

## **Animal Containment Workstation**

The Portable Safety Solution for Animal Research Laboratories





#### **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





# 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.



#### Easy Work Access

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



#### 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.

Viva Dual Access Animal Containment Workstation, Model VDA-\_A\_ Available in 1.2, and 1.5 meter models (4', and 5').

#### **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







\*\*\*\*\*/\*

## **ELISA Proven Containment**

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

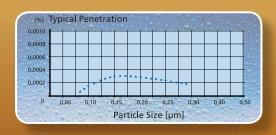




## VIVA

#### **ULPA Filter**

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



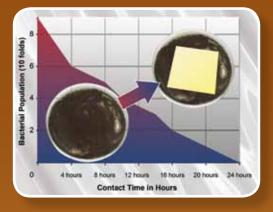
## **Quiet Operation**

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



#### **ISOCIDE** Powder Coat

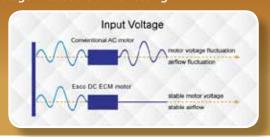
- Silver-ion impregnated powder coat
- Inhibit microbial growth to improve safety



## **Dual 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





Standards Compliance ISO 14644.1, Class 4, Worldwide JIS B9920, Class 4, Japan JIS BS5295, Class 4, Japan US Fed Std 209E, Class 10 USA

**Air Quality** 

EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA

**Filtration** 

UL-61010A-1, USA CSA22.2, No.1010-192, Canada EN61010-1, Europe IEC61010-1, International

**Electrical Safety** 





#### **Airflow Sensor**

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

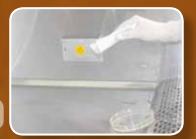
## Sentinel™ Gold Microprocessor Controller -

- 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



4

#### **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







a Universal Animal Containment Workstation, Model VA2-\_A-E

Available in 1.2, and 1.8 meter models (4', and 6')





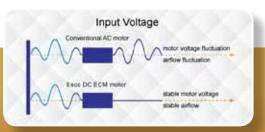


VIVA.

## **Energy Efficient DC ECM Motor**

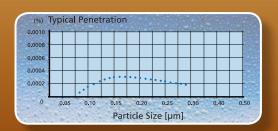
- Powered by latest generation DC ECM motor, that is more efficient than legacy ECM and VFD motors
- 70% Energy savings compared to AC motor
- Stable airflow, despite building voltage fluctuations & filter loading





#### ULPA Filter

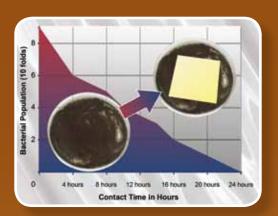
- 10x Filtration efficiency of HEPA filter
- Creates ISO Class 3 work zone instead of industrystandard ISO Class 5





Silver-ion impregnated powder coat

Inhibit microbial growth to improve safety



#### **ELISA Proven Containment**

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





Standards
Compliance

ISO 14644.1, Class 3, Worldwide JIS B9920, Class 3, Japan JIS BS5295, Class 3, Japan US Fed Std 209E, Class 1 USA

**Air Quality** 

EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA

**Filtration** 

UL-61010A-1, USA CSA22.2, No.1010-192, Canada EN61010-1, Europe IEC61010-1, International

**Electrical Safety** 





## **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



#### Bang Bars ———

Increase efficiency of bedding disposal operations.



## **Integrated Waste Chute**

Dispose refuse bag safely within the work zone



Operator and Environmental Protection

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



Exclusive hydraulic height-adjustable stand

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





Viva Animal Bedding Disposal Workstation Model VBD-4A\_



VIVA:

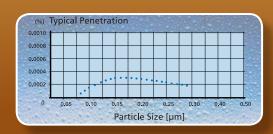
## — Carbon Filter

■ Nanocarb™ activated carbon filter removes odors



#### - ULPA Filter

- 10x Filtration efficiency of HEPA filter
- Yields 10x cleaner lab air from allergen than industry standard HEPA filter



#### **ELISA Proven Containment**

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





#### **ISOCIDE™** Powder Coat

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



Standards
Compliance

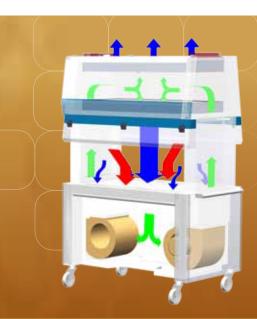
EN-1822 (H14), Europe
IEST-RP-CC001.3, USA
IEST-RP-CC007, USA
IEST-RP-CC034.1, USA

