

LABGARD ES energy saver

CELLGARD ES energy saver

CLASS II BIOLOGICAL SAFETY CABINETS



Sustainability

We at NuAire continually strive to improve our responsibilities to the economy, environment, social communications, and our customer satisfaction. Our commitment extends to purchasing or using products that reduce energy consumption, reduce environmental impact, minimize pollution and make use of recycled content that will not deplete natural resources. We continually use more recycled materials in our cabinets through both design and supplier part and process improvements. The following chart represents our current level of sustainability for Biological Safety Cabinets.

General Cabinet Component Description	% Content by Weight	% of Recycled Material used in Manufacturing	% Recyclable
Stainless Steel	75%	80%	100%
Mild Steel	10%	10%	100%
Copper	2%	0%	100%
Aluminum	2%	50%	100%
Glass	3%	0%	100%
Electronics	1%	0%	25%
Filter Media	1%	0%	0%
Misc. Plastic Parts	1%	0%	0%
Packing Materials	5%	60%	95%
	100% BSC	65%	97%

Controlled Environments for Optimum Protection



NU-425



NU-437



NU-440



NU-427



NU-430 / 435



NU-475



NU-477



NU-480



NU-481

Model	Type	Exhausted Air vs. Recirculated Air	Available Sizes (nominal)	Safety	Performance Specifications*
LabGard					
NU-425	A2	30% / 70%	2, 3, 4, 5, 6 ft.	All models: Product protection Personnel protection Environmental protection	All models: NSF / ANSI 49 EN12469 UL/UL-C Listed
NU-437	A2	30% / 70%	3, 4, 5, 6 ft.		
NU-440	A2	30% / 70%	3, 4, 5, 6 ft.		
NU-427	B1	70% / 30%	4, 6 ft.		
NU-430 / 435	B2	100% / 0%	3, 4, 6 ft.		
CellGard					
NU-475	A2	30% / 70%	3, 4, 5, 6 ft.	CellGard NU-481: EN12469 UL/UL-C Listed	
NU-477	A2	30% / 70%	3, 4, 5, 6 ft.		
NU-480	A2	30% / 70%	3, 4, 5, 6 ft.		
NU-481	A2	30% / 70%	4, 5, 6 ft.		

* Please note that performance specifications and listings vary for models and types. Please consult NuAire for exact performance specifications and listings. Not all certifications apply to all products.



Select Your Perfect Cabinet

1 Select Your Slope

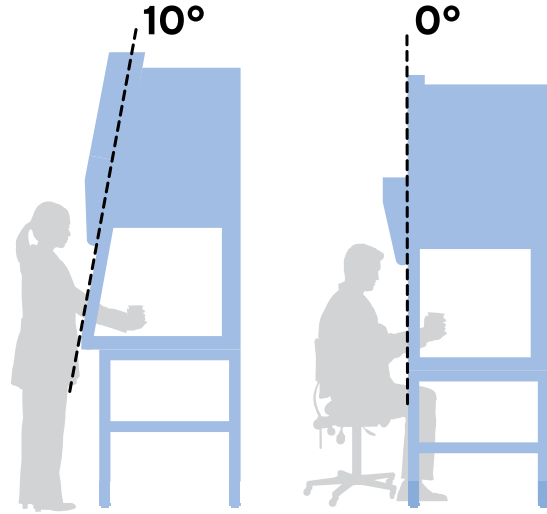
Cabinets are available with 0° (vertical) or 10° window angle



CellGard Class II
Biological Safety Cabinet with 10° Slope



LabGard Class II
Biological Safety Cabinet with 0° Slope



2 Select Your Controls



TOUCHLINK™
Electronic Control System
Auto Monitor and Control Real Time Airflow



FLOWGARD™
Easy Clean Touch Pad Control System
Auto Monitor Plenum Pressure



ESSENTIALS
Easy to Use Toggle Switch Controls
Manual Monitor Plenum Pressure

3 Select Options and Accessories

Many Accessories and Options, Plus Custom Configurations Are Available



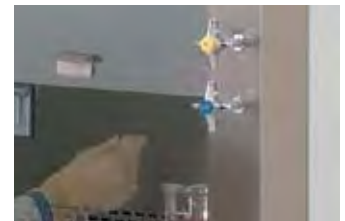
Motorized Adjustable Base Stand



Base Stand with Storage Cabinet



Motorized Adjustable Base Stand
with casters



Remote Controlled Service Valves

Also Available:

Ultraviolet Germicidal Lamps
Faucets and Sinks, Cup Sinks
Pre-Piped Plumbing

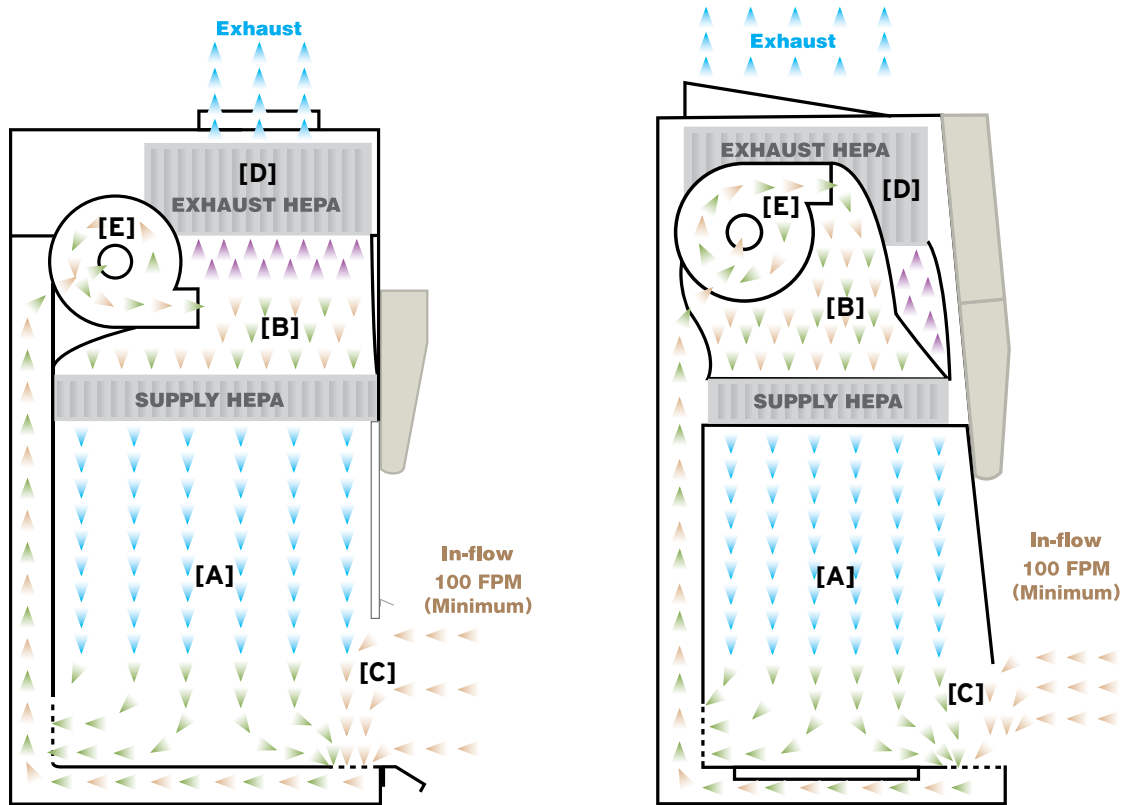
Ground Fault Interrupter
Side Panels
Seismic Brackets

