



Viva Dual Access Animal Containment Workstation, Model VDA-4A_



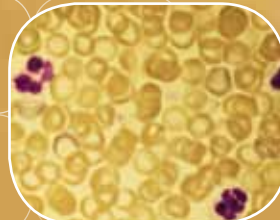
Viva Universal Animal Containment Workstation, Model VA2-4A_



Viva Animal Bedding Disposal Workstation Model VBD-4A_

Animal Containment Workstation

The Portable Safety Solution for Animal Research Laboratories





Esco UA2 15:34
 Airflow: OK Sash: OK
 I: 90 fpm D: 70 fpm
 Socket: ON

Sentinel GOLD

MICROPROCESSOR CONTROL SYSTEM



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



Easy Work Access

- Large 354 mm (14") Access Opening.
- Accommodates rat and mouse cages.
- Hinged up for easy cleaning.



Easy to Clean Work Surface and Drain pan

- Two-pieces Stainless Steel Tray, easy to lift.
- Drain hole on both sides to dump animal bedding.



Advanced Work Tray Design

- V-shaped Grill to avoid blocking.
- Center Grill to separate Work zone to clean & dirty area.
- Large Tray handle for easy lift.



Comfortable Leg Room

- 254 mm (10") Leg Room on BOTH sides.
- Reduce fatigue for sitting position.
- Hydraulic Motor to adjust height.



Accessories and Options

Contact Esco or your Esco Sales Representative for details.

- Electrical outlets
- Side Shield
- Foldable side tray
- Feed Hopper



Side shield



Feed Hopper

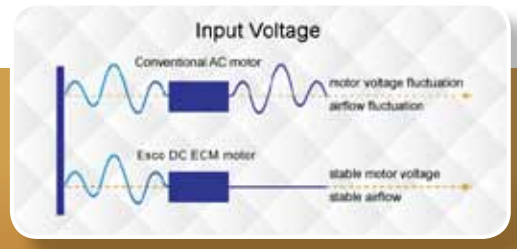


Airflow Sensor

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

Energy Efficient DC ECM Motor

- Powered by latest generation DC ECM motor, 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



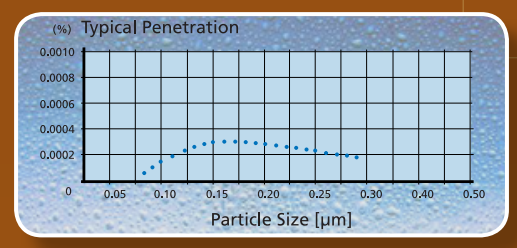
Quiet Operation

- The quietest Dual-Access Animal Workstation in the world, at 53 dbA in open field condition
- Comfortable for the operator and animals



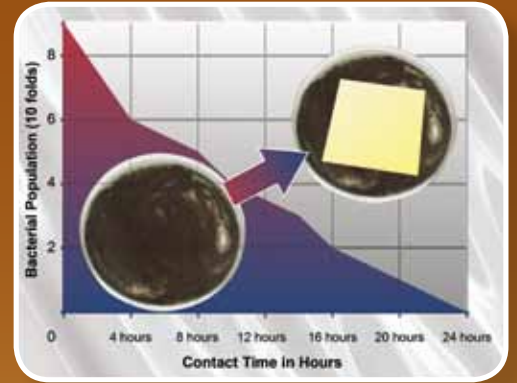
ULPA Filter

- 10x Filtration efficiency of HEPA filter
- Creates ISO Class 4 work zone instead of industry-standard ISO Class 5



ISOCIDE™ powder coat

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



ELISA Proven Containment

- Provides >99% Allergen Containment.
- Ensures User's Safety.



	Air Quality	Filtration	Electrical Safety
Standards Compliance	ISO 14644.1, Class 4, Worldwide JIS B9920, Class 4, Japan JIS B55295, Class 4, Japan US Fed Std 209E, Class 10 USA	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	UL-61010A-1, USA CSA22.2, No.1010-192, Canada EN61010-1, Europe IEC61010-1, International



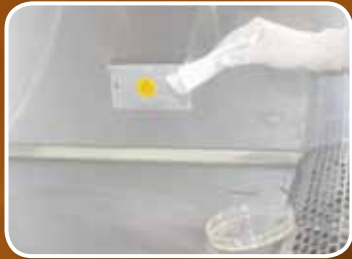
Sentinel™ Gold Microprocessor Controller