**Filtration** 

UL61010-1, USA

**Electrical Safety** 

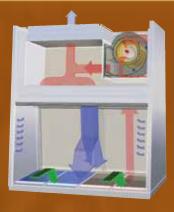




#### **VDA Cabinet Airflow System**

- 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 nonturbulent downflow.
- ULPA-filtered air
- Unfiltered / Potentially contaminated air
- Room air / Inflow air

■ The combination of vertical laminar downflow and inflow creates an air curtain to protect the operator from contaminants released from the work surface



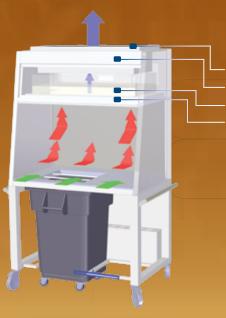
ULPA-filtered air

8

- 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.



#### **VBD Cabinet Airflow System**

Carbon Filter

Blower

Exhaust ULPA Filter

Pre-Filter

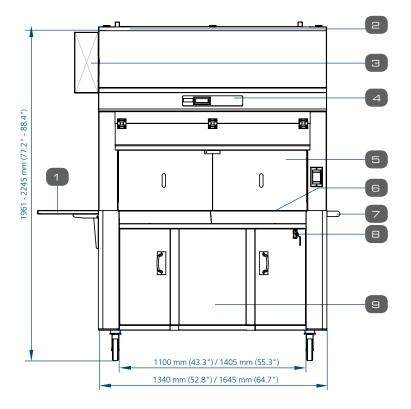
- Room air is drawn in across the front of the cabinet with an average velocity of 0.35 m/s (70 fpm).
- Air is drawn up through the cabinet's work zone and forced through the ULPA filter (>99.999% typical efficiency for 0.1 to 0.3 micron sized particles).
- ULPA-filtered air
- Unfiltered / Potentially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

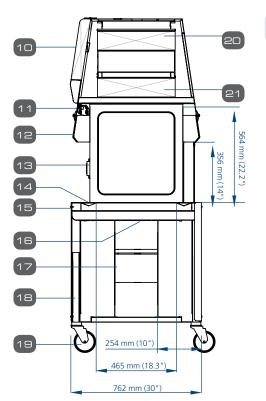


General Specifications, VIVA® Dual Access Animal Containment Workstation, Model VDA						
Model		VDA-4A_	VDA-5A_			
External Dimensions (W x D x H)		1340 x 762 x 1961 mm (52.8" x 30.0" x 77.2") min height 1340 x 762 x 2245 mm (52.8" x 30.0" x 88.4") max height	1645 x 762 x 1961 mm (64.7" x 30.0" x 77.2") min height 1645 x 762 x 2245 mm (64.7" x 30.0" x 88.4") max height			
Internal Work Area (W	x D x H)	1100 x 465 x 564 mm (43.3" x 18.3" x 22.2")	1405 x 465 x 564 mm (55.3" x 18.3" x 22.2")			
Downflow Velocity		0.24 m/s (47 fpm)				
Pre-Filter		Disposable and non-washable polyester fibres with 85% arrestence / EU3 rated				
ULPA Filter Typical Effic	iency	>99.999% for particle size between 0.	>99.999% for particle size between 0.1 to 0.3 microns, per IEST-RP-CC001.3			
Sound Emission per EN	12469*	53 dBA 54 dBA				
Fluorescent Lamp Intensity at Zero Ambient		1725 lux (160 foot candles)	1525 lux (142 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, I	Maximum (W x D x H)	1720 x 820 x 2240 mm (67.7" x 32.2" x 88.1") 2025 x 820 x 2240 mm (79.7" x 32.2" x 88.				
Shipping Weight		342 Kg (754 lbs)	432 Kg (952 lbs)			
Shipping Volume, Maxi	mum	3.16 m³ (111.6 cu.ft.)	3.72 m³ (131.4 cu.ft.)			
VDAA8 220-240 VAC, 50 /		0 / 60 Hz, 1Ø				
Electrical Rating VDAA9		110-130 VAC, 50 / 60 Hz, 1Ø				
VDAA8 190 W		190 W	230 W			
Power Consumption	VDAA9	210 W	250 W			
	Foldable Side Tray (SS Shelf Kit)	VDA-001	5170257			
Accessories	Side Shield	VDA-004 5170562	VDA-005 5170563			
	Feed Hopper	VDA-006	5170594			

<sup>\*</sup> Noise as measured in open field / anechoic chamber.



- 9. Knee Space (254 mm / 10" Deep) at both sides
- 10. Electrical Panel
- 11. T5 Fluorescent Lamps (1 on each side)
- 12. Hinged Polycarbonate Window
- 13. GFCI Electrical Outlets with Dip Proof Cover (1 on each right side)
- 14. Recessed Air Intake Grill
- 15. Arm Rest



9

- 16. Impregnated Activated Carbon Pre-filter
- 17. DC ECM Blower (Self-compensating and Low Noise)
- 18. Electric Hydraulic Height Adjustor
- 19. Caster Wheels
- 20. Exhaust ULPA/H14 Filter
- 21. Downflow ULPA/H14 Filter

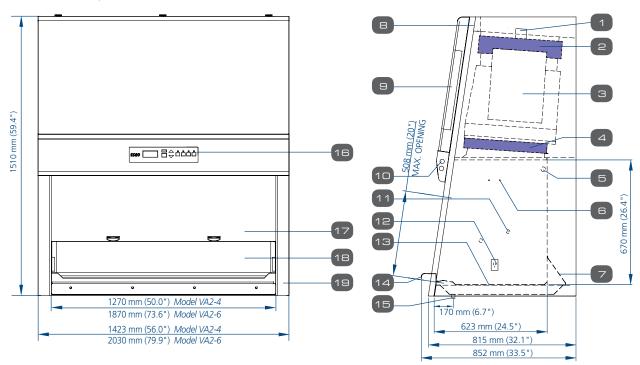
- 1. Foldable Side Tray
- 2. Airflow Sensor
- 3. Retractable Cord Reel (30 ft)
- 4. Sentinel™ Gold Microprocessor Control System
- 5. Optional Side Shield
- 6. Stainless Steel Work Top
- 7. Push Handle
- 8. Drain Valve



#### General Specifications, VIVA® Universal Animal Containment Workstation, Model VA2

Note to customer: Insert electrical voltage number into last model number digit_when ordering.						
Model		VA2-4AE		VA2-6AE		
Nominal Size		1.2 meter (4')		1.8 meter (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)				1870 x 620 x 680 mm (73.6" x 24.4" x 26.7")		
Average Airflow Inflow		0.45 m/s (90 fpm)				
Velocity	Downflow	0.35 m/s (70 fpm)				
	Inflow	625 m³ / h (368 cfm)		921 m³ / h (542 cfm)		
Airflow Volume	Downflow, 60%	959 m³ / h (547 cfm)		1414 m³ / h (832 cfm)		
	Exhaust, 40%	625 m³ / h (368 cfm)		921 m³ / 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		
Journa Emission	EN 12469	60 dBA		61 dBA		
Fluorescent Lamp Inten	sity	> 1400 lux (> 130 foot candles)		> 1230 lux (> 114 foot candles)		
Cabinet Construction	et Construction 1.5 mm (16 gauge) electrogalvanized steel with Isocide white oven-baked epoxy power coating		ven-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 m³ (99 cu.ft.)		3.88 m³ (137 cu.ft.)		
Electrical*		Model	Voltage	Model	Voltage	
		VA2-4A1-E	220-240 VAC,50/60 Hz, 1Ph, 5.5 amps	VA2-6A1-E	220-240V, AC,50/60 Hz, 1Ph, 6 amps	
		VA2-4A2-E	110-120 VAC, 50/60 Hz, 1Ph, 11 amps	VA2-6A2-E	110-120V, AC, 50/60 Hz, 1Ph, 12 amps	

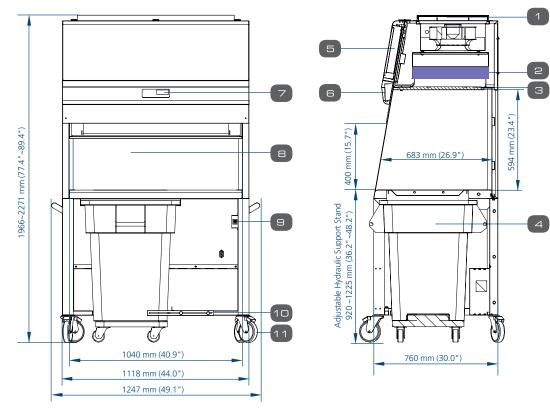
<sup>\*</sup> Noise as measured in open field / anechoic chamber.



- 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
- 8. RS 232 Port, zero volt relay contacts
- for exhaust and alarm system
- 9. Electrical Panel
- 11. Plugged Service Fixture provisions (2 on each side)
- 12. Electrical Outlet Retrofit Kit Provision
- 13. Stainless Steel Single-piece Work Tray
- 14. Stainless Steel Arm Rest
- 15. Drain Valve Retrofit Kit Provision
- 16. Sentinel<sup>™</sup> 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

	General Specificat	tions, VIVA® Bedding Dispo	sal Workstation, Model VB	D-4A_		
Nominal Size		1.2 meter (4')				
External Dimen	sions (W x D x H)		1966 mm (49.1" x 30.0" x 77.4") minimum height 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 H	leight	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 Typ	ical Efficiency	>99.999%	at 0.1 to 0.3 microns as per IEST-RP-Co	C001.3 USA		
Sound Emission	* Per EN 12469	58 dBA				
Fluorescent Lamps		> 1,300 lux (> 121 foot candles)				
Workstation	Main Body	1.2 mm (0.05") 18 gauge electro-galvanized steel with Isocide™ white oven-baked epoxy-polyester powder-coating				
Construction	Work Top	1.2 mm (0.05") 18 gauge stainless steel, type 304, with 4B finish				
	Inner Liner	0.9 mm (0.035") 20 gauge stainless steel, type 304, with 4B finish				
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 4	18.4")		
Shipping Volume, Maximum		4.87 m³ (172 cu.ft.)				
	Model	VBD-4A1	VBD-4A2	VBD-4A3		
	Voltages	220-240 VAC, 50 Hz, 1Ф	110-120 VAC, 60 Hz, 1 <b>Ф</b>	220-240 VAC, 60 Hz, 1Ф		
Electrical**	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.



- 1. Carbon filter
- 2. ULPA / H14 filter
- 3. Pre-filter
- 4. Waste container
- 5. Electrical Panel
- 6. Fluorescent Lamp
- 7. Sentinel<sup>™</sup> Microprocessor Control System
- 8. Stainless Steel single piece Work Zone
- 9. Switch to adjust stand height
- 10. Lock for waste container
- 11. Caster Wheels



**ART Equipment Biological Safety Cabinets** CO<sub>2</sub> Incubators Compounding Pharmacy Equipment Containment / Pharma Products **Ductless Fume Hoods** Freeze Drver Lab Animal Research Products Laboratory Fume Hoods **Laboratory Ovens and Incubators** Laminar Flow Clean Benches

**PCR Thermal Cyclers** 

**PCR Cabinets** 

**Powder Weighing Balance Enclosures Ultra-low Freezers** 

The Esco Group of Companies is a global life sciences tools provider with sales in over 100 countries. The group is active in lab equipment, pharma equipment and medical devices. Manufacturing facilities are located in Asia and Europe. R&D is conducted worldwide spanning the US, Europe and Asia. Sales, service and marketing subsidiaries are located in 12 major markets including the US, UK, Singapore, Japan, China and India. Regional distribution centers are located in the US, UK, and Singapore.

Science • Chemical Research • Assisted Reproductive Technology (ART) • Pharmaceutical Equipment • General Equipment



## WORLD CLASS. WORLDWIDE.

Esco Micro Pte. Ltd. • 21 Changi South Street 1 • Singapore 486 777 Tel +65 6542 0833 • Fax +65 6542 6920 • mail@escoglobal.com www.escoglobal.com

Esco Technologies, Inc. • 903 Sheehy Drive, Suite F, Horsham, PA 19044, USA Toll-Free USA and Canada 1-877-479-3726 • Tel 215-441-9661 • Fax 484-698-7757 eti.sales@escoglobal.com • www.escolifesciences.us

Esco Global Offices: Bahrain | Bangladesh | China | India | Indonesia | Italy | Japan | Malaysia Philippines | Russia | Singapore | South Africa | South Korea | Thailand | United Kingdom | USA | Vietnam



LABORATORIUM-APPARATUUR.NI. T. +31 (0)320-266 171 | laboratorium@dijkstra.net pascallaan 9 - 8218 NJ Lelystad | www.dijkstra.net







