



NuAire, Inc. | 2100 Fernbrook Lane | Plymouth, MN 55447 | U.S.A. | 763.553.1270 | WWW.NUAIRE.COM

# 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-475

NU-477

NU-480

Model	Туре	Exhausted Air vs. Recirculated Air	Available Sizes (nominal)	Safety	Performance Specifications*
LabGard		1			1
NU-425	A2	30% / 70%	2, 3, 4, 5, 6 ft.	All models:	All models:
NU-437	A2	30% / 70%	3, 4, 5, 6 ft.	Product protection	NSF / ANSI 49
NU-440	A2	30% / 70%	3, 4, 5, 6 ft.	Personnel protection	EN12469
NU-427	B1	70% / 30%	4, 6 ft.	Environmental protection	UL/UL-C Listed
NU-430 / 435	B2	100% / 0%	3, 4, 6 ft.		
CellGard					
NU-475	A2	30% / 70%	3, 4, 5, 6 ft.		
NU-477	A2	30% / 70%	3, 4, 5, 6 ft.		
NU-480	A2	30% / 70%	3, 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 Slope

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





Biological Safety Cabinet with O° Slope

LabGard Class II

CellGard Class II Biological Safety Cabinet with 10° Slope





TOUCHLINK<sup>™</sup> 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

**0**°

10°

# Select Options and Accessories

Many Accessories and Options, Plus Custom Configurations Are Available



Motorized Adjustable Base Stand

#### Also Available:

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



Base Stand with Storage Cabinet

Side Panels

Seismic Brackets

Ground Fault Interrupter



Motorized Adjustable Base Stand with casters

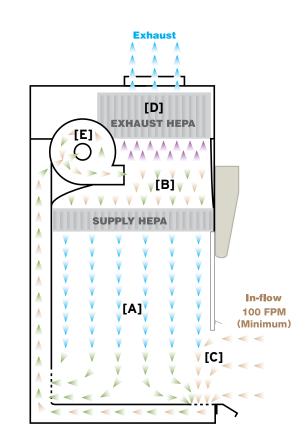
Metal Frame HEPA Filter Microscope Window Heated Work Surface

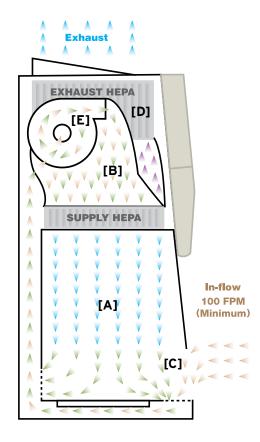


Remote Controlled Service Valves



# Improved Principles of Biological Safety Cabinet Design





Class II Type A2 Biological Safety Cabinet Airflow Schematics

HEPA FILTERED AIRROOM AIR

CONTAMINATED WORK SURFACE 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 <sup>™</sup> Zero Leak Airflow System [B]

The HEPEX<sup>™</sup> 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** 



# Over 640 Muscles at Work • Experience Ergonomics

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.

## Forearm Support for Comfort and Safety

- Improves forearm support, keeps arms off front air grill
- Closed cell foam, easy to clean



- · Closed cell non-absorbing foam
- · Disposable, easy application and removal (10 pads / package)

# **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.

Foam Armrest Pad

Accessories

BioFit® Chair / Adjustable Footrest

**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.

## Larger Effective Work Zone Area

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).



# **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



BioFit® Ergonomic Adjustable Chair



Automatic Adjustable

Base Support Stand

Remote Controlled Service Valves

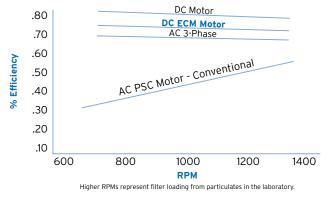


Adjustable Footrest





#### Fan Motor Efficiency



## 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
КШН	4927	2612	1424	3617
Annual Cost (\$.09/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

# 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

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 da	iys per wee	ek = 8,736	hrs per year					
KWH per year	2612	4927	3617	1424				
\$0.09/kwh	\$235	\$443	\$326	\$128				
15 Year Life Cycle Co	sts							
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.



NU-480 (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.

nite**care**<sup>™</sup>- A unique system initiated by the window closure, will reduce motor / blower operational airflow to conserve energy while maintaining work zone sterility.

intelliflow<sup>™-</sup> 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<sup>™</sup> 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

motor / blower operational airflow to conserve energy while maintaining work zone sterility.