Metal Frame HEPA Filter
Microscope Window
Heated Work Surface



For more information contact NuAire, Inc. at 1.800.328.3352 or www.nuaire.com

Improved Principles of Biological Safety Cabinet Design



Class II Type A2 Biological Safety Cabinet
Airflow Schematics

▶ **HEPA FILTERED AIR**
 ▶ **CONTAMINATED WORK SURFACE AIR**
▶ **ROOM AIR**
 ▶ **CONTAMINATED EXHAUST AIR**

True Laminar Airflow [A]

Unidirectional airflow moving along parallel flow lines at a constant velocity minimizes air turbulence within the work zone.

HEPEX™ Zero Leak Airflow System [B]

The HEPEX™ Zero Leak Airflow System eliminates the possibility of cabinet and gasket leaks.

Greater Volume of Air Creates a Stronger Air Barrier [C]

Air exchanges within the Class II Type A2 Biological Safety Cabinet occur 25 times per minute.

Larger, Long Lasting HEPA Filters [D]

NuAire utilizes HEPA filters that are typically 25% larger than those in competitive products.

Motor/Blower System Extends HEPA Filter Life [E]

As the HEPA filter loads the motor/blower system automatically compensates to assure performance and extended filter life.

Stainless Steel Construction

Centrally Located Control Center

State-of-the-Art Electronic Safety System

Improved Quality, Reduced Noise

Biological Tolerance Testing Assures Optimal Performance



Registered to: ISO 9001:2008
ISO 13485:2003



The best fit for your lab.

Advancements for biological safety cabinets

1 Ability to Sit or Stand at a Range of Heights



The cabinet design maximizes knee/thigh clearance to improve posture and the adjustable base stand allows optimization for leg and forearm support.

2 Expanded Vision Zone Reduces Awkward Postures and Proper Lighting Reduces Glare



Cabinets incorporate cool white lighting and frameless polished edge windows to allow for greater visibility and better sight lines.

3 Forearm Support for Comfort and Safety



Elbow Rest

- Improves forearm support and keeps arms off front air grill
- Closed cell foam - easy to clean
- Rubber feet caps allow for use on variety of grill configurations



Foam Armrest Pad

- Increased forearm comfort
- Closed cell non-absorbing foam pad
- Disposable pad-self-adhesive tape for easy application and removal (10 pads per package)

4 Effective Work Zone Area for More "User-Friendly" Space



Turntable

NuAire's cabinets provide the largest effective work zone which helps reduce arm/neck/shoulder strain. Extend reach up to 12" with 100% stainless steel turntable (ball bearing construction, easy to clean and can be autoclaved).



5 Ergonomically Designed Laboratory Chair and Footrest

NuAire's BioFit® chair has a star-based platform with adjustable height, back and lumbar support. The non-skid adjustable footrest provides optimal foot/leg support.



BioFit® Chair
Adjustable Footrest

6 Class II Type A2 Cabinet with an Air-Break Canopy Transition*

Class II Type A2 Cabinets with an adjustable base can be canopy connected with the use of Flex Duct and an Air-Break Transition. *Flex Duct necessary if used with adjustable base stand.



Air-Break Canopy Transition

Accessories



Automatic Adjustable
Base Support Stand



Adjustable Footrest



Elbow Rest



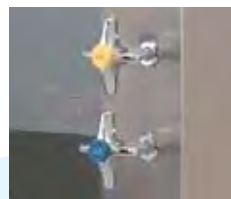
Stainless Steel Turntable



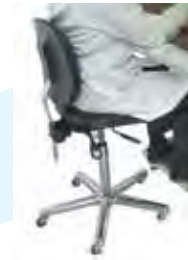
Foam Armrest Pad



Air-Break Canopy Transition



Remote Controlled Service Valves



BioFit® Ergonomic Adjustable Chair

Accessories from Scientific Visions make a difference. Order online at www.scientificvisions.com

