VIVA® Dual Access Animal Containment Workstation, Model VDA-4A_

VIVA® Universal Animal Containment Workstation, Model VA2-4A_-E

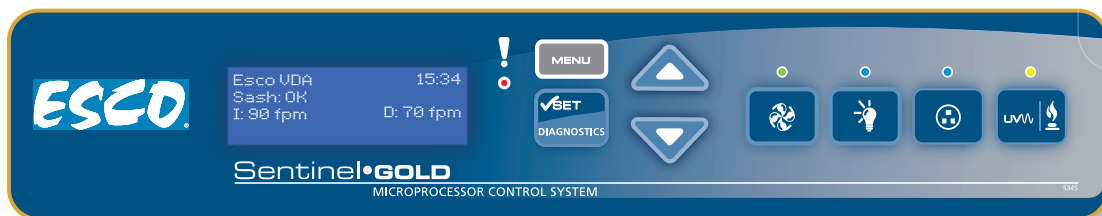VIVA® Bedding Disposal Animal Containment Workstation, Model VBD-4A_

VIVA® Animal Research Workstations

The Portable Safety Solution for Animal Research Laboratories

ESCO
SCIENTIFIC

Esco VDA 15:34
Sash: OK
I: 90 fpm   D: 70 fpm

MENU
SET
DIAGNOSTICS

Sentinel•GOLD
MICROPROCESSOR CONTROL SYSTEM

Airflow Sensor

- *Real-time airflow monitoring system*
- *Alerts the user if the airflow is insufficient*

Sentinel™ Gold Microprocessor Controller

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

2

Easy-to-clean Work Surface and Drain pan

- *Two-piece, easy-to-lift stainless steel tray*
- *Drain hole on both sides to dump animal bedding*

Easy Work Access

- *Large access opening of 344 mm (14")*
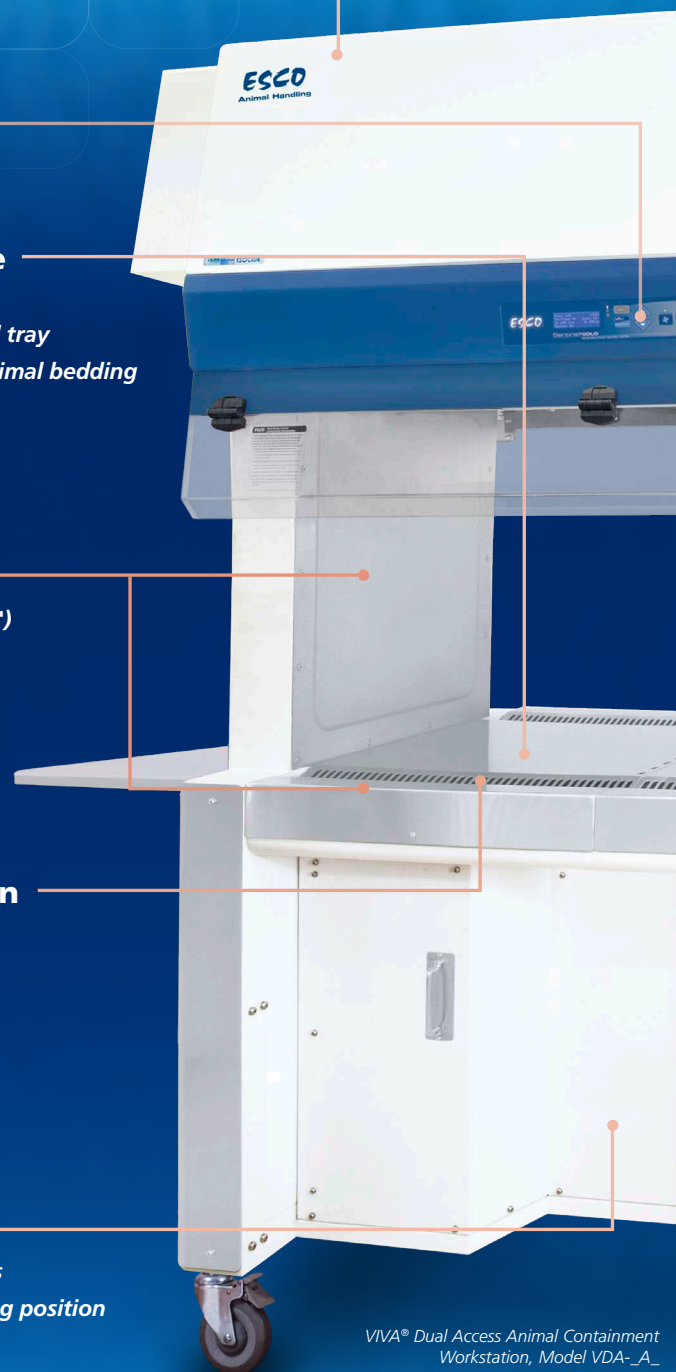- *Accomodates rat and mouse cages*
- *Hinged up for easy cleaning*