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 <sup>3</sup> / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>8</sub> [ 873 x 724 x 664 ]	41 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1057 x 1572 x 838 ]	475 lbs. / 215 kg
NU-475-400	4 ft.	115 VAC / 60 Hz	$46^{3}$ / <sub>8</sub> x $28^{1}$ / <sub>2</sub> x $26^{1}$ / <sub>8</sub> [ 1178 x 724 x 664 ]	53 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> 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 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1669 x 1572 x 838 ]	665 lbs. / 302 kg
NU-475-600	6 ft.		$70^{3}$ / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>8</sub> [ 1788 x 724 x 664 ]	77 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1972 x 1572 x 838 ]	750 lbs. / 340 kg
NU-477-300	3 ft.		34 <sup>3</sup> / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>8</sub> [ 873 x 724 x 664 ]	41 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1057 x 1572 x 838 ]	475 lbs. / 215 kg
NU-477-400	4 ft.	115 VAC / 60 Hz	$46^{3}$ / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>8</sub> [ 1178 x 724 x 664 ]	53 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1362 x 1572 x 838 ]	565 lbs. / 256 kg
NU-477-500	5 ft.	E: 230 VAC / 50 Hz-60 Hz	$58^{3}_{8} \text{ x } 28^{1}_{2} \text{ x } 26^{1}_{8} \text{ [ } 1483 \text{ x } 724 \text{ x } 664 \text{ ]}$	65 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1669 x 1572 x 838 ]	665 lbs. / 302 kg
NU-477-600	6 ft.		$70^{3}$ / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>8</sub> [ 1788 x 724 x 664 ]	77 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1972 x 1572 x 838 ]	750 lbs. / 340 kg
NU-480-300	3 ft.		34 <sup>3</sup> / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>8</sub> [ 873 x 724 x 664 ]	41 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1057 x 1572 x 838 ]	475 lbs. / 215 kg
NU-480-400	4 ft.	115 VAC / 60 Hz E: 230 VAC / 50 Hz-60 Hz	$46^{3}_{8} \times 28^{1}_{2} \times 26^{1}_{8}$ [ 1178 x 724 x 664 ]	53 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1362 x 1572 x 838 ]	565 lbs. / 256 kg
NU-480-500	5 ft.		$58^{3}_{8} \times 28^{1}_{2} \times 26^{1}_{8}$ [ 1483 x 724 x 664 ]	65 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1669 x 1572 x 838 ]	665 lbs. / 302 k
NU-480-600	6 ft.		70 <sup>3</sup> / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>8</sub> [ 1788 x 724 x 664 ]	77 <sup>5</sup> / <sub>8</sub> x 61 <sup>7</sup> / <sub>8</sub> x 33 [ 1972 x 1572 x 838 ]	750 lbs. / 340 kg

#### 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<sup>™</sup> Control System

intelli**flow™** - 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

nite**care**™ - Night Setback System

#### NU-477 Features

FLOWGARD<sup>™</sup> Control System On/Off Functions For: Blower/Motor Lights UV Light Outlets Window Alarm Silence

Monitor Window Position

Password Protection

\*Specify model with appropriate letter suffix for electrical specifications. "NU-425-300E" for 230

Audible and Visual Alarms

Ring Back Function

Plenum Monitor Via Digital Pressure Transducer

nitecare<sup>™</sup> - 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











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 <sup>3</sup> / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 873 x 724 x 597 ]	41 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1057 x 1600 x 835 ]	475 lbs. / 215 kg
NU-425-400	4 ft.	E: 230 VAC / 50 Hz-60 Hz	$46^{3}$ / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 1178 x 724 x 597 ]	53 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 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 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1667 x 1600 x 835 ]	600 lbs. / 273 kg
NU-425-600	6 ft.		$70^{3}$ / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 1788 x 724 x 597 ]	77 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1972 x 1600 x 835 ]	680 lbs. / 308 kg
NU-437-300	3 ft.	115 VAC / 60 Hz	34 <sup>3</sup> / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 873 x 724 x 597 ]	41 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1057 x 1600 x 835 ]	475 lbs. / 215 kg
NU-437-400	4 ft.	E: 230 VAC / 50 Hz-60 Hz	$46^{3}$ / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 1178 x 724 x 597 ]	53 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 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 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1667 x 1600 x 835 ]	600 lbs. / 273 kg
NU-437-600	6 ft.		$70^{3}$ / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 1788 x 724 x 597 ]	77 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1972 x 1600 x 835 ]	680 lbs. / 308 kg
NU-440-300	3 ft.	115 VAC / 60 Hz	34 <sup>3</sup> / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 873 x 724 x 597 ]	41 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1057 x 1600 x 835 ]	475 lbs. / 215 kg
NU-440-400	4 ft.	E: 230 VAC / 50 Hz-60 Hz	$46^{3}$ / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 1178 x 724 x 597 ]	53 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 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 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1667 x 1600 x 835 ]	600 lbs. / 273 kg
NU-440-600	6 ft.		70 <sup>3</sup> / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 1788 x 724 x 597 ]	77 <sup>5</sup> /8 x 63 x 32 <sup>7</sup> /8 [ 1972 x 1600 x 835 ]	680 lbs. / 308 kg

## 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 (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<sup>™</sup> Control System

intelliflow<sup