Total Cost of Ownership Motor Comparison

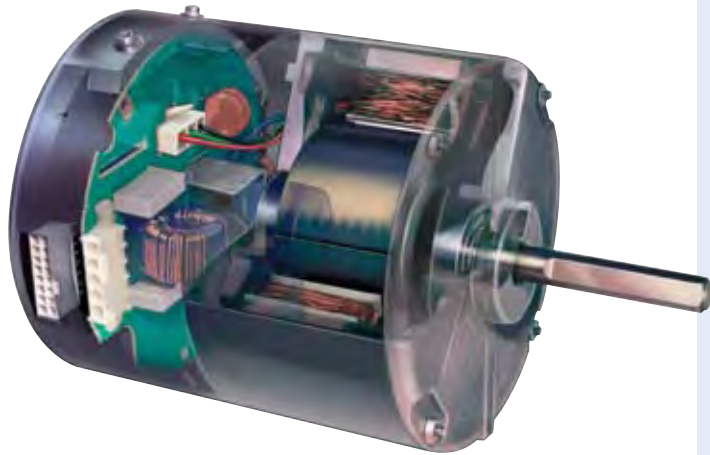
Comparison	NuAire DC ECM	NuAire AC PSC	BSC A AC 3-Phase	BSC B DC
8 hrs per day / 5 days per week = 2,000 hrs per year				
KWH per year	598	1128	828	326
\$0.09/kwh	\$54	\$102	\$75	\$29
24 hrs per day / 7 days per week = 8,736 hrs per year				
KWH per year	2612	4927	3617	1424
\$0.09/kwh	\$235	\$443	\$326	\$128
15 Year Life Cycle Costs				
Avg. Filter Changes*	1 Set	2 Sets	1 Set	3 Sets
Estimated Cost of HEPA Filters	\$715	\$1,430	\$715	\$2,145
Total Cost of Decon/Certification	\$450	\$900	\$450	\$1,350
Motors to Replace**	1 Motor	1 Motor	1 Motor	2 Motors
Cost of Motors/ Power Supplies/ Fan Control	\$650	\$420	\$725	\$2,544
Utility Costs (2,000 hrs/yr over 15 years)	\$810	\$1,530	\$1,125	\$435
Total Cost of Ownership	\$2,625	\$4,280	\$3,015	\$6,474

* Estimate (See Filter Load Capacity)

** Estimate based on historical information.

Disclaimer: This example is for illustrative purposes only and should not be deemed a representation of future performance or a guarantee of any kind. Information is based on internal performance data obtained through NuAire® testing and information provided by motor, blower, HEPA filter manufacturers, and independent service technicians.





Experience energy savings with DC ECM Technology

NuAire incorporates our existing technology and new DC ECM technology to give you the best VALUE – lower energy costs, longer filter life, and reduced noise and vibration.

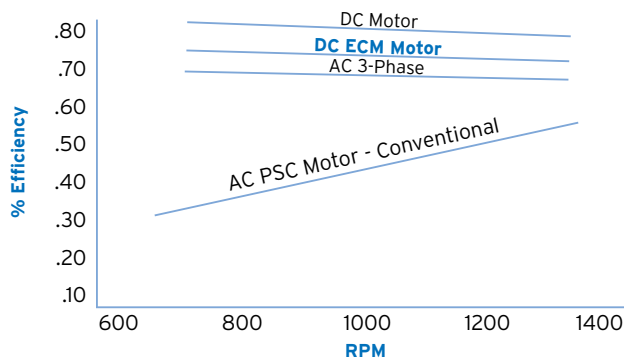
Benefits of NuAire cabinets

- Largest HEPA filters with the most pleats per square inch
- Choice of three control systems
- Motor Speed Control
- Internal exhaust damper
- Optimally determined fan for each model size/width

Added benefits from DC ECM technology

- Less energy to operate
- Greater horsepower and lower potential RPM
- Integrated digital control system
- Longer filter life
- Lowest possible noise and vibration
- Ability to upgrade classic AC PSC motor technology in existing cabinets to realize future energy savings

Fan Motor Efficiency



Higher RPMs represent filter loading from particulates in the laboratory.

Filter Loading Capacity

DC ECM technology increases filter life from the NSF minimum requirement of 50% or an approximate 3 year equivalent life to 10 years or more.

Percent increase in total load capacity*:

- 85% - DC (4 Years)
- 180% - AC PSC (7 Years)
- 250% - DC ECM (10 Years)
- 250% - AC 3-Phase (10 Years)

*Percent increase testing based on NSF/ANSI 49, ANNEX A.12 motor/blower performance test methods.

Energy Costs	AC PSC	DC ECM	DC	AC 3-Phase
Kilowatts	.564	.299	.163	.414
KWH	4927	2612	1424	3617
Annual Cost (\$/KWH)*	\$443.43	\$235.09	\$128.16	\$325.53

4 Foot Type A2 BSC that runs 24/7 (8736 hours per year) plus the energy required to control the laboratory ventilation by adding the rejected heat.

* U.S. DOE Average Cost

Noise	AC PSC	DC ECM	DC	AC 3-Phase
Airflow (Design)	N/A	N/A	N/A	N/A
Fan (RPM)	1100-1700	800-1400	1400-2200	800-1400
Motor (Harmonics)	Yes	No	No	No

Vibration	AC PSC	DC ECM	DC	AC 3-Phase
Airflow (Design)	N/A	N/A	N/A	N/A
Fan (RPM)	Higher	Lower	Higher	Lower

Longer HEPA Filter Life

NuAire HEPA filters feature more filter media per square inch that translates into longer life. Introduce this type of filter into the proper system and you significantly increase the life of your filter resulting in increase safety and lower operating costs. NuAire uses a single ultra high efficiency DC ECM motor to lower energy costs but push more air through the filter over time. An internal exhaust dampener provides accurate control over airflow resulting in extended filter life.

The Energy Saver system built into every NuAire Biological Safety Cabinet can extend your HEPA Filter's life 10 or more years by engineering the following features into the system:

- Ultra High Efficiency DC ECM Motor
- Internal Exhaust Control Dampener
- Larger Exhaust HEPA Filter
- Larger Supply HEPA Filter
- Electronic Motor Speed Controller

- NU-480 (Class II Type A2)
- NU-481 (Class II Type A2)
- NU-440 (Class II Type A2)
- NU-427 (Class II Type B1)
- NU-430 / 435 (Class II Type B2)

The **TOUCHLINK** is an easy-to-use touch screen LCD which will operate and display all system functions. On / off functions for fluorescent and germicidal ultraviolet lights, blower motor, and interior outlets. Monitors high / low limits for downflow, inflow, and sliding window position. The password protected **TOUCHLINK** also contains a unique date/clock display and timer function which can be used as a laboratory timer, to set purge cycles, outlet timer, UV light timer, auto-run timer, night setback, or weekend turn-off. The **TOUCHLINK** also contains diagnostic functions for a NSF trained service technician or certifier.

nitecare™- A unique system initiated by the window closure, will reduce motor / blower operational airflow to conserve energy while maintaining work zone sterility.

intelliflow™- Fast, Accurate, Reliable, Dual Thermistor Airflow Sensors powered by TSI. The same sensor technology used in certification instruments designed to assure BSC optimal performance.



Interchangeable control panel face plates available.