Advanced Work Tray Design

- *V-shaped grill to avoid blocking*
- *Center grill to separate clean and contaminated area*
- *Large tray handle for easy lifting*

Comfortable Leg Room

- *254 mm (10") leg room on both sides*
- *Reduces user's fatigue when in sitting position*
- *Hydraulic motor to adjust the 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

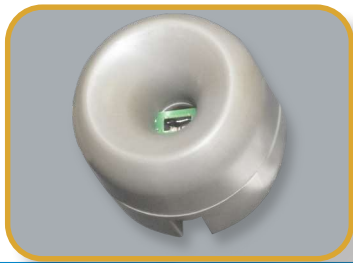*Contact Esco or your Esco Sales Representative for details.*

- **Electrical Outlets**
- **Foldable Side Tray**
- **Side Shield**
- **Feed Hopper**
- **Service Fixtures**

Side Shield   *Feed Hopper*

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Animal Research Workstations • **Dual Access Animal Transfer Containment Workstation**
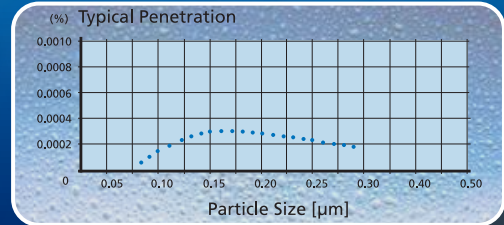
ELISA Proven Containment

- *Provides >99% allergen containment to ensure user's safety*

VIVA®

ULPA Filter

- *10x filtration efficiency than of HEPA filter*
- *Creates an ISO Class 3 work-zone instead of the industry-standard ISO Class 5*

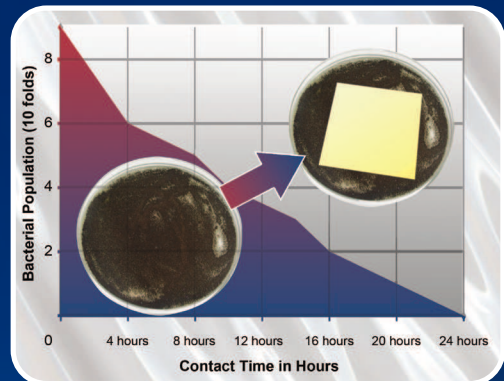Typical Penetration — (%) vs Particle Size [µm]

Quiet Operation
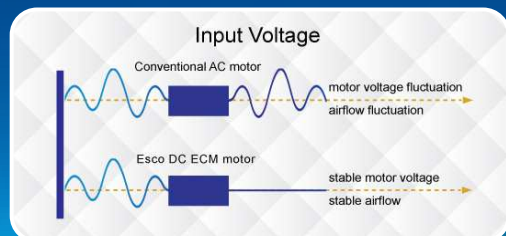
- *Comfortable low noise emission at 53 for the users and animals*

Isocide™ Antimicrobial Coating

- *Silver-ion impregnated powder coat*
- *Inhibits the microbial growth to improve safety*

Bacterial Population (10 folds) vs Contact Time in Hours

Dual Energy-efficient DC ECM Blower

- *Powered by the latest generation DC ECM 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*

