

Labculture[•]**RELIANT**[™]

Class II, Type A2 Biological Safety Cabinets

*The Safety Solution for Life Science
Laboratories*

Introducing the Esco Labculture Reliant[™] - the best value Class II Biological Safety Cabinet on the North American market supported by nationwide sales and service representatives in the USA and Canada. The Reliant series is designed with a shorter height and smaller footprint for optimal utilization of lab space.

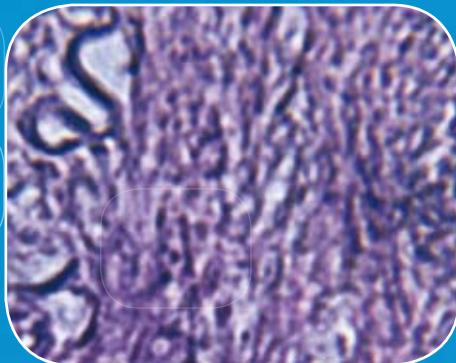


Certified to NSF 49 and UL 61010 for safety and performance.



*Labculture Reliant Class II, Type A2 Biological Safety Cabinet,
Model LR2-4S2.*

*Each cabinet is KI-Discus tested for performance integrity.
Available in 4' and 6'. Shown with optional stand.*



Labculture Reliant™ Class II, Type A2 Biological Safety Cabinets

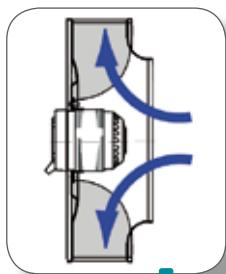
Provides Operator, Product And Environmental Protection

High Performance Blower System

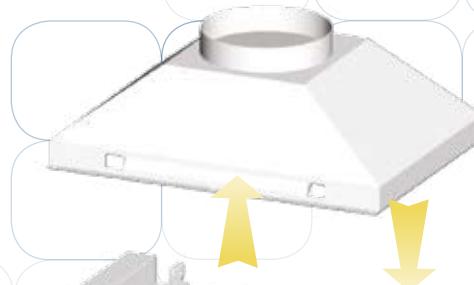
German made ebm-papst® permanently lubricated, centrifugal motor/blowers with external rotor designs.

Motors are selected for energy efficiency, compact design, and flat profile. Completely integrated assembly optimizes motor cooling.

All rotating parts are balanced for smooth, quiet, vibration-free operation.



Optional Exhaust Collar



Integrated Filtration System

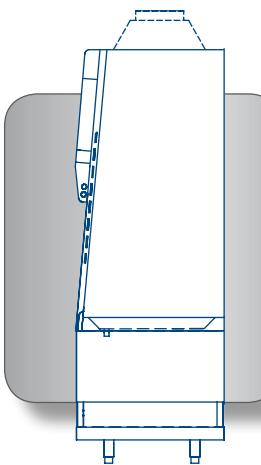
The combination of a supply ULPA filter and an exhaust ULPA filter gives the Labculture Reliant cabinet a fully integrated performance envelope for product, operator and environmental protection.



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User Interface

Ergonomics, safety and aesthetics all come together with the 5° pitch of the face.



Removable Tray

Raised one-piece work surface lifts and removes for easy surface decontamination.



Durable Interior

Reliant utilizes a heavy-gauge, one-piece liner with coved corners for easy cleaning and durability.



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Biological Safety Cabinet • Class II, Type A2 Biological Safety Cabinets

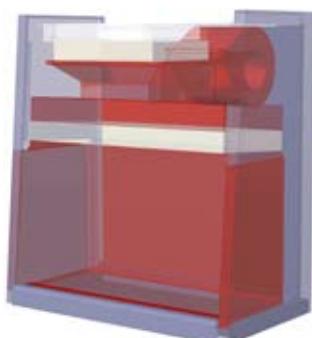


Esco Standard Control System

Reliable rocker switches and easy-to-read gauge for safety and durability.

Robust Cabinet Construction

Key components, including fluorescent lamps, motor capacitor, electrical harness, electronic ballast, and switch control are mounted outside the airstream and away from contaminated air to permit service without decontamination.



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.

The Esco Labculture Reliant Class II, Type A2 Biosafety Cabinet provides operator, product and environmental protection for Biosafety Levels 1, 2 and 3 work. This cabinet can be used for handling Biohazard Level 4, provided that the operator wears positive pressure suit.

Key Features

- Certified to NSF 49 and UL 61010 for safety and performance.
- The best value Class II Biological Safety Cabinet on the North American market supported by nationwide sales and service representatives in the USA and Canada.
- The angled front, narrow-front grille, raised armrest and frameless sash create an ergonomic work environment.
- Unique front grill designed to provide the maximum product and personnel protection.
- Single-piece stainless-steel work tray and front grille, lower drain pan with angled side, and single-piece work zone liner eliminate joints for superior cleanability.
- ULPA filters (per IEST-RP-CC-001.3) tested to a typical efficiency of >99.999% for 0.1 to 0.3 micron particles are better than HEPA filters. ULPA filters last as long as conventional HEPA filters and have similar replacement costs.
- **ISOCIDE™** antimicrobial coating on all powder coated surfaces eliminates 99.9% of surface bacteria within 24 hours of exposure.
- Reliable rocker switches and Minihelic® pressure gauge.
- Lowest height profile of any benchtop biological safety cabinet for the North American market.
- Dual-wall construction surrounds the work zone with negative pressure plenums for maximum safety.