- 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

- Helps prevent grille blocking
- Does not harbor contaminants



4



Lab Animal Research Products • Universal Animal Containment Workstation

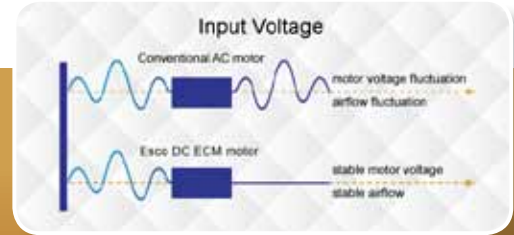
Standards Compliance	Air Quality	Fi
	ISO 14644.1, Class 3, Worldwide JIS B9920, Class 3, Japan JIS BS5295, Class 3, Japan US Fed Std 209E, Class 1 USA	EN-182 IEST-RP IEST-R IEST-RP

Airflow Sensor

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

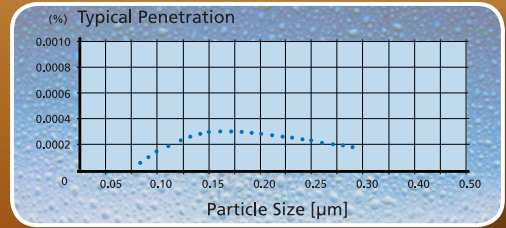
Energy Efficient DC ECM Motor

- Powered by latest generation DC ECM motor, 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



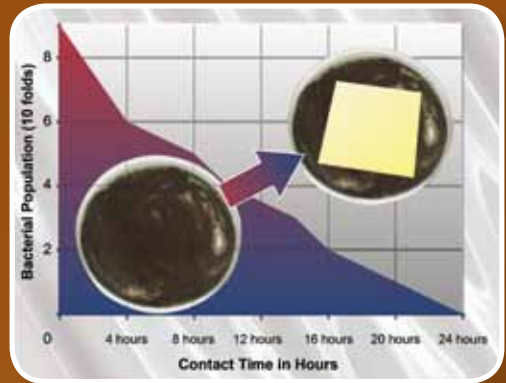
ULPA Filter

- 10x Filtration efficiency of HEPA filter
- Creates ISO Class 4 work zone instead of industry-standard ISO Class 5



ISOCIDE™ powder coat

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



ELISA Proven Containment

- Provides >99% Allergen Containment.
- Ensures User's Safety.



Filtration	Electrical Safety
<ul style="list-style-type: none"> ■ H14, Europe ■ -CC001.3, USA ■ P-CC007, USA ■ -CC034.1, USA 	<ul style="list-style-type: none"> ■ UL-61010A-1, USA ■ CSA22.2, No.1010-192, Canada ■ EN61010-1, Europe ■ IEC61010-1, International



Airflow Sensor

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

Sentinel™ Silver Microprocessor Controller

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



Integrated Waste Chute

- Dispose refuse bag safely within the work zone



Angled Drain pan

- Bang bars increase efficiency of bedding disposal operations.



6



Operator and Environmental Protection

The VIVA Bedding Disposal Workstation provides operator and environmental protection from animal allergen.



Exclusive hydraulic height-adjustable stand

Allows the work surface height to be adjusted to user preference therefore minimizing strain during repetitive operations.



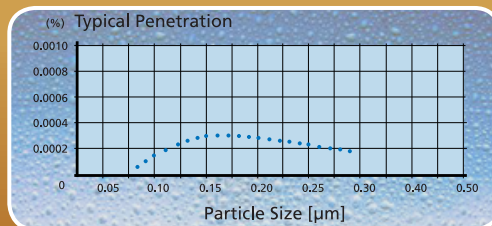
VIVA.



VIVA®

ULPA Filter

- 10x Filtration efficiency of HEPA filter
- Creates ISO Class 4 work zone instead of industry-standard ISO Class 5