NU-425, NU-475 (Class II Type A2)

The **ESSENTIALS** cabinet control system includes a minihelic pressure gauge, motor voltage regulator, audible and visual window alarm, main and outlet power circuit breakers, and power switches for exterior mounted fluorescent lights and / or ultraviolet lights, interior outlets, and blower motor.



NU-437, NU-477 (Class II Type A2)

The **FLOWGARD™ US** Electronic Control System Features:

Easy to Clean Touch Pad

On / Off Functions for:

Fluorescent Lighting

Ultraviolet Germicidal Light

Blower / Motor

Duplex Outlets

Monitors Window Position

Ring Back Function

Password Protection

Audible and Visual Alarms

Remote Alarm Connector

Relay contact closures for interaction with HVAC
if BSC is connected to external exhaust.

Digital Pressure Transducer

Monitors BSC Positive Pressure Plenum

Green LED- Normal Operation

Red LED- High Alarm Status

HEPA Filter Loading

Low Alarm Status

Low Airflow

nitecare™- initiated by the window closure, will reduce motor / blower operational airflow to conserve energy while maintaining work zone sterility.



NU-475

NU-477

NU-480

Class II Type A2 Biological Safety Cabinets

The CellGard Class II Biological Safety Cabinet can be either exhausted back into the room or connected to a facility HVAC system. The cabinet's airflow is 30% exhausted / 70% recirculated to minimize cross-contamination of low to moderate risk biologicals in the absence of volatile toxic chemicals.

Specifications

Model	Size (Nominal)	Electrical* (All Sizes)	Interior Dimensions (W x H x D) [mm]	Exterior Dimensions (W x H x D) [mm]	Weight
NU-475-300	3 ft.		34 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [873 x 724 x 664]	41 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1057 x 1572 x 838]	475 lbs. / 215 kg.
NU-475-400	4 ft.	115 VAC / 60 Hz	46 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1178 x 724 x 664]	53 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1362 x 1572 x 838]	565 lbs. / 256 kg.
NU-475-500	5 ft.	E: 230 VAC / 50 Hz-60 Hz	58 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1483 x 724 x 664]	65 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1669 x 1572 x 838]	665 lbs. / 302 kg.
NU-475-600	6 ft.		70 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1788 x 724 x 664]	77 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1972 x 1572 x 838]	750 lbs. / 340 kg.
NU-477-300	3 ft.		34 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [873 x 724 x 664]	41 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1057 x 1572 x 838]	475 lbs. / 215 kg.
NU-477-400	4 ft.	115 VAC / 60 Hz	46 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1178 x 724 x 664]	53 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1362 x 1572 x 838]	565 lbs. / 256 kg.
NU-477-500	5 ft.	E: 230 VAC / 50 Hz-60 Hz	58 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1483 x 724 x 664]	65 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1669 x 1572 x 838]	665 lbs. / 302 kg.
NU-477-600	6 ft.		70 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1788 x 724 x 664]	77 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1972 x 1572 x 838]	750 lbs. / 340 kg.
NU-480-300	3 ft.		34 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [873 x 724 x 664]	41 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1057 x 1572 x 838]	475 lbs. / 215 kg.
NU-480-400	4 ft.	115 VAC / 60 Hz	46 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1178 x 724 x 664]	53 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1362 x 1572 x 838]	565 lbs. / 256 kg.
NU-480-500	5 ft.	E: 230 VAC / 50 Hz-60 Hz	58 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1483 x 724 x 664]	65 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1669 x 1572 x 838]	665 lbs. / 302 kg.
NU-480-600	6 ft.		70 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1788 x 724 x 664]	77 ⁵ / ₈ x 61 ⁷ / ₈ x 33 [1972 x 1572 x 838]	750 lbs. / 340 kg.

*Specify model with appropriate letter suffix for electrical specifications. "NU-425-300E" for 230 VAC / 50 Hz

Features

Standard Features

- Energy Saver (ES) DC/ECM Motor
- Motor Speed Control
- Internal Exhaust Dampener
- Monolithic Pressure Tight Design
- Wood Frame Large HEPA Filters 99.99% @ 0.3 Microns
- 10" Access Opening (4, 5, 6 ft. Models)
- 8" Access Opening (3 ft. Models)
- External Fluorescent Lighting
- Front Filter Removal
- Frameless Sliding Tempered Glass View Screen
- 30° Hinged Wing Window Frame
- Armrest
- Removeable Work Tray
- Metal Diffuser Over Supply Filter
- Spill Trough with Drain Valve
- One Duplex Outlet Backwall (3ft. Models)
- Two Duplex Outlet Backwall (4, 5, 6 ft Models)
- Two Service Valves Right Side Wall
- DECON Sealable Window

Optional Features and Accessories

- DECON 101 System
- Germicidal UV Light
- Ground Fault Interrupter
- Additional Duplex Outlet
- IV Bar with Six Hooks
- Base Support Stand
- Base Storage Cabinet
- Auto Lift Base Stand
- Hinged Viewing Window
- Microscope Window
- Additional Service Valves
- Remote Service Valves
- Exhaust Transitions
- ULPA Filters 99.999% @ 0.12 Microns
- Metal Framed HEPA Filters
- Permanent Plenum with Quick Release Supply Filter (NU-425)
- Storage Pull-Out Trays
- Decorative Side Panels
- 8" (203 mm) Access Opening (4, 5, 6 ft. Models)
- Sinks with Hot/Cold or DI water Faucets

- Heated Worksurface
- Adjustable Footrest
- Elbow Rests
- Custom Solutions

NU-480 Features

- TOUCHLINK™ Control System
- intelliflow™ - Monitor, Display, and Control Airflow Via Digital Dual Thermistor Airflow Sensors
- Alarm Setpoints
- Date/Clock Display, with Timer Functions
- Light and Outlet Control Via Solid State Switch
- Password Protection
- nitecare™ - Night Setback System

NU-477 Features

- FLOWGARD™ Control System
- On/Off Functions For:
 - Blower/Motor
 - Lights
 - UV Light
 - Outlets
 - Window Alarm Silence
 - Monitor Window Position

- Password Protection
- Audible and Visual Alarms
- Ring Back Function
- Plenum Monitor Via Digital Pressure Transducer
- nitecare™ - Night Setback System

NU-475 Features

- ESSENTIALS Control System
- Power Switch Controls For:
 - Blower/Motor
 - Lights
 - UV Light
 - Outlet(s)
 - Window Alarm
- Minihelic Pressure Gauge
- Audible and Visual Window Alarm



critical cleaning components™





NU-425

NU-437

NU-440



Class II Type A2 Biological Safety Cabinets

The LabGard Class II Type A2 Biological Safety Cabinet can be either exhausted back into the room or connected to a facility HVAC system. The cabinet's airflow is 30% exhausted / 70% recirculated to minimize cross-contamination of low to moderate risk biologicals in the absence of volatile toxic chemicals.

Specifications

Model	Size (Nominal)	Electrical* (All Sizes)	Interior Dimensions (W x H x D) In. [mm]	Exterior Dimensions (W x H x D) In. [mm]	Weight
NU-425-300	3 ft.	115 VAC / 60 Hz	34 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [873 x 724 x 597]	41 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1057 x 1600 x 835]	475 lbs. / 215 kg.
NU-425-400	4 ft.	E: 230 VAC / 50 Hz-60 Hz	46 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [1178 x 724 x 597]	53 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1362 x 1600 x 835]	500 lbs. / 227 kg.
NU-425-500	5 ft.		58 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [1483 x 724 x 597]	65 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1667 x 1600 x 835]	600 lbs. / 273 kg.
NU-425-600	6 ft.		70 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [1788 x 724 x 597]	77 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1972 x 1600 x 835]	680 lbs. / 308 kg.
NU-437-300	3 ft.	115 VAC / 60 Hz	34 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [873 x 724 x 597]	41 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1057 x 1600 x 835]	475 lbs. / 215 kg.
NU-437-400	4 ft.	E: 230 VAC / 50 Hz-60 Hz	46 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [1178 x 724 x 597]	53 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1362 x 1600 x 835]	500 lbs. / 227 kg.
NU-437-500	5 ft.		58 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [1483 x 724 x 597]	65 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1667 x 1600 x 835]	600 lbs. / 273 kg.
NU-437-600	6 ft.		70 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [1788 x 724 x 597]	77 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1972 x 1600 x 835]	680 lbs. / 308 kg.
NU-440-300	3 ft.	115 VAC / 60 Hz	34 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [873 x 724 x 597]	41 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1057 x 1600 x 835]	475 lbs. / 215 kg.
NU-440-400	4 ft.	E: 230 VAC / 50 Hz-60 Hz	46 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [1178 x 724 x 597]	53 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1362 x 1600 x 835]	500 lbs. / 227 kg.
NU-440-500	5 ft.		58 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [1483 x 724 x 597]	65 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1667 x 1600 x 835]	600 lbs. / 273 kg.
NU-440-600	6 ft.		70 ³ / ₈ x 28 ¹ / ₂ x 23 ¹ / ₂ [1788 x 724 x 597]	77 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1972 x 1600 x 835]	680 lbs. / 308 kg.

*Specify model with appropriate letter suffix for electrical specifications. "NU-425-300E" for 230 VAC / 50 Hz

Features

Standard Features

- Energy Saver (ES) DC/ECM Motor (NU-437, NU-440)
- Motor Speed Control
- Internal Exhaust Dampener
- Monolithic Pressure Tight Design
- Wood Frame Large HEPA Filters 99.99% @ 0.3 Microns
- 10" Access Opening (4, 5, 6 ft. Models)
- 8" Access Opening (2, 3 ft. Models)
- External Fluorescent Lighting
- Front Filter Removal
- Frameless Sliding Tempered Glass View Screen
- Armrest
- Removeable Work Tray
- Metal Diffuser Over Supply Filter
- Spill Trough with Drain Valve
- One Duplex Outlet Backwall (3ft. Models)
- Two Duplex Outlet Backwall (4, 5, 6 ft Models)
- Two Service Valves Right Side Wall

Optional Features and Accessories

- Energy Saver (ES) DC/ECM Motor (NU-425)
- Germicidal UV Light
- Ground Fault Interrupter
- Additional Duplex Outlet
- IV Bar with Six Hooks
- Base Support Stand
- Base Storage Cabinet
- Auto Lift Base Stand
- Hinged Viewing Window
- Microscope Window
- Additional Service Valves
- Remote Service Valves
- Exhaust Transitions
- ULPA Filters 99.999% @ 0.12 Microns
- Metal Framed HEPA Filters
- Permanent Plenum with Quick Release Supply Filter (NU-425)
- Storage Pull-Out Trays
- Decorative Side Panels
- 8" (203 mm) Access Opening (4, 5, 6 ft. Models)
- Sinks with Hot/Cold or DI water Faucets

- Heated Worksurface
- Adjustable Footrest
- Elbow Rests
- Custom Solutions

NU-440 Features

- TOUCHLINK™ Control System
- intelliflow™ - Monitor, Display, and Control Airflow Via Digital Dual Thermistor Airflow Sensors
- Alarm Setpoints
- Date/Clock Display, with Timer Functions
- Light and Outlet Control Via Solid State Switch
- Password Protection
- nitecare™ - Night Setback System

NU-437 Features

- FLOWGARD™ Control System
- On/Off Functions For:
 - Blower/Motor
 - Lights
 - UV Light
 - Outlets
 - Window Alarm Silence
- Monitor Window Position
- Password Protection

- Audible and Visual Alarms
- Ring Back Function
- Plenum Monitor Via Digital Pressure Transducer
- nitecare™ - Night Setback System

NU-425 Features

- ESSENTIALS Control System
- Power Switch Controls For:
 - Blower/Motor
 - Lights
 - UV Light
 - Outlet(s)
 - Window Alarm
- Minihelic Pressure Gauge
- Audible and Visual Window Alarm





Class II Type A2 Biological Safety Cabinets

The CellGard™ HD (Hazardous Drug) ES (Energy Saver) Class II, Type A2 Biological Safety Cabinet offers personnel, product, and environmental protection for handling of hazardous particulate drugs, powders. ISO Class 5 sterility and protection for your valuable in process work materials. True laminar airflow provides a sterile environment that minimizes cross contamination. A strong air barrier 105 fpm (0.53 m/s) protects the end user from hazardous materials in the work zone. Multiple oval HEPA pre-filters located underneath the work surface provide the primary means for particulate filtration that allows for an efficient and safe bag-in/bag-out filter change procedure without exposing the interior HEPA filters. Environmental protection is achieved by all contaminated air passing through a 99.99% HEPA filter.

Specifications

Model	Size (Nominal)	Electrical* (All Sizes)	Interior Dimensions (W x H x D) In. [mm]	Exterior Dimensions (W x H x D) In. [mm]	Weight
NU-481-400	4 ft.	115 VAC / 60 Hz	46 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1178 x 724 x 664]	54 ⁷ / ₈ x 87 ⁷ / ₈ x 33 [1394 x 2232 x 838]	700 lbs. / 318 kg.
NU-481-500	5 ft.	E: 230 VAC / 50 Hz-60 Hz	58 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1483 x 724 x 664]	66 ⁷ / ₈ x 87 ⁷ / ₈ x 33 [1699 x 2232 x 838]	790 lbs. / 358 kg.
NU-481-600	6 ft.		70 ³ / ₈ x 28 ¹ / ₂ x 26 ¹ / ₈ [1788 x 724 x 664]	78 ⁷ / ₈ x 87 ⁷ / ₈ x 33 [2003 x 2232 x 838]	880 lbs. / 399 kg.

*Specify model with appropriate letter suffix for electrical specifications. "NU-425-300E" for 230 VAC / 50 Hz

Features

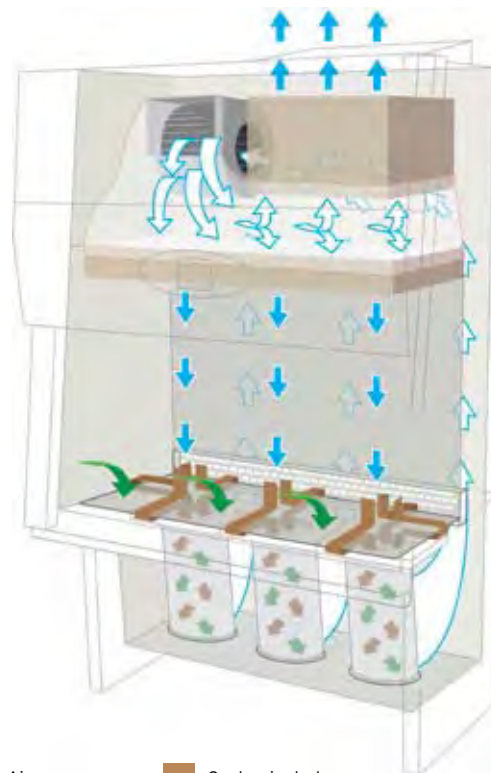
Standard Features

- Energy Saver DC ECM ES Motor
- Motor Speed Control
- Internal Exhaust Dampener
- TOUCHLINK™ Control System
- intelliflow™ - Monitor, Display, and Control Airflow Via Digital Dual Thermistor Airflow Sensors
- nitecare™ - Night Setback System
- Monolithic Pressure Tight Design
- Large HEPA Filters 99.99% @ 0.3 Microns
- Oval Canister HEPA Pre-Filters 99.99% Efficiency Rated
- 10" Access Opening
- External Fluorescent Lighting
- Front Filter Removal
- Frameless Sliding Tempered Glass View Screen
- 30° Hinged Wing Window Frame
- Armrest
- Removeable Work Tray
- Metal Diffuser Over Supply Filter
- Spill Trough with Drain Valve
- Two Duplex Outlet Backwall (4, 5, 6 ft Models)
- Two Service Valves Right Side Wall
- DECON Sealable Window

Optional Features and Accessories

- Germicidal UV Lamp
- Ground Fault Interrupter
- IV Bar with Six Hooks
- Adjustable Footrest
- Hinged Viewing Window
- Additional Service Valves for Gas, Air, or Vacuum
- ULPA Filters 99.999 % at 0.12 Microns
- Metal Framed HEPA Filters
- Bag In / Bag Out Exhaust HEPA Filters
- Storage Pull-Out Trays
- Remote Service Valves
- Additional Duplex Outlets
- Alarm Systems
- Adjustable Control for Support Stand
- Decorative Side Panels
- Additional Oval Canister HEPA Pre-filters 99.99% Efficiency Rated
- Elbow Rests
- Custom Configurations

Airflow: 70% Exhausted / 30% Recirculated



■ Room Air
■ Contaminated Worksurface Air
■ Clean HEPA Filtered Air
□ Clean Oval Canister HEPA Filtered Air





NU-427

Class II Type B1 Biological Safety Cabinets

NuAire's LabGard NU-427 is the only 70% exhaust Class II Type B1 Laminar Flow Biological Safety Cabinet offering a single piece, low-profile configuration in combination with a number of other significant improvements. The LabGard NU-427 Class II Type B1 Biological Safety Cabinet may be used for work treated with minute quantities of volatile toxic chemicals and trace amounts of radionuclides required as an adjunct to microbiological studies if work is done in the direct exhausted portion of the cabinet, or if the chemicals or radionuclides will not interfere with the work when recirculated in the downflow air.

Specifications

Model	Size (Nominal)	Electrical* (All Sizes)	Interior Dimensions (W x H x D) In. [mm]	Exterior Dimensions (W x H x D) In. [mm]	Weight
NU-427-400	4 ft.	115 VAC / 60 Hz	46 ³ / ₈ x 25 ¹ / ₂ x 23 ¹ / ₂ [1178 x 648 x 597]	53 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1362 x 1600 x 835]	550 lbs. / 249 kg.
NU-427-600	6 ft.	E: 230 VAC / 50 Hz-60 Hz	70 ³ / ₈ x 25 ¹ / ₂ x 23 ¹ / ₂ [1788 x 648 x 597]	77 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1972 x 1600 x 835]	740 lbs. / 336 kg.

*Specify model with appropriate letter suffix for electrical specifications. "NU-425-300E" for 230 VAC / 50 Hz

Features

Standard Features

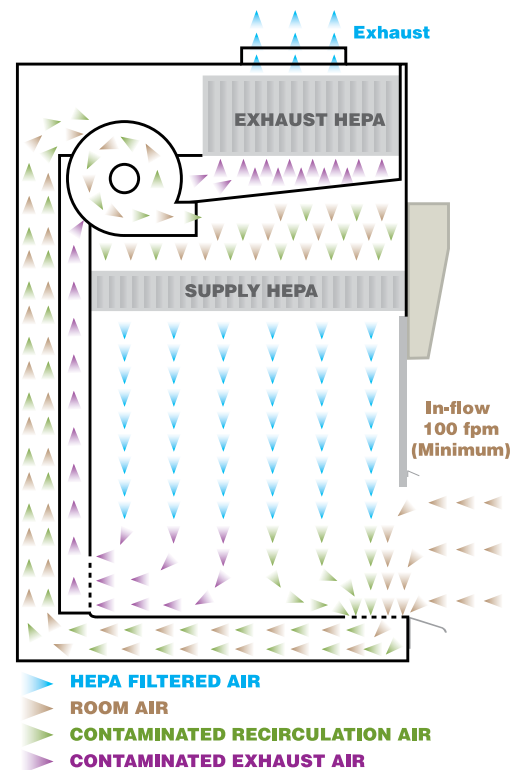
- HEPEX Zero Leak Airflow System
- TOUCHLINK System
- Large HEPA Filters
99.99% Efficiency Rated
- External Fluorescent Lighting
- Front Filter Removal
- Sliding Tempered Glass View Screen
- Removable Work Tray
- Metal Diffuser Over Supply Filter
- Removable Control Center
- Spill Trough with Drain Valve
- Armrest
- Two Gas Service Valves (Right Sidewall)
- One Duplex Outlet (Left Front)
- Energy Saver DC ECM ES Motor

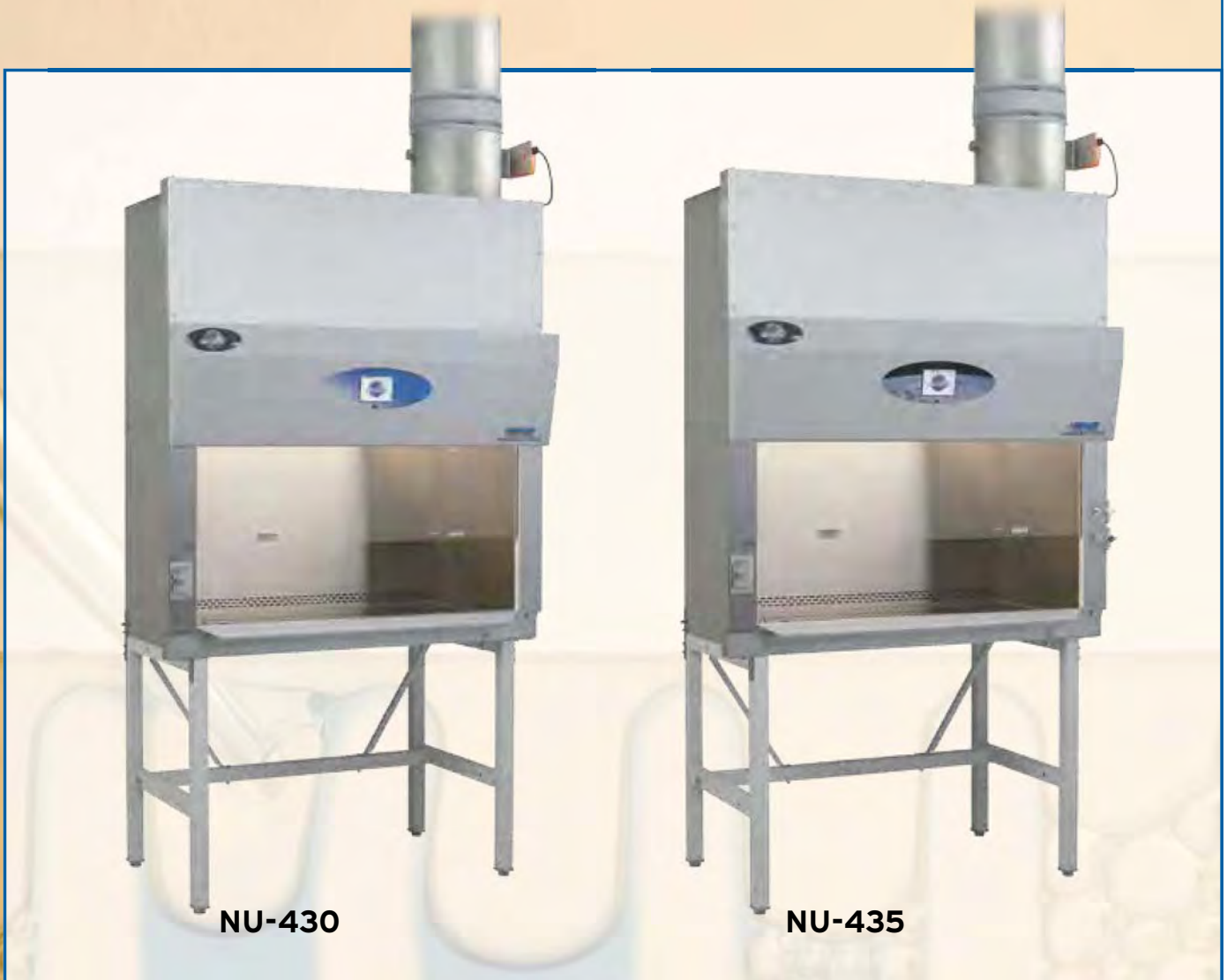


Optional Features and Accessories

- Germicidal UV Lamp
- Ground Fault Interrupter
- IV Bar with Six Hooks
- Base Support Stand
- Base Storage Cabinet
- Adjustable Footrest
- Hinged Viewing Window
- Microscope Viewing Window
- Additional Service Valves for Gas, Air, or Vacuum
- ULPA Filters
99.999 % at 0.12 Microns
- Metal Framed HEPA Filters
- Bag In / Bag Out Exhaust HEPA Filters
- Storage Pull-Out Trays
- Remote Service Valves
- Additional Duplex Outlets
- Alarm Systems
- Adjustable Control for Support Stand or Storage Cabinet
- Decorative Side Panels
- Sinks With Hot / Cold or DI Water Faucets
- Custom Configurations (i.e. 5 ft. models)

Airflow: 70% Exhausted / 30% Recirculated





Class II Type B2 Biological Safety Cabinets

LabGard Class II Type B2 Biological Safety Cabinets feature downflow air drawn from within the laboratory or outside air. No downflow air is drawn from the cabinet exhaust air. All downflow and inflow air is exhausted through a HEPA filter without recirculation within the cabinet. All contaminated ducts and plenums are maintained at negative pressure. The LabGard Class II Type B2 Biological Safety Cabinet may be used for work with volatile toxic chemicals and radionuclides as required as adjuncts to microbiological studies.

Specifications

Model	Size (Nominal)	Electrical* (All Sizes)	Interior Dimensions (W x H x D) In. [mm]	Exterior Dimensions (W x H x D) In. [mm]	Weight
NU-430-300	3 ft.	115 VAC / 60 Hz	30 ³ / ₈ x 25 ¹ / ₂ x 23 ¹ / ₂ [772 x 648 x 597]	37 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [956 x 1600 x 835]	460 lbs. / 231 kg.
NU-430-400	4 ft.	E: 230 VAC / 50 Hz-60 Hz	46 ³ / ₈ x 25 ¹ / ₂ x 23 ¹ / ₂ [1178 x 648 x 597]	53 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1362 x 1600 x 835]	520 lbs. / 236 kg.
NU-435-400	4 ft.		46 ³ / ₈ x 25 ¹ / ₂ x 23 ¹ / ₂ [1178 x 648 x 597]	53 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1362 x 1600 x 835]	520 lbs. / 236 kg.
NU-430-600	6 ft.		70 ³ / ₈ x 25 ¹ / ₂ x 23 ¹ / ₂ [1788 x 648 x 597]	77 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1972 x 1600 x 835]	710 lbs. / 322 kg.
NU-435-600	6 ft.		70 ³ / ₈ x 25 ¹ / ₂ x 23 ¹ / ₂ [1788 x 648 x 597]	77 ⁵ / ₈ x 63 x 32 ⁷ / ₈ [1972 x 1600 x 835]	710 lbs. / 322 kg.

*Specify model with appropriate letter suffix for electrical specifications. "NU-425-300E" for 230 VAC / 50 Hz

Features

Standard Features

- HEPEX Zero Leak Airflow System
- TOUCHLINK System
- Large HEPA Filters
99.99% Efficiency Rated
- External Fluorescent Lighting
- Front Filter Removal
- Sliding Tempered Glass View Screen
- Removable Work Tray
- Metal Diffuser Over Supply Filter
- Removable Control Center
- Spill Trough with Drain Valve
- Armrest
- Two Gas Service Valves
(Right Sidewall on NU-430)
- One Duplex Outlet (Left Front)
- Two Remote Service Valves
(Right Front Farring on NU-435)
- Energy Saver DC ECM ES Motor



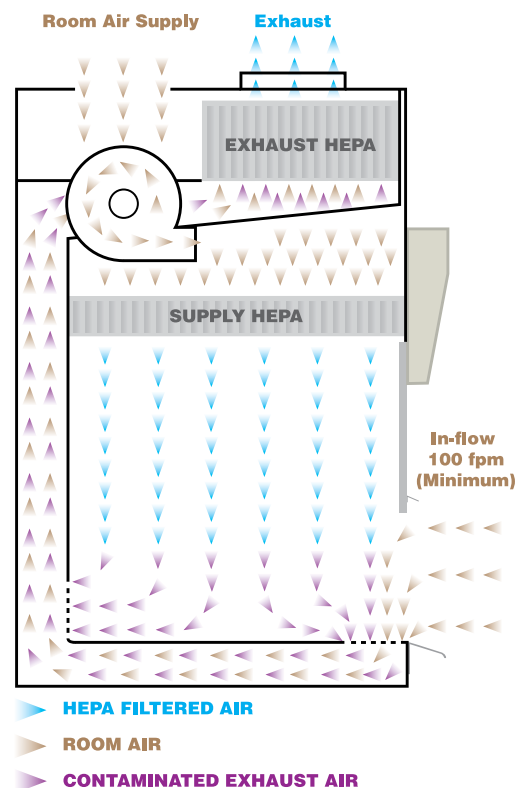
(NU-435)



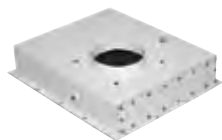
Optional Features and Accessories

- Germicidal UV Lamp (NU-430)
- Ground Fault Interrupter
- IV Bar with Six Hooks
- Base Support Stand
- Base Storage Cabinet
- Adjustable Footrest
- Hinged Viewing Window
- Microscope Viewing Window
- Additional Service Valves for Gas, Air, or Vacuum
- ULPA Filters
99.999 % at 0.12 Microns
- Metal Framed HEPA Filters
- Bag In / Bag Out Exhaust HEPA Filters
- Storage Pull-Out Trays
- Remote Service Valves
- Additional Duplex Outlets
- Alarm Systems
- Adjustable Control for Support Stand or Storage Cabinet
- Decorative Side Panels
- Sinks With Hot / Cold or DI Water Faucets
- Custom Configurations (i.e. 5 ft. models)

Airflow: 100% Exhausted / 0% Recirculated



Options and Accessories



Low Profile
Exhaust Transition



Canopy Exhaust Transition
and Flex Duct



Butterfly Valves



8" to 10"
Round Transition



Neoprene Connection Kit



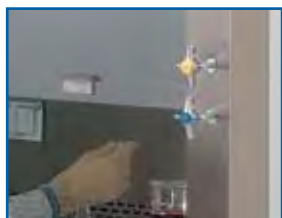
Exhaust Airflow Monitors



Elbow Rest



IV Bar With Hooks



Remote Controlled
Service Valves



Foam Armrest Pad



Stainless Steel Turntable



Adjustable Footrest



Motorized Adjustable Base Stand



Base Stand with Storage Cabinet

Also Available:

Ultraviolet Germicidal
Lamps
Faucets and Sinks, Cup Sinks
Pre-Piped Plumbing
Ground Fault Interrupter
Side Panels

Seismic Brackets
Metal Frame HEPA Filter
Microscope Window
Heated Work Surface
Custom Configurations



Sales Information

To Locate a NuAire Representative

Please visit NuAire's Web site at: www.nuaire.com and select the 'Sales Team' menu item. Information can be found there for both United States and international distributors.



Other NuAire Products





For more information please visit
www.nuaire.com or call **1.800.328.3352**