Standards Compliance	Biosafety Cabinets	Air Quality	Filtration	Electrical Safety
	NSF / ANSI 49, USA JIS K 3800, Japan SFDA YY-0569, China	ISO 14644.1, Class 3, Worldwide JIS B9920, Class 3, Japan JIS BS5295, 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 61010-1, USA CAN/CSA-22.2, No.61010-1 EN 61010-1, Europe IEC 61010-1, Worldwide

General Specifications, Labculture Reliant Class II, Type A2 Biological Safety Cabinets

Model		LR2-4S2	LR2-6S2
External Dimensions (W x D x H)	Without Base Stand	1340 x 762 x 1440 mm (52.8" x 30" x 56.7")	1950 x 762 x 1540 mm (76.8" x 30" x 60.6")
	With Optional Base Stand, 711mm (28") type	1340 x 762 x 2151 mm (52.8" x 30" x 84.7")	1950 x 762 x 2251 mm (76.8" x 30" x 88.6")
Gross Internal Dimensions (W x D x H)		1216 x 570 x 670 mm (47.9" x 22.4" x 26.4")	1826 x 570 x 670 mm (71.9" x 22.4" x 26.4")
Usable Work Area		0.50 m ² (5.4 sq.ft.)	0.75 m ² (8.1 sq.ft.)
Tested Opening		254 mm (10")	203 mm (8")
Working Opening		264 mm (10.4")	213 mm (8.4")
Average Airflow Velocity	Inflow	0.53 m/s (105 fpm)	
	Downflow	0.35 m/s (70 fpm)	0.33 m/s (65 fpm)
Airflow Volume	Inflow	589 m ³ / h (347 cfm)	707 m ³ / h (416 cfm)
	Downflow	858 m ³ / h (505 cfm)	1215 m ³ / h (715 cfm)
	Exhaust	589 m ³ / h (347 cfm)	707 m ³ / h (416 cfm)
	Required Exhaust With Optional Thimble Exhaust Collar	884 m ³ / h (520 cfm)	1061 m ³ / h (624 cfm)
ULPA Filter Typical Efficiency		>99.999% for particle size between 0.1 to 0.3 microns per IEST-RP-CC001.3	
Sound Emission*	NSF / ANSI 49	<60 dBA	<57 dBA
	EN 12469	<57 dBA	<54 dBA
Fluorescent Lamp Intensity		> 1000 Lux (> 92.9 foot-candles)	
Cabinet Construction	Main Body	Electrogalvanized steel with Isocide oven-baked epoxy-polyester powder coating	
	Work Zone/ Side Walls	1.2 mm (0.05") / 18 gauge stainless steel, type 304, with 4B finish	
Electrical (110-120V, AC, 60Hz, 1Ø)	Cabinet Power/ Amp (Main Inlet)	1230 W/ 10.3 A	1300 W/ 11.5 A
	Outlet Amp Fuse (Aux Inlet)	6 A	6 A
	Total Amp (Both Line Cords)	16.3 A	17.5 A
	BTU/ Hr	2509	2652
Net Weight		259 kg / 571 lbs	350 kg/ 772 lbs
Shipping Weight		314 kg / 692 lbs	430 kg/ 947 lbs
Shipping Dimensions, Maximum (W x D x H)		1440 x 840 x 1750 mm (56.7" x 33.0" x 70.0")	2040 x 840 x 1850 mm (80.3" x 33.0" x 72.8")
Shipping Volume, Maximum		2.32 m ³ (82 cu.ft.)	3.0 m ³ (106 cu.ft.)

* Noise reading in open field condition/ anechoic chamber.

Accessories for Labculture Reliant Class II, Type A2 Biological Safety Cabinets

Model	Description
SPL-4A0	4ft Stand 28", = 30" work surface, Leveling Feet, Shipped flat
SPL-6A0	6ft Stand 28", = 30" work surface, Leveling Feet, Shipped flat
STL-4A0	4ft Stand adjustable from 26" to 37", work surface 28" to 39", Leveling Feet, Shipped flat
STL-6A0	6ft Stand adjustable from 26" to 37", work surface 28" to 39", Leveling Feet, Shipped flat
SF-2U	Universal Service Fixture Kit, Suitable for Air/Gas/Vac, Field Installed
IV-XXX-XXX	IV Bar Kit, Includes 6 hooks, <i>Specify model when ordering</i> , Field Installed, <i>Specify Model when ordering</i>

Note: LR2-4S2 comes with 1 Service Fixture and 2 GFCI Duplex outlets.
LR2-6S2 comes with 2 Service Fixture and 2 GFCI Duplex outlets.
UV Light included on both models.

ESCO
WORLD CLASS. WORLDWIDE.

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