ft.)
Tested Opening		203 mm (8.0")	203 mm (8.0")	203 mm (8.0")	203 mm (8.0")	203 mm (8.0")
Working Opening		274 mm (10.8")	274 mm (10.8")	274 mm (10.8")	248 mm (9.8")	248 mm (9.8")
Average Airflow Velocity	Inflow	0.53 m/s (105 fpm)				
	Downflow	0.31 m/s (60 fpm)				
Airflow Volume	Inflow	376 m ³ /h (223 cfm)	492 m ³ /h (292 cfm)	608 m ³ /h (361 cfm)	724 m ³ /h (429 cfm)	945 m ³ /h (560 cfm)
	Downflow	628 m ³ /h (363 cfm)	822 m ³ /h (476 cfm)	1016 m ³ /h (588 cfm)	1210 m ³ /h (700 cfm)	1580 m ³ /h (914 cfm)
	CBV Exhaust Air Volume**	1127 m ³ /h (658 cfm)	1476 m ³ /h (862 cfm)	1824 m ³ /h (1065 cfm)	2173 m ³ /h (1269 cfm)	2835 m ³ /h (1656 cfm)
	Min Exhaust Static Pressure	400 Pa / 1.6 in H ₂ O	375 Pa / 1.5 in H ₂ O	375 Pa / 1.5 in H ₂ O	400 Pa / 1.6 in H ₂ O	475 Pa / 1.9 in H ₂ O
	CBV Exhaust Static Pressure**	575 Pa / 2.3 in H ₂ O	550 Pa / 2.2 in H ₂ O	550 Pa / 2.2 in H ₂ O	575 Pa / 2.3 in H ₂ O	650 Pa / 2.6 in H ₂ O
Supply ULPA Filter Typical Efficiency		≥99.999% for particle size between 0.1 to 0.3 microns				
Exhaust HEPA Filter Typical Efficiency		≥99.99% at 0.3 microns				
Maximum Sash Opening		508 mm (20")				
Sound Emission***	NSF / ANSI 49	57 dBA	58 dBA	59 dBA	60 dBA	61 dBA
Fluorescent Lamp Intensity At Zero Ambient		> 1250 lux (> 116 foot-candles)	> 1400 lux (> 130 foot-candles)	> 1200 lux (> 111 foot-candles)	> 1200 lux (> 111 foot-candles)	> 1200 lux (> 111 foot-candles)
Cabinet Construction	Main Body	Electro-galvanized steel with white oven-baked epoxy-polyester Isocide™ antimicrobial powder-coated finish, 1.5 mm (0.06") / 16 gauge thick				
	Work Zone	Stainless steel Type 304 with No.4 finish, 1.5 mm (0.06") / 16 gauge thick				
Electrical	Full Load Amps 115 V	9 A	11 A	11.5 A	12 A	13 A
	Heat Load	566 BTU/Hr	645 BTU/Hr	781 BTU/Hr	860 BTU/Hr	1177 BTU/Hr
Nominal Power Consumption		166 W	189 W	229 W	252 W	345 W
Net Weight****		279 Kg (615 lbs)	317 Kg (699 lbs)	359 Kg (791 lbs)	438 Kg (966 lbs)	591 Kg (1304 lbs)
Shipping Weight****		318 Kg (703 lbs)	370 Kg (814 lbs)	402 Kg (886 lbs)	491 Kg (1083 lbs)	651 Kg (1435 lbs)
Shipping Dimensions, Maximum (W x D x H)****		1210 x 950 x 1950 mm (47.6" x 37.4" x 76.8")	1520 x 950 x 1950 mm (59.8" x 37.4" x 76.8")	1900 x 950 x 1950 mm (74.8" x 37.4" x 76.8")	2150 x 950 x 1950 mm (84.7" x 37.4" x 76.8")	2720 x 950 x 1950 mm (107.0" x 37.4" x 76.8")
Shipping Volume, Maximum****		2.24 m ³ (79.1 cu.ft.)	2.82 m ³ (99.6 cu.ft.)	3.52 m ³ (124.3 cu.ft.)	3.98 m ³ (140.6 cu.ft.)	5.04 m ³ (178.0 cu.ft.)

*Height includes exhaust collar, and depth includes the remove-able arm rest and front cover. When they are removed, depth is 790 mm (31.1").

**This Concurrent Balance Value (CBV) Exhaust Volume (per Pitot Duct Traverse) and Static Pressure at cabinet exhaust connection should be used when sizing the HVAC exhaust and supply.

***Noise reading in open field condition / **anechoic** chamber. Noise reading in **normal room varies** by room size, layout, and background noise, but may reach roughly

3-4 dBA above these values

****Cabinet only, excludes optional stand.

Power Rating	Voltage (VAC)	Frequency (Hz)	Example
2	115	60	LB2-4B2

Class II Type B2 can be used to handle volatile toxic chemicals and radionuclides because by default it's hard ducted. Use this option if chemical vapor re-circulation into the work zone is not permitted.

ESCO GLOBAL NETWORK



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- Ductless Fume Hoods
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