



# LABGUARD<sup>ES LP</sup>

NU-640 CLASS II TYPE A2 ANIMAL HANDLING BIOSAFETY CABINET



The Safer Choice



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ISO 13485:2016 Fernbrook  
ISO 9001:2015 & Niagara  
**CERTIFIED** Locations



# NUAIRE

## THE NUAIRE ADVANTAGE

In 1971, Max D. Peters designed his first Biosafety Cabinet (BSC) from inside his garage at the behest of the National Institute of Health (NIH) in Bethesda, Maryland. The NIH put out a public purchase order (NIH-03-112c) for a machine that could guarantee the safety of scientific personnel and their research specimens. Max D. Peters helped establish the very fundamental standards that all modern Biosafety Cabinets are held to this very day. After being awarded the NIH contract, a new laboratory equipment engineering and manufacturing company, NuAire, was born. Today, NuAire, Inc. is still owned and operated by the Peters family in Plymouth, MN.

For nearly 50 years, NuAire has consistently led the industry in safety standards and customer satisfaction. We obsess over our customers' needs and tailor unique solutions to meet those needs. With invaluable input from customers like you, we now offer a wide range of BSCs, CO<sub>2</sub> incubators, animal handling devices, centrifuges, ultra-low freezers, acid-resistant polypropylene cabinetry and fume hoods, pharmacy compounding isolators, and much more. With our cutting-edge robotic sheet metal facility, we are able to deliver you custom, innovative laboratory safety solutions in addition to the standard products that we sell.

NuAire, Inc. has now sold more than 100,000 Biosafety Cabinets in more than 150 countries, spanning across all seven of the world's continents. We pride ourselves on our products' industry leading quality, reliability, low cost of ownership, and environmental sustainability. Our quality management system is certified to adhere to ISO 9001:2015 and 13485:2016 requirements. Our products are also celebrated for their ergonomic design, ease of use, and quiet operation. All standard BSC units sold in the US and Canada come with a 5 year parts & labor warranty. Every one of our machines are built specifically to your order, so we can guarantee your satisfaction.

As NuAire continues to grow, we are committed to continuously improving our products and expanding our offerings. We always strive to provide you with the optimum level of personnel, environmental, and product protection throughout any industry.

### NuAire's Quality Policy:

**Satisfy Customers**

**Comply with System Requirements**

**Continually Improve**

**Choose NuAire as the safer choice for your laboratory.**



# BUILT FOR SMALL LABS WITH BIG CAGES



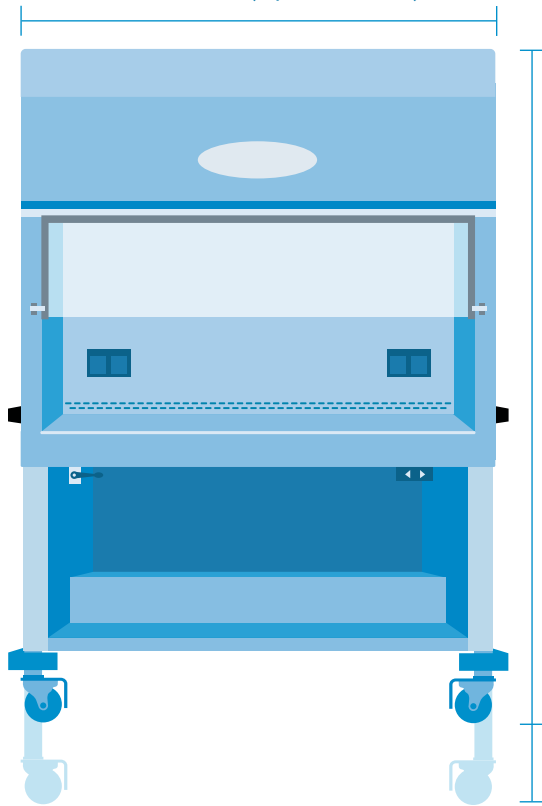
environmental,  
product & personnel  
protection

The LabGard® ES (Energy Saver) LP (Low Profile) NU-640 Class II, Type A2 Animal Handling Biosafety Cabinet (BSC) offers the largest access opening with the smallest footprint. The NU-640 is a full console model with a mechanical auto-rising base stand and built-in ergonomic footrest. With an extra large 14 inch [356 mm] hinged access opening and only a 78.25 inch [1988] unit height, this animal handling biological safety cabinet easily handles large rat cages in the smallest of vivarium laboratories. This BSC unit comes standard with heavy-duty reinforced casters and fits through most standard doorways for extra mobility. Like all other NuAire biosafety cabinets, the NU-640 utilizes a single ultra-high efficiency DC ECM motor with forward facing fan blades that reduces overall energy consumption and automatically compensates for variances in filter loading. A flat prop-up work tray allows easy access to the single mesh pre-filter and makes cleaning the work zone a breeze.

# COMPATIBLE WITH LOW CEILINGS

56.375-80.375" [1433-2042 mm]

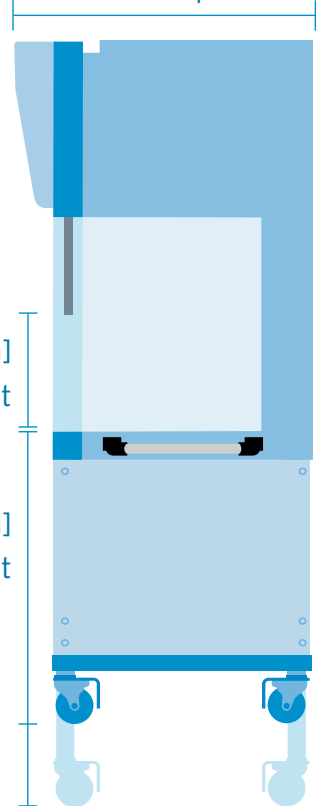
Unit Width (w/ Pull Bars)



78.25-86.25"  
[1988-2191 mm]  
Unit Height

33" [838 mm]

Unit Depth



14" [356 mm]  
Sash Height

35-43" [889-1092 mm]  
Work Surface Height

# FITS THROUGH STANDARD DOORWAYS

## Mobility in Your Animal Facility

By placing the ultra-high efficiency DC ECM motor into the cabinet's base stand, the NU-640 frees up significant space over the top of the unit, increasing compatibility with low ceilings. We also shortened the unit's overall depth to easily be moved from room to room through any standard doorway. The side-mounted pull bars and heavy-duty casters also come standard with any NU-640 cabinet. The unit's height can be adjusted with a simple push of a button on the hydraulic auto-rising base stand.





## EXTRA-LARGE ACCESS OPENING

The LabGuard® ES LP NU-640 Offers the Largest Access Opening in the Vivarium Industry. The tall 14 inch [356 mm] access opening easily fits large rat cages and provides ample room to stack empty cages without cluttering the work surface and disrupting the laminar downflow air. As a Class II, Type A2 biological safety cabinet, the LabGuard NU-640 provides personnel, product, and environmental protection by combining 105 fpm [0.53 m/s] in-flow with 60 fpm [0.30 m/s] true laminar down-flow. A cleanable pre-filter is located under the work surface to capture excess bedding, hair, and dander, which extends the overall life of your HEPA filters.



### Minimize Cross-Contamination

Comfortably reach in and around large rat cages without compromising the laminar airflow, minimizing the potential for cross-contamination within the work zone. You can easily stack several mouse and/or rat cages while maintaining plenty of space to access the back-wall outlets.

# EASY TO CLEAN



## Hinged Front Panel

The hinged access window also allows you to comfortably reach in and clean\* every corner of your work zone. A drain valve is located directly under the flat stainless steel work zone to assist in routine cleaning of the trough.

**\*CAUTION:** Do **NOT** use chlorinated or halogen cleaning agents. A disinfectant agent compatible with the stainless steel work surface is recommended.

## PROP-UP WORK TRAY

The NU-640 comes standard with a prop-up work tray to easily access the fabric mesh pre-filter and comfortably clean the trough without having to hold up the stainless steel work surface.



# SUPERIOR ERGONOMICS

experience  
ergonomics

## NuAire Laboratory Equipment Boasts Superior Ergonomics Without Compromising on Safety.

Technicians often spend several hours in front of their work station; this makes ergonomic comfort a necessity. Our engineer's design specifically reduces arm, shoulder, and neck strain that often contribute to workplace injuries. Set the NU-640 work surface to your perfect height with a simple push of a button on the auto-rising base stand.



**Heavy-Duty Casters with Built-in Brakes**



**Flat Stainless Steel Work Tray**

## Built-In Footrest

The standard auto-rising base stand allows you to set the work surface height at a range of 35 to 43 inches [889 to 1092 mm] and comes with a built-in stainless steel footrest.





# CONSTRUCTION FEATURES & OPTIONS

The nominal 6 foot [1.8 m] wide cabinet allows the ability to mix and match an assortment of configurations. Add Dirty Cage Collection and/or Refuse Disposal Options to create your ideal animal handling BSC.



## Refuse Disposal Options

Dispose animal bedding and waste directly into a waste bin from the sterile work zone.



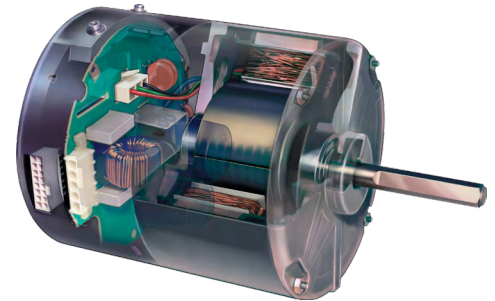
## Dirty Cage Collection System

Pass dirty cages directly through the side wall port into an attachable bio-hazard bag.

## Ultra-High Efficiency DC ECM Motor.

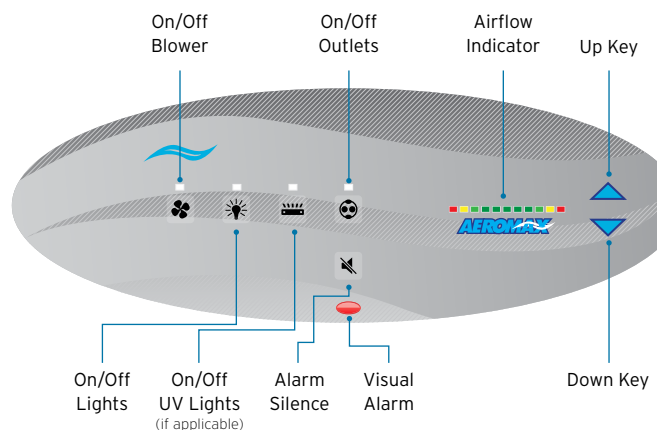
Combining a single ultra-high efficiency DC ECM motor with forward facing fan blades reduces energy consumption while extending the lifespan of your filters. Our LabGard Series offers the lowest total cost of ownership when compared to other BSC models.\*

*\*Compares NuAire DC ECM motor technology and a BSC featuring DC motor technology.*



# AEROMAX

The AeroMax™ Control System is a streamlined control panel that monitors and displays cabinet airflow status via our single PressureFlow™ sensor - a specialized digital pressure transducer. The control panel also notifies lab workers with both audio and visual alarms if the unit's airflow pressure departs significantly from its set point. The user interface is operated through a series of buttons and LED indicators, which control the unit's LED lights, interior outlets, and single DC ECM motor/blowers.

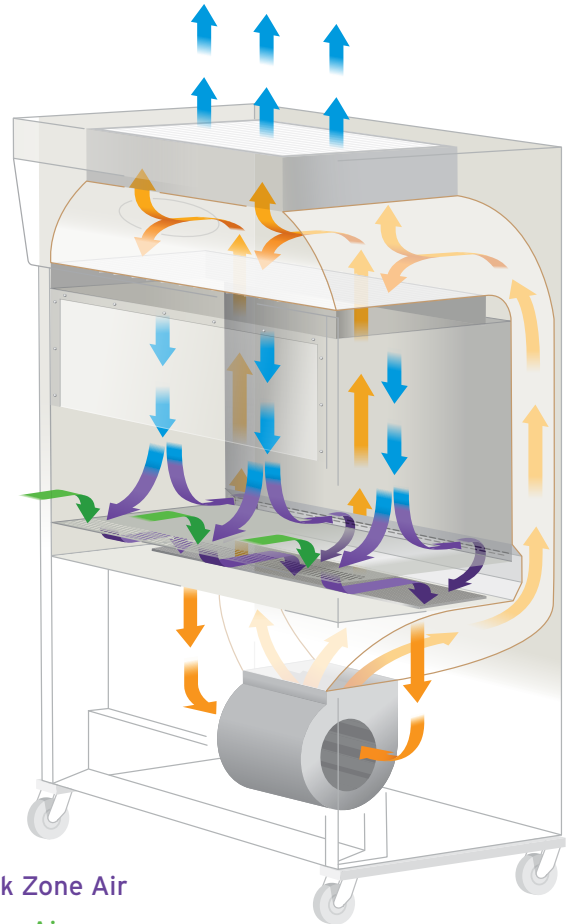


*\*UV light is not available on the NU-640 model.*

# CLASS II TYPE A2 PROTECTION

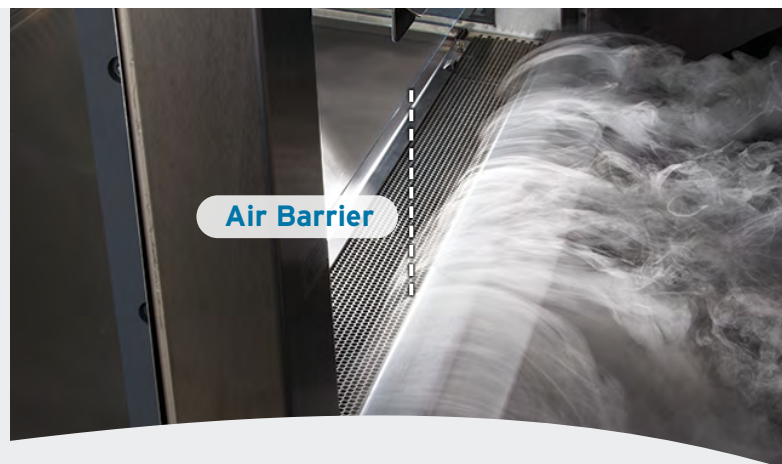


Our **Commitment to Safety** doesn't stop at simply meeting the industry standards. Every NuAire product goes through a stringent series of checks and balances before it arrives at your laboratory. As your product moves through each phase in the assembly process, each work station double checks the quality of the previous station; all filters are triple checked. Our unique HEPEX™ Zero Leak Airflow system evenly disperses air across the supply filter, which minimizes vibration transfer, reduces noise, and eliminates potential leaks by surrounding the positive pressure plenum with negative air pressure. The work zone is flushed with ISO class 5 quality air. 105 fpm [0.53 m/s] in-flow combined with 60 fpm [0.30 m/s] true laminar down-flow creates the dynamic air barrier, offering personnel, product, and environmental protection.



environmental,  
product & personnel  
protection

-  HEPA Filtered Air
-  Contaminated Work Zone Air
-  Contaminated Room Air
-  Pre-filtered Work Zone Air



**true laminar**

True laminar downward moving air flushes the work surface at 60 fpm [0.30 m/s] minimizing cross-contamination within the work zone.

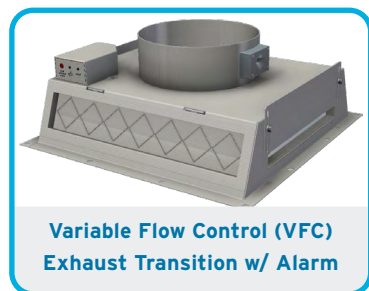
*dynamic air barrier*

Constant inflow air speed of 105 fpm [0.53 m/s] creates a dynamic air barrier at the front of the cabinet, separating the lab from the work zone.

# NU-640 Specifications

Class, Type, Style	Class II, Type A2, Console		
Model #	NU-640-400	NU-640-500	NU-640-600
Nominal Widths	4 ft [1.2 m]	5 ft [1.5 m]	6 ft [1.8 m]
Work Zone Dimensions (W x D x H)	46.5 x 22.75 x 24.625 in [1181 x 578 x 626 mm]	58.5 x 22.75 x 24.625 in [1486 x 578 x 626 mm]	70.5 x 22.75 x 24.625 in [1791 x 578 x 626 mm]
Exterior Dimensions (W x D x H)	56.375 x 33 x (78.25-86.25) in [1433 x 838 x (1987-2190) mm]	68.375 x 33 x (78.25-86.25) in [1737 x 838 x (1987-2190) mm]	80.375 x 33 x (78.25-86.25) in [2042 x 838 x (1987-2190) mm]
Net Weight	560 lbs [254 kg]	650 lbs [295 kg]	740 lbs [336 kg]
Certifications	UL listed*		
Access Opening / Type	14 in [356 mm] (Hinged)		
Electrical	115 VAC / 60 Hz		
Filter Load Capacity	250%		
Airflow	105 fpm [0.53 m/s] Dynamic In-Flow, 60 fpm [0.30 m/s] True Laminar Down Flow		
Supply Filter	ISO Class 5 Air Protection		
Pre-Filter	3 in [76 mm] HEPA 99.99% Efficient @ 0.3 microns		
Exhaust Filter	Animal Hair / Dander Pre-Filter		
Control System	6 in [152 mm] HEPA 99.99% Efficient @ 0.3 microns		
Lighting	Aeromax™ w/ PressureFlow™ Pressure Sensor		
Password Protection	LED		
Noise Level	Yes		
Construction Options	Up to 67 dba		
	Coved Interior Corners		
	Two (2) Outlets (Back Wall)		
	Removable Stainless Steel Easy-to-Clean Flat Prop-Up Work Tray		
	Side-Mounted Pull Bars		
	Up to Four (4) Service Valves/Couplings (2 per Right/Left Sidewalls)		
	Attachable Stainless Steel Armrest		
	16/18 gauge Stainless Steel Welded Construction		
	Stainless Steel Spill Trough w/ Drain Valve		
	AttenuMont™ Vibration Control Support System		
	Permanent Positive Pressure Plenum w/ Quick Release Supply Filter Removal		
	Customized Dirty Cage Collection Bin w/ Exterior Sidewall Mounted Shelf		
Integral Base Stand	Stainless Steel Window Edge Protector		
	Customized Heated Work Surface		
	Customized Waste Disposal System		
Popular Accessories	Motorized Adjustable Base Stand w/ Built-In Footrest		
	Exhaust Canopy		
	Butterfly Damper		
	Flex Duct		
	Standard Feature	Optional Feature	

\*Factory tested to meet NSF/ANSI:49 requirements as a Class II, Type A2 biosafety cabinet.



# LABGUARD<sup>ES</sup> LP<sup>®</sup>

**NU-640** CLASS II TYPE A2 ANIMAL HANDLING BIOSAFETY CABINET



## The Safer Choice

For more information please visit:

[www.nuaire.com](http://www.nuaire.com) or call **1.800.328.3352**



Your Local NuAire Partner:



ISO 13485:2016 Fernbrook  
ISO 9001:2015 & Niagara  
CERTIFIED Locations