Input Voltage

Standards Compliance	Air Quality	Filtration	Electrical Safety
	ISO 14644.1, Class 3, Worldwide	EN-1822 (H14), Europe	UL-61010A-1, USA
	JIS B9920, Class 3, Japan	IEST-RP-CC001.3, USA	CSA22.2, No.1010-192, Canada
	JIS BS5295, Class 3, Japan	IEST-RP-CC007, USA	EN61010-1, Europe
	US Fed Std 209E, Class 1 USA	IEST-RP-CC034.1, USA	IEC61010-1, International

ESCO SCIENTIFIC

Esco VA2   15:34
Airflow: OK   Sash: OK
I: 90 fpm   D: 70 fpm
Socket: ON

Sentinel•GOLD
MICROPROCESSOR CONTROL SYSTEM

Airflow Sensor
- ■ *Real-time airflow monitoring system*
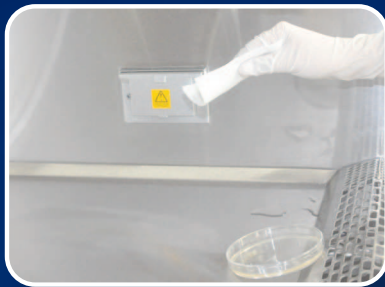- ■ *Alerts the user if the airflow is insufficient*

Sentinel™ Gold Microprocessor Controller
- ■ *Displays all safety information on one screen*
- ■ *Centered and angled down for an 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*

Single-Piece Work Tray
- ■ *Recessed working area to contain spillage*
- ■ *Curved grill to prevent blockage*

Raised Arm Rest
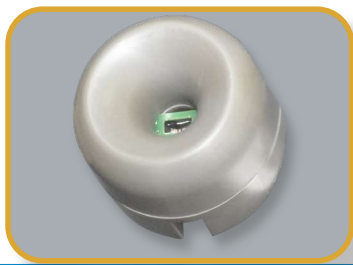- ■ *Helps prevent grille blocking*
- ■ *Comfortable working posture*

Angled Drain Pan
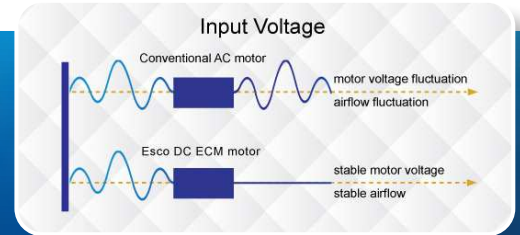- ■ *Helps prevent grille blocking*
- ■ *Does not harbor contaminants*

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VIVA® Universal Animal Containment Workstation, Model VA2-_A_-E

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

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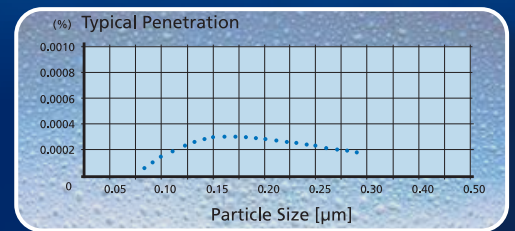
Energy Efficient DC ECM Blower

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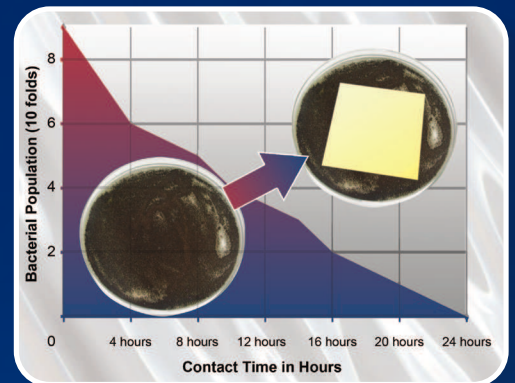- *Stable airflow despite building voltage fluctuations & filter loading*

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Input Voltage

Conventional AC motor — motor voltage fluctuation, airflow fluctuation

Esco DC ECM motor — stable motor voltage, stable airflow

ULPA Filter

- *10x filtration efficiency than of HEPA filter*
- *Creates an ISO Class 3 work-zone instead of the industry-standard ISO Class 5*

(%) Typical Penetration

Particle Size [µm]

Isocide™ Antimicrobial Coating

- *Silver-ion impregnated powder coat*
- *Inhibits the microbial growth to improve safety*

Bacterial Population (10 folds)

Contact Time in Hours

ELISA-proven Containment

- *Provides >99% allergen containment to ensure user's safety*

5

Standards Compliance	Air Quality	Filtration	Electrical Safety
	ISO 14644.1, Class 3, Worldwide	EN-1822 (H14), Europe	UL-61010A-1, USA
	JIS B9920, Class 3, Japan	IEST-RP-CC001.3, USA	CSA22.2, No.1010-192, Canada
	JIS BS5295, Class 3, Japan	IEST-RP-CC007, USA	EN61010-1, Europe
	US Fed Std 209E, Class 1 USA	IEST-RP-CC034.1, USA	IEC61010-1, International

ESCO SCIENTIFIC

AIR SAFE 16:20

Read all safety-related instructions before use
Operate unit continuously for best performance
Test / certify this cabinet at least annually

Designed to Meet IEC 61010-1
Safety / Protection Standards
ISO 9001 Quality Certified
Manufacturing Environment

ESCO

Airflow Sensor
- Real-time airflow monitoring system
- Alerts the user if the airflow is insufficient

Sentinel™ Silver Microprocessor Controller
- Displays all safety information on one screen
- Centered and angled down for easy reach & viewing

Bang Bars
- Increases efficiency of bedding disposal operations

Integrated Waste Chute
- Disposes refuse bag safely within the work-zone

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*VIVA® Bedding Disposal Animal Containment Workstation, Model VBD-4A_*

Available in 1.2 meter model (4') only.

**User and Environment Protection**

The VIVA Bedding Disposal Workstation provides operator and environment protection User animal allrgen.

Exclusive hydraulic height-adjustable stand

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

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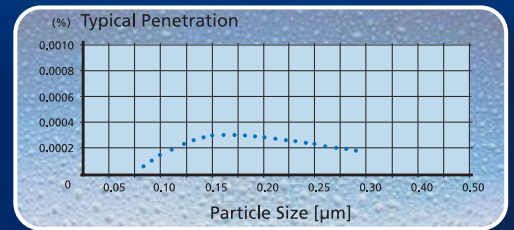Lab Animal Research Products • **Animal Bedding Disposal Workstation**
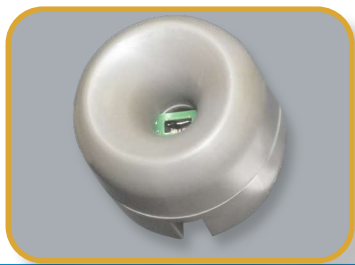
Carbon Filter

- *Nanocarb activated carbon filter to remove unpleasant odors*

ULPA Filter

- *10x filtration efficiency than of HEPA filter*
- *Creates an ISO Class 3 work-zone instead of the industry-standard ISO Class 5*

(%) Typical Penetration

Particle Size [µm]

ELISA-proven Containment

- *Provides >99% allergen containment to ensure user's safety*

Isocide™ Antimicrobial Coating

- *Silver-ion impregnated powder coat*
- *Inhibits the microbial growth to improve safety*

Bacterial Population (10 folds)

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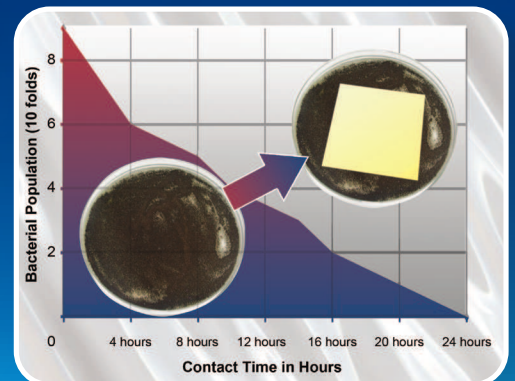
Standards Compliance	Filtration	Electrical Safety
	EN-1822 (H14), Europe IEST-RP-CC001.3, USA IEST-RP-CC007, USA IEST-RP-CC034.1, USA	UL61010-1, USA

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AIRFLOW PATTERN

VDA Cabinet Airflow System

- The VDA Dual Access Workstation employs a recirculating airflow configuration for better filtration efficiency.

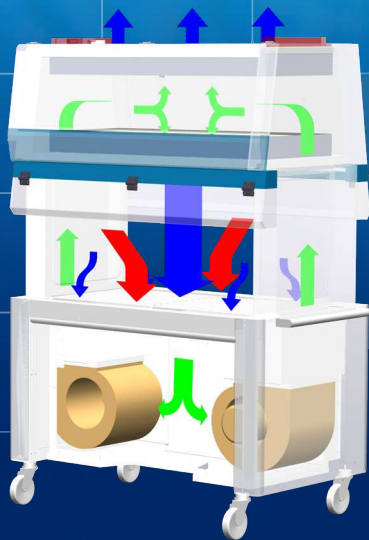- The blower system pulls ambient intake air through the front grilles, creating inflow that provides operator protection from allergen inside the work-zone. An activated carbon pre-filter removes unpleasant odors

- 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 laminar air with a non-turbulent downflow.

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

- ■ ULPA-filtered air
- ■ Unfiltered / Potentially contaminated air
- ■ Room air / Inflow air
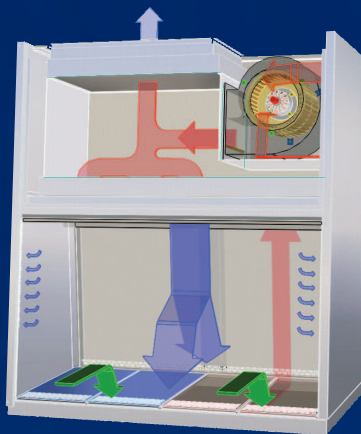
VA2 Cabinet Airflow System

- 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 towards 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
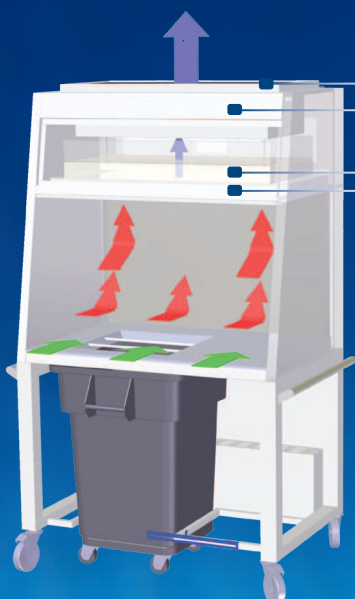
VBD Cabinet Airflow System

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).

- 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.

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

VIVA®
Animal Research Workstations • **Dual Access Animal Transfer Containment Workstation**

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 Efficiency		>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, 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 88.1")
Shipping Weight		342 Kg (754 lbs)	432 Kg (952 lbs)
Shipping Volume, Maximum		3.16 m³ (111.6 cu.ft.)	3.72 m³ (131.4 cu.ft.)
Electrical Rating	VDA-_A8	220-240 VAC, 50 / 60 Hz, 1Ø	
	VDA-_A9	110-130 VAC, 50 / 60 Hz, 1Ø	
Power Consumption	VDA-_A8	190 W	230 W
	VDA-_A9	210 W	250 W
Accessories	Foldable Side Tray (SS Shelf Kit)	VDA-001 5170257	
	Side Shield	VDA-004 5170562	VDA-005 5170563
	Feed Hopper	VDA-006 5170594	

Noise as measured in an open field / anechoic chamber.

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

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

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

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

Model		VA2-4A_ -E	VA2-6A_ -E
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)		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 m³ / h (368 cfm)	921 m³ / h (542 cfm)
	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
	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 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

* Noise as measured in an open field / anechoic chamber.
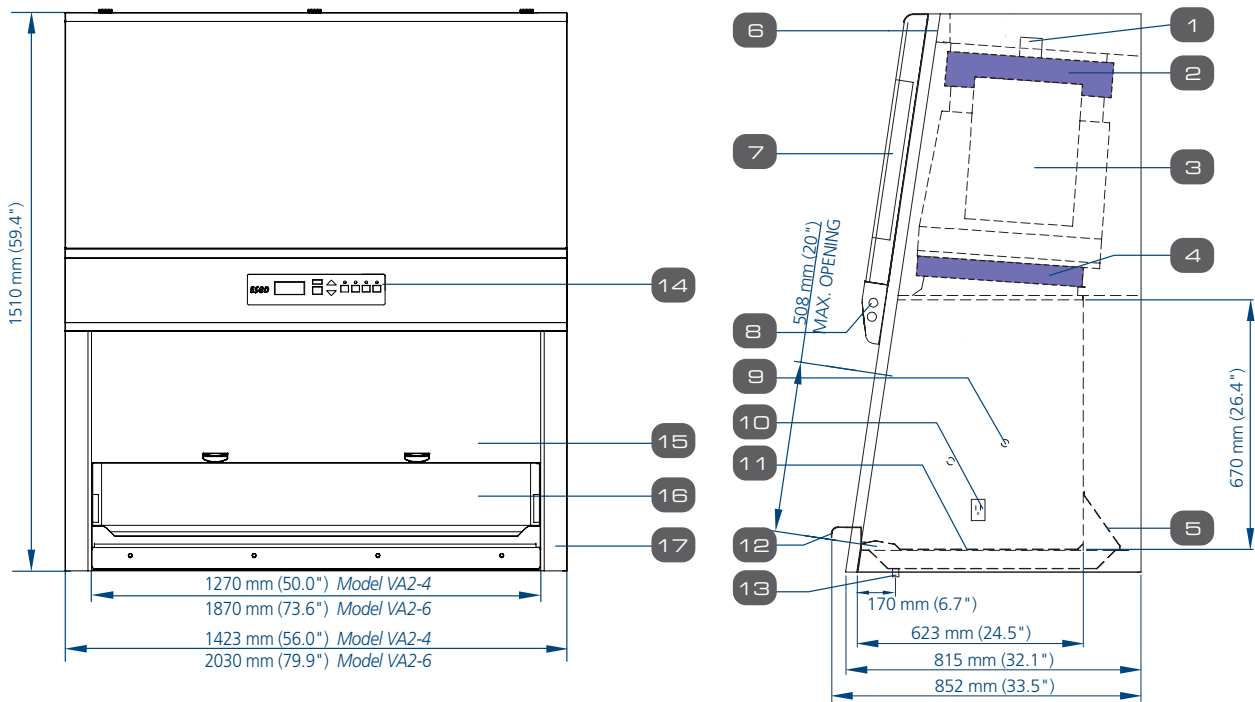