Carbon Filter

- Nanocarb™ activated carbon filter removes odors



ELISA Proven Containment

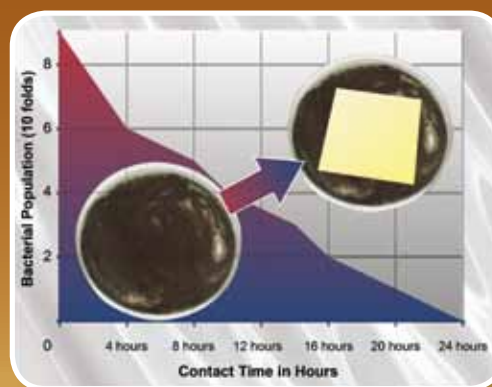
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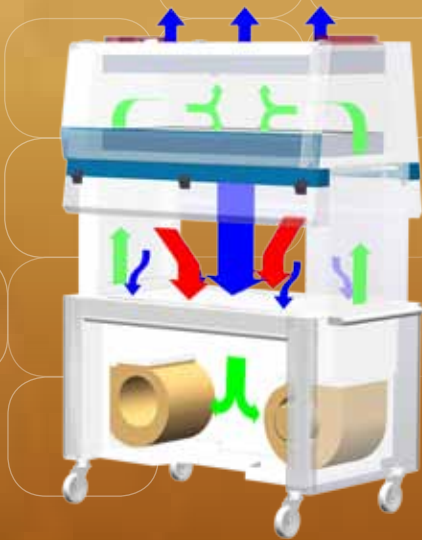
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ISOCIDE™ powder coat

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- Inhibit microbial growth to improve safety



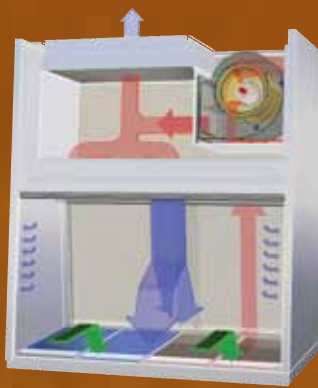
Standards Compliance	Filtration	Electrical Safety
	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	UL61010-1, USA



VDA Cabinet Airflow System

- The VDA Dual Access Workstation employs recirculating airflow configuration for better filtration efficiency.
- The blower system pulls ambient intake air through the front grilles, creating inflow that provides operator protection from allergen inside the work zone. An activated carbon pre-filter removes odors.
- Air flows through the common plenum on top of the cabinet. A portion of it goes up through ULPA filter as exhaust to create inflow. The remaining portion goes down through ULPA supply filter and bathes the work zone in clean air with a non-turbulent downflow.
- The combination of vertical laminar downflow and inflow creates an air curtain to protect the operator from contaminants released from the work surface.

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

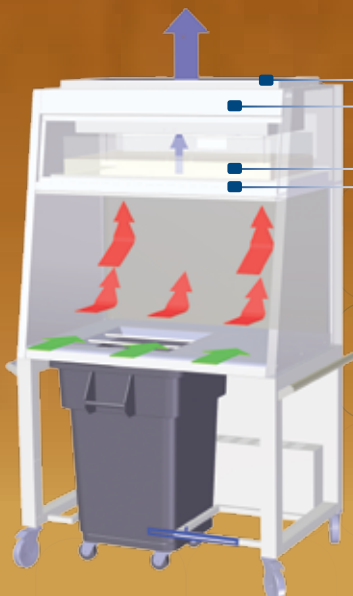


VA2 Cabinet Airflow System

- Ambient air pulled through the perforations towards the work zone front prevents 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 (blower plenum) at the top of the cabinet.
- Approximately 40% of the air in the common plenum is exhausted through the ULPA filter to the room. The remaining 60% 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 ULPA-filtered 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 downflow enters the side capture zones at a higher velocity (small blue arrows).
- A combination of inflow and downflow air streams form an air barrier that prevents contaminated room air from entering the work zone, and prevents work surface emissions from escaping the work zone.

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



VBD Cabinet Airflow System

- Carbon Filter
- Blower
- Exhaust ULPA Filter
- Pre-Filter

- Room air is drawn in across the front of the cabinet with an average velocity of 0.35 m/s (70 fpm).
- Air is drawn up through the cabinet's work zone and forced through the ULPA filter (>99.999% typical efficiency for 0.1 to 0.3 micron sized particles).

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

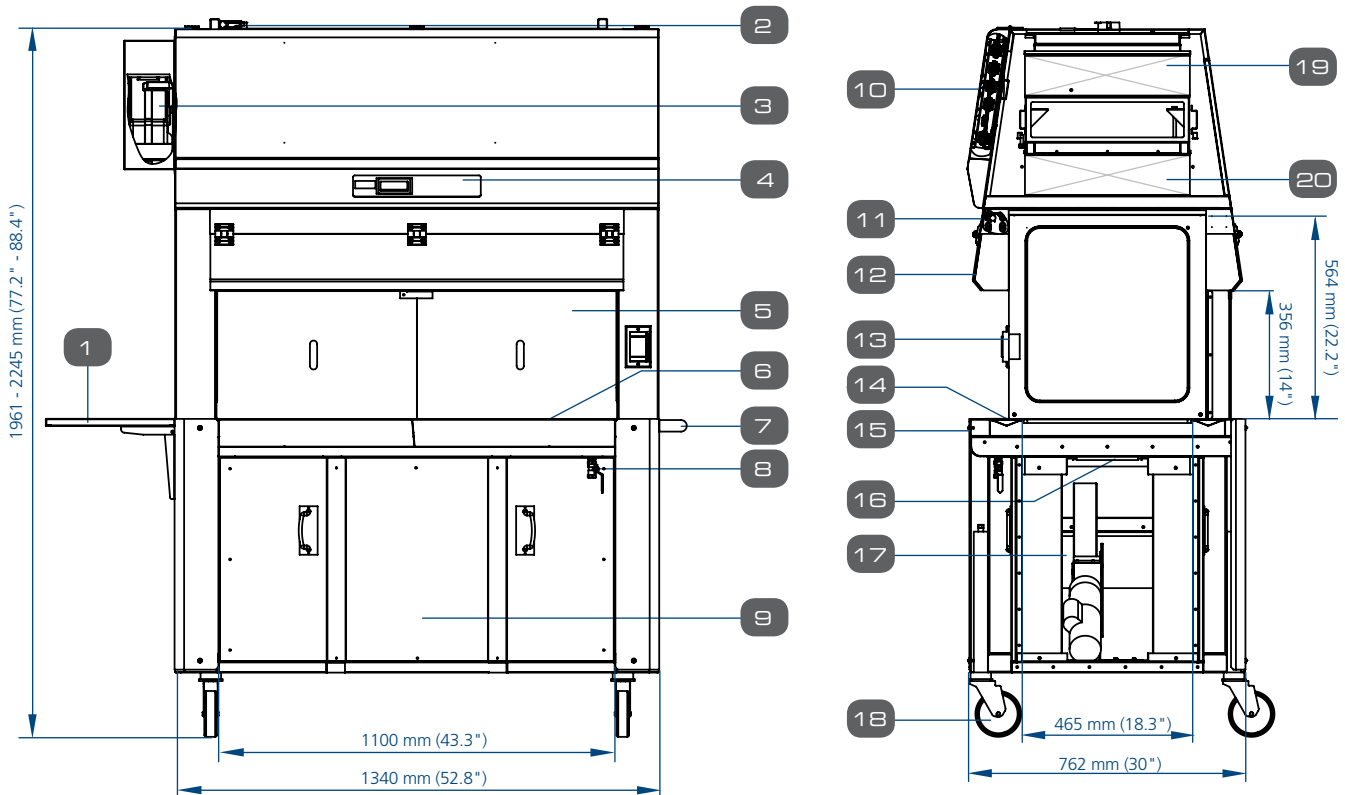
- The full work zone ceiling extraction system ensures airflow uniformity throughout the cabinet's main chamber.
- The ULPA filtered air then returns to the laboratory stripped of all airborne contaminants and odor.



VIVA®

General Specifications	Dual Access Animal Containment Workstation
Model	VDA-4A_
External Dimensions (W x D x H)	1340 x 762 x 1961 mm (52.8" x 30.0" x 77.2") minimum height 1340 x 762 x 2245 mm (52.8" x 30.0" x 88.4") maximum height
Internal Work Area (W x D x H)	1100 x 465 x 583 mm (43.3" x 18.3" x 22.2")
Downflow Velocity	0.30 m/s (60 fpm)
Pre-Filter	Disposable and non-washable polyester fibres with 85% arrestence / EU3 rated
ULPA Filter Typical Efficiency	>99.999% for particle size between 0.1 to 0.3 microns, per IEST-RP-CC001.3
Sound Emission*	53 dBA
Fluorescent Lamp Intensity at Zero Ambient	1725 lux (160 foot-candles)
Construction, Main Body	1.5 mm (0.06") 16 gauge EG Steel with Isocide™ Oven-Baked Epoxy-Polyester Powder Coated Finish
Shipping Dimensions, Maximum (W x D x H)	1600 x 930 x 2106 mm (63.0" x 36.6" x 83.0")
Shipping Weight	342 Kg (754 lbs)
Shipping Volume, Maximum	3.13 m ³ (110.67 cu.ft.)
Electrical Rating	110-130 VAC, 50 / 60 Hz, 1Ø
Power Consumption	210 W
Accessories	Fold Down Table
	Side Shield
	Storage Bracket for Side Shield

* Noise as measured in open field / anechoic chamber.



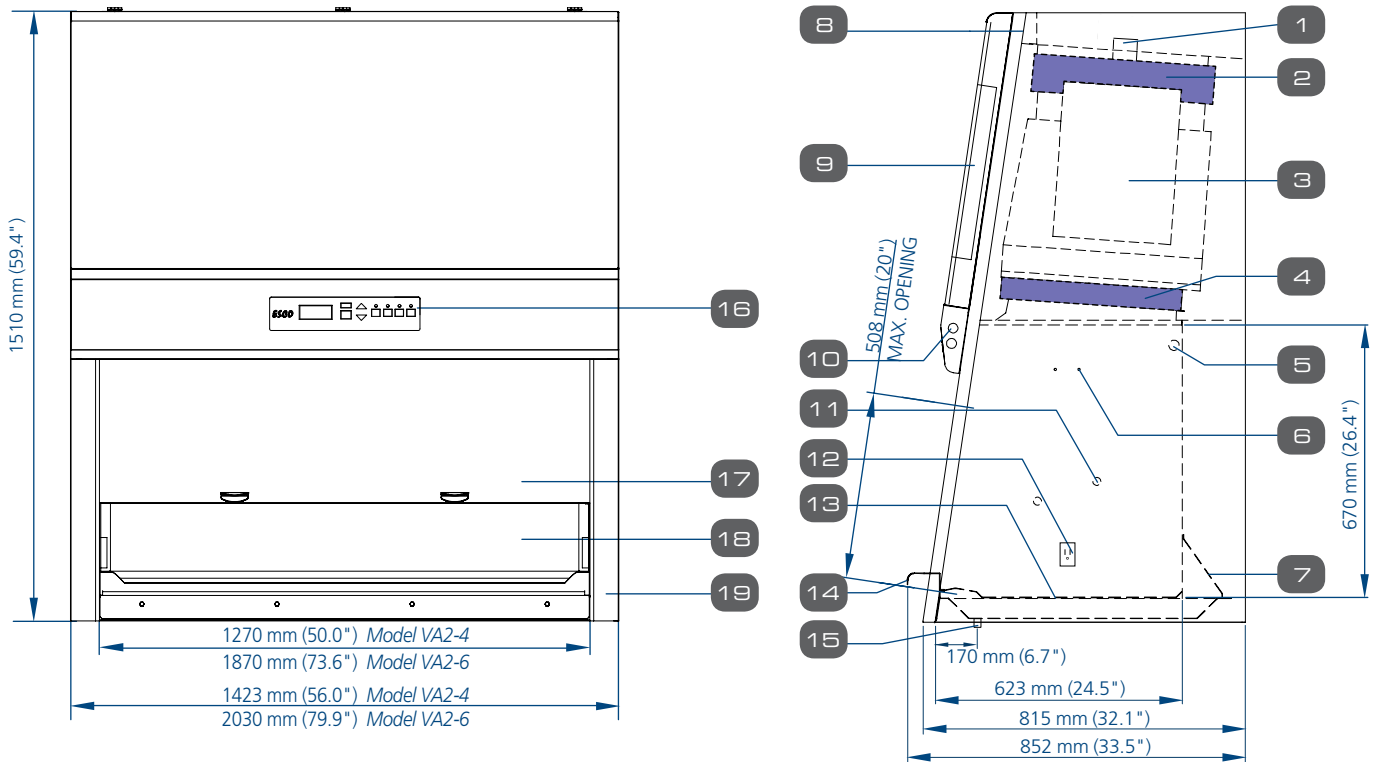
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|---|--|---|
| 1. Optional SS Table | 8. Drain Valve | 15. Arm Rest |
| 2. Airflow Sensor | 9. Knee Space (254 mm / 10" Deep) at both sides | 16. Impregnated Activated Carbon Pre-filter |
| 3. Retractable Cord Reel (30ft) | 10. Electrical Panel | 17. DC ECM Blower (Self-compensating and Low Noise) |
| 4. Sentinel™ Gold Microprocessor Control System | 11. T5 Fluorescent Lamps (1 on each side) | 18. Caster Wheels |
| 5. Optional Side Shield | 12. Hinged Polycarbonate Window | 19. Exhaust ULPA / H14 Filter |
| 6. Stainless Steel Work Top | 13. GFCI Electrical Outlets with Dip Proof Cover | 20. Downflow ULPA / H14 Filter |
| 7. Push Handle | 14. Recessed Air Intake Grill | |

General Specifications, VIVA Universal Animal Containment Workstation, Model VA2

Note to customer: Insert electrical voltage number into last model number digit when ordering.

Model	VA2-4A_		VA2-6A_	
Nominal Size	1.2 meters (4')		1.8 meters (6')	
External Dimensions (W x D x H)	1423 x 815 x 1510 mm 56" x 32.1" x 59.4"		2030 x 815 x 1510 mm 79.9" x 32.1" x 59.4"	
Maximum External Dimensions with Support Stand (W x D x H)	1585 x 852 x 2235 mm 62.4" x 33.5" x 88.0"		2193 x 852 x 2235 mm 86.3" x 33.5" x 88.0"	
Internal Work Area (W x D x H)	1270 x 623 x 680 mm 50.0" x 24.5" x 26.7"		1870 x 620 x 680 mm 73.6" x 24.4" x 26.7"	
Average Airflow Velocity	Inflow	0.45 m/s (90 fpm)		
	Downflow	0.35 m/s (70 fpm)		
Airflow Volume	Inflow	625 m ³ / h (368 cfm)	921 m ³ / h (542 cfm)	
	Downflow, 60%	959 m ³ / h (547 cfm)	1414 m ³ / h (832 cfm)	
	Exhaust, 40%	625 m ³ / h (368 cfm)	921 m ³ / h (542 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	63 dBA	64 dBA	
	EN 12469	60 dBA	61 dBA	
Fluorescent Lamp Intensity	> 1400 Lux (> 130 foot-candles)		> 1230 Lux (> 114 foot-candles)	
Cabinet Construction	1.5 mm (16 gauge) electrogalvanized steel with Isocide white oven-baked epoxy power coating			
Net Weight Cabinet including stand	406 kg (895 lbs)		528 kg (1164 lbs)	
Shipping Weight Cabinet including stand	456 kg (1005 lbs)		570 kg (1257 lbs)	
Shipping Dimensions, Maximum (W x D x H) Cabinet excluding stand	1550 x 950 x 1900 mm (61.0" x 37.4" x 74.8")		2150 x 950 x 1900 mm (84.6" x 37.4" x 74.8")	
Shipping Volume, excluding stand	2.80 m ³ (99 cu.ft.)		3.88 m ³ (137 cu.ft.)	
Electrical*	Model	Voltage	Model	Voltage
	VA2-4A1	220-240V, AC, 50Hz, 1Ph, 5.5 amps	VA2-6A1	220-240V, AC, 50Hz, 1Ph, 6 amps
	VA2-4A2	110-120V, AC, 60Hz, 1Ph, 11 amps	VA2-6A2	110-120V, AC, 60Hz, 1Ph, 12 amps
	VA2-4A3	220-240V, AC, 60Hz, 1Ph, 5.5 amps	VA2-6A3	220-240V, AC, 60Hz, 1Ph, 6 amps

* Noise as measured in open field / anechoic chamber.

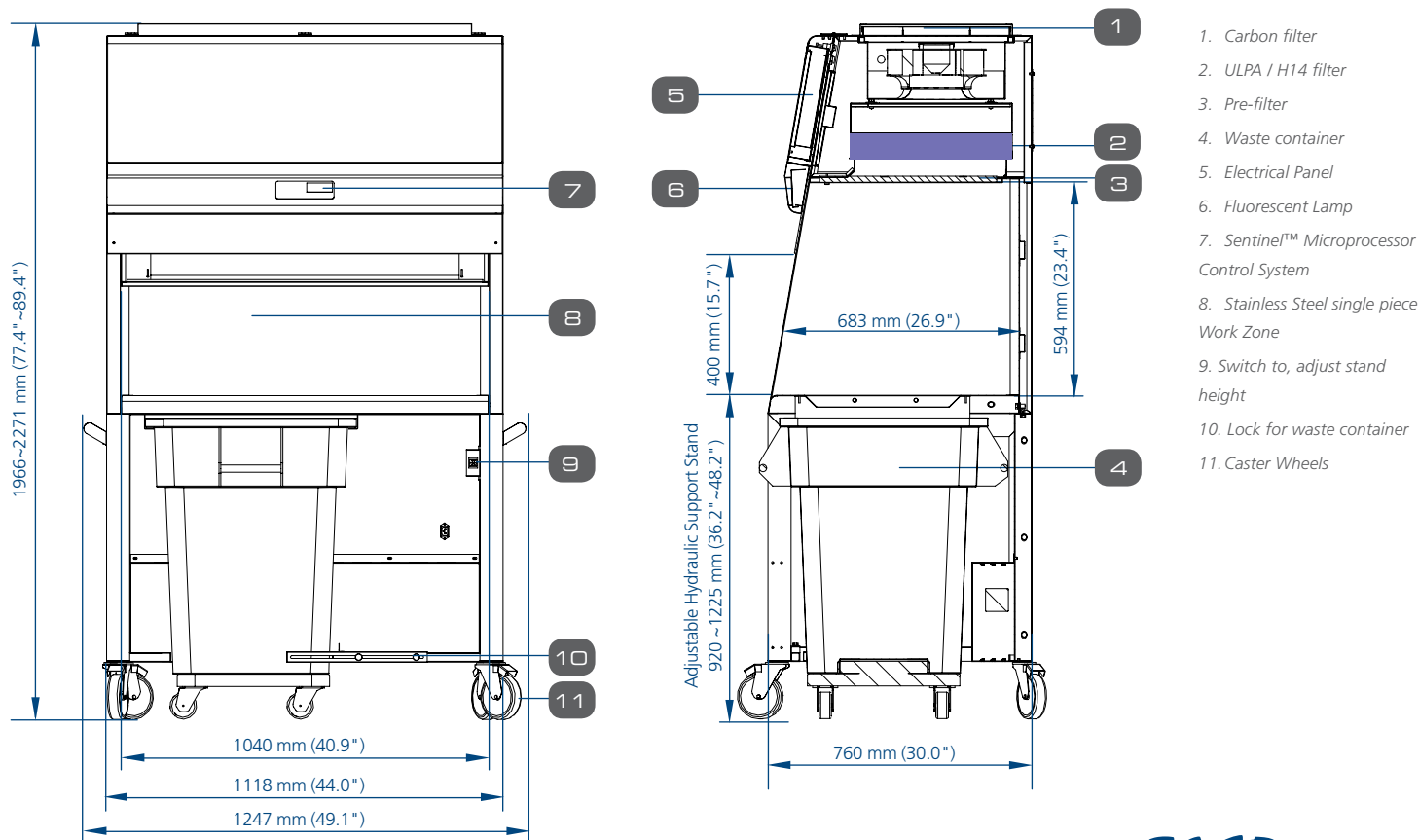


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|--|--|---|
| <ol style="list-style-type: none"> 1. Airflow Sensor 2. Exhaust ULPA / H14 Filter 3. Energy-efficient DC ECM Blower 4. Downflow ULPA / H14 Filter 5. UV light Retrofit Kit Provision 6. IV bar Retrofit Kit Provision 7. Pre-filter | <ol style="list-style-type: none"> 8. RS 232 Port, zero volt relay contacts for exhaust and alarm system 9. Electrical / Electronics Panel 10. Fluorescent Lamps 11. Plugged Service Fixture provisions (2 on each side) 12. Electrical Outlet Retrofit Kit Provision 13. Stainless Steel Single-piece Work Tray | <ol style="list-style-type: none"> 14. Stainless Steel Arm Rest 15. Drain Valve Retrofit Kit Provision 16. Sentinel™ Gold Microprocessor Control System 17. Safety Glass Sliding Sash Window 18. Single-piece Stainless Steel Back Wall and Side Walls 19. Removable Side Panel for plumbing access |
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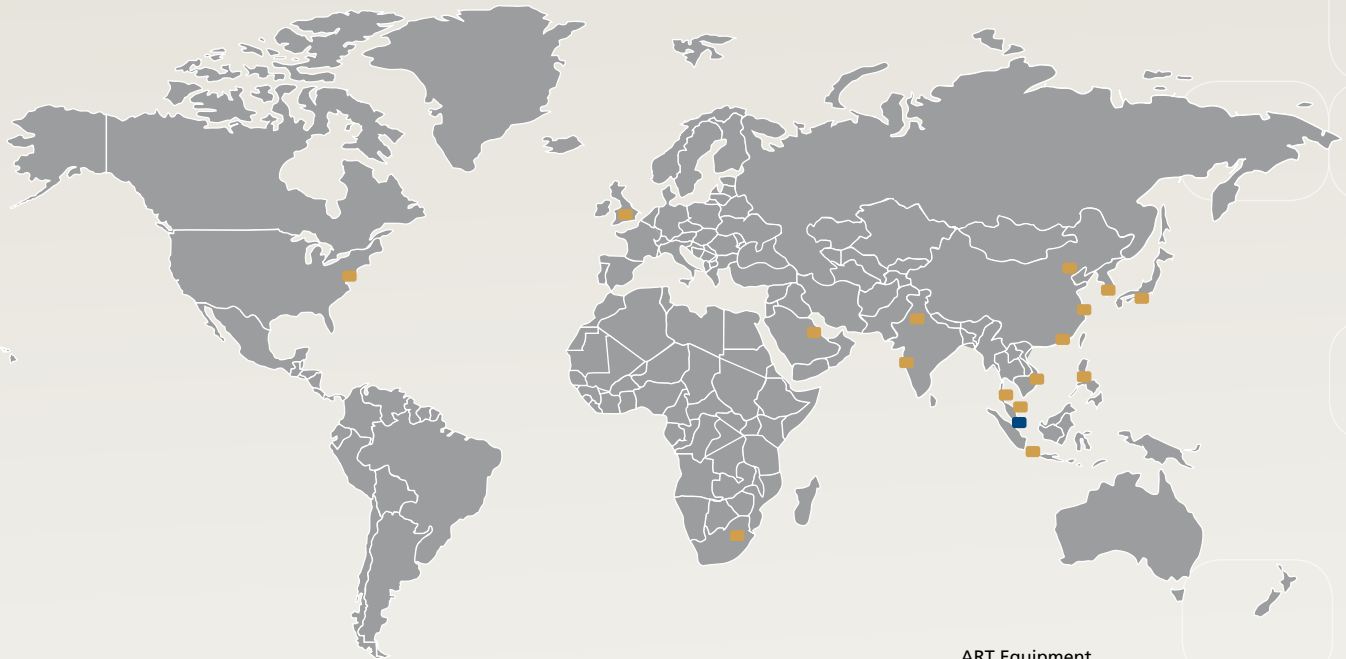
General Specifications, VIVA Bedding Disposal Workstation, Model VBD-4A_

Nominal Size	1.2 meters (4')			
External Dimensions (W x D x H)	1247 x 760 x 1966 mm (49.1" x 30.0" x 77.4") minimum height 1247 x 760 x 2271 mm (49.1" x 30.0" x 89.4") maximum height			
Internal Work Area (W x D x H)	1040 x 680 x 594 mm (40.9" x 26.8" x 23.4")			
Work Surface Height	920 mm ~ 1225 mm (36.2" ~ 48.2")			
Front Opening	400 mm (15.7")			
Inflow Velocity	0.35 m/s (70 fpm) at initial setpoint			
Pre-Filter	Disposable, non-washable polyester fiber, 85% arrestance, EU3 rated			
ULPA Filter Typical Efficiency	>99.999% at 0.1 to 0.3 microns as per IEST-RP-CC001.3 USA			
Sound Emission* Per EN 12469	58 dBA			
Fluorescent Lamps	> 1,300 Lux (> 121 foot-candles)			
Workstation Construction	Main Body	1.2 mm (0.05") 18 gauge electro-galvanized steel with Isocide™ white oven-baked epoxy-polyester powder-coating		
	Work Top	1.2 mm (0.05") 18 gauge stainless steel, type 304, with 4B finished		
	Inner Liner	0.9 mm (0.035") 20 gauge stainless steel, type 304, with 4B finished		
Net Weight	233 kg (514 lbs)			
Shipping Weight	294 kg (648 lbs)			
Shipping Dimensions, Maximum (W x D x H)	2150 x 1840 x 1230 mm (84.6" x 72.4" x 48.4")			
Shipping Volume, Maximum	4.87 m ³ (172 cu.ft.)			
Electrical**	Model	VBD-4A1	VBD-4A2	VBD-4A3
	Voltages	220-240V, AC, 50Hz, 1Φ	110-120V, AC, 60Hz, 1Φ	220-240V, AC, 60Hz, 1Φ
	Cabinet Full Load Amps (FLA)	3 A	6.5 A	3 A
	Optional Outlets FLA	5 A	5 A	5 A
	Cabinet Nominal Power	309 W	268 W	309 W
	Cabinet BTU	1054	914	1054

* Noise as measured in open field / anechoic chamber.



ESCO GLOBAL NETWORK



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- Ductless Fume Hoods
- Freeze Dryer
- Lab Animal Research Products
- Laboratory Fume Hoods
- Laboratory Ovens and Incubators
- Laminar Flow Clean Benches
- PCR Cabinets
- PCR Thermal Cyclers
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