1. Airflow Sensor
2. Exhaust ULPA / H14 Filter
3. Energy-efficient DC ECM Blower
4. Downflow ULPA / H14 Filter
5. Pre-filter
6. RS 232 Port, zero volt relay contacts for exhaust and alarm system
7. Electrical Panel
8. Fluorescent Lamps
9. Plugged Service Fixture provisions (2 on each side)
10. Electrical Outlet Retrofit Kit Provision
11. Stainless Steel Single-piece Work Tray
12. Stainless Steel Arm Rest
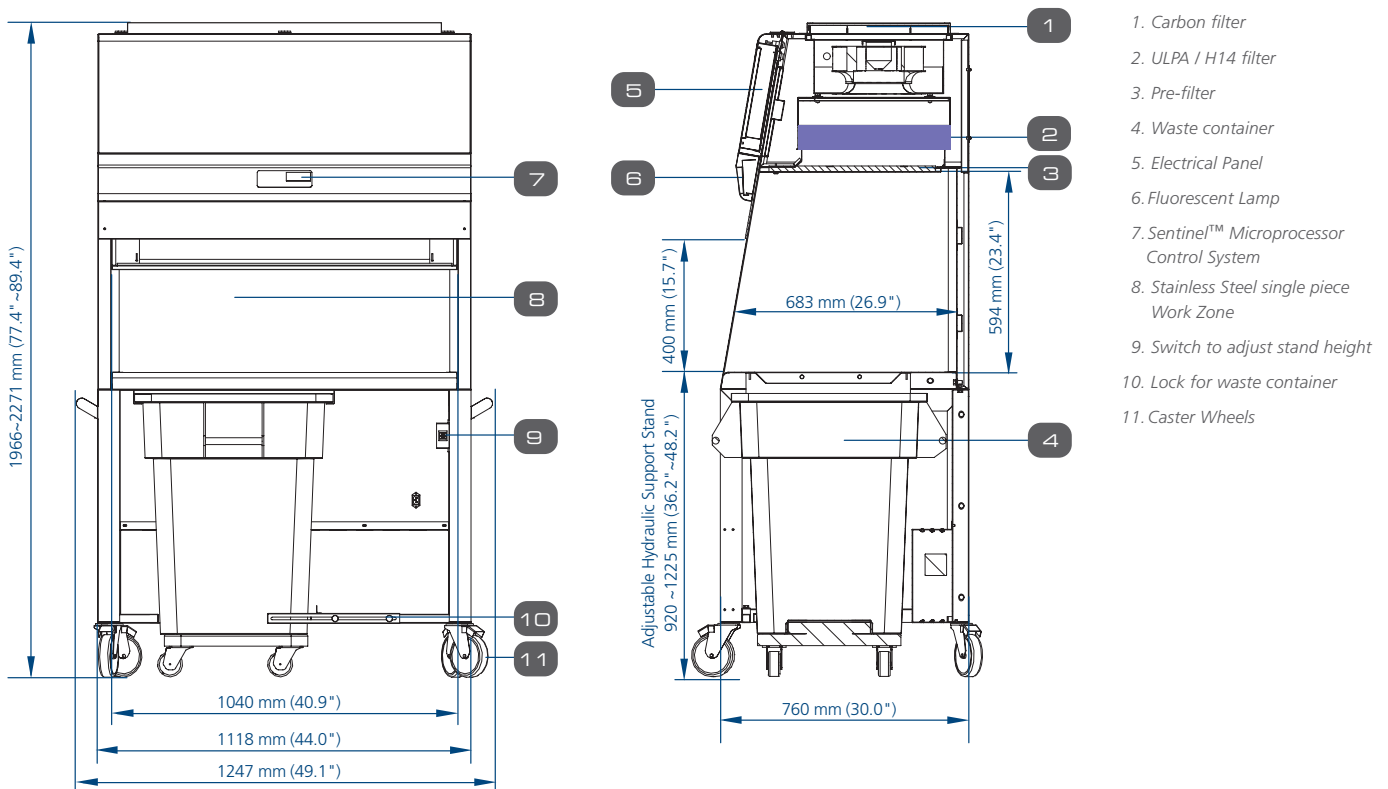13. Drain Valve Retrofit Kit Provision
14. Sentinel™ Gold Microprocessor Control System
15. Safety Glass Sliding Sash Window
16. Single-piece Stainless Steel Back Wall and Side Walls
17. Removable Side Panel for plumbing access

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General Specifications, VIVA® Bedding Disposal Workstation, Model VBD-4A_

Nominal Size	1.2 meter (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	<65 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 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 48.4")			
Shipping Volume, Maximum	4.87 m³ (172 cu.ft.)			
Electrical	Model	VBD-4A1	VBD-4A2	VBD-4A3
	Voltages	220-240 VAC, 50 Hz, 1Φ	110-120 VAC, 60 Hz, 1Φ	220-240 VAC, 60 Hz, 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 an 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™ Microprocessor Control System
8. Stainless Steel single piece Work Zone
9. Switch to adjust stand height
10. Lock for waste container
11. Caster Wheels

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ESCO LIFESCIENCES GROUP
42 LOCATIONS IN 21 COUNTRIES ALL OVER THE WORLD
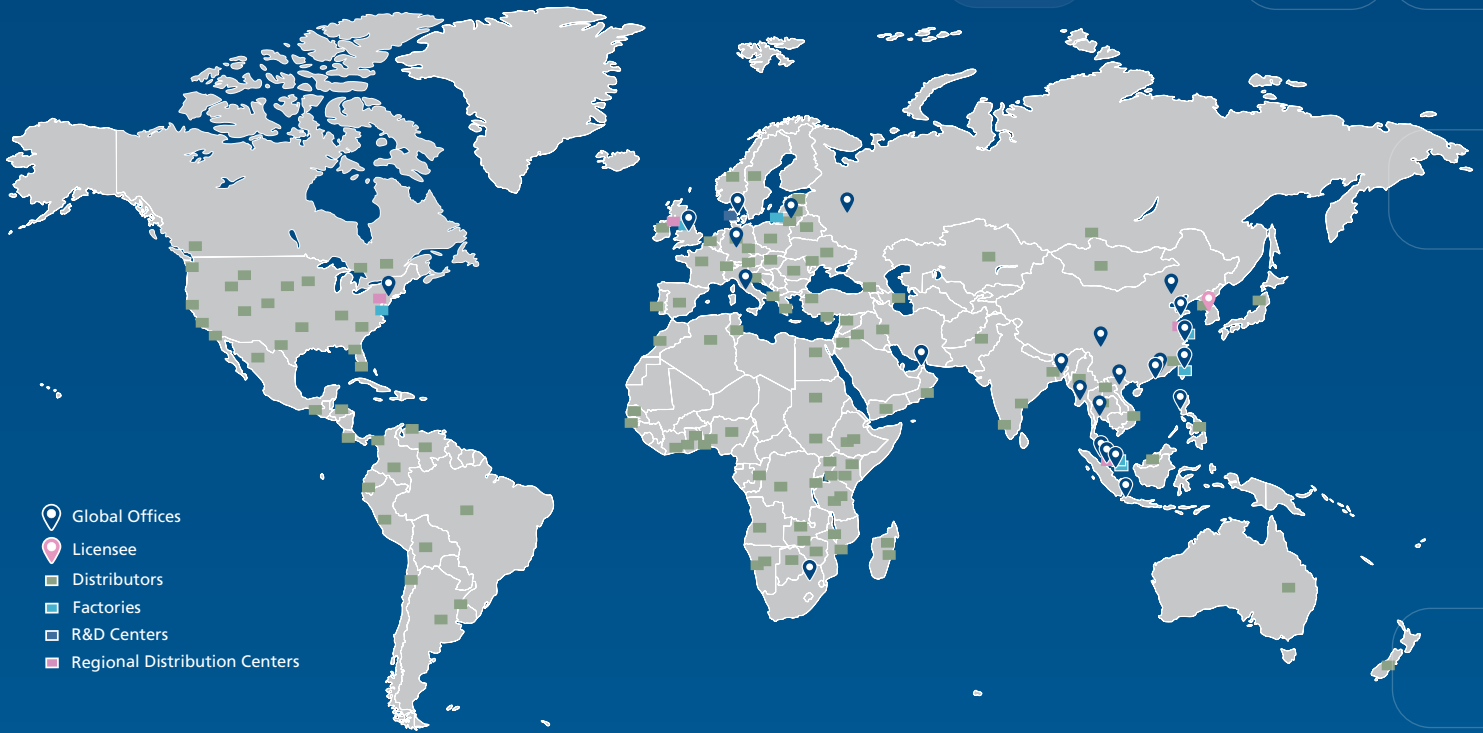
- ⦿ Global Offices
- ⦿ Licensee
- ▣ Distributors
- ▣ Factories
- ▢ R&D Centers
- ▣ Regional Distribution Centers

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ESCO®
LIFESCIENCES GROUP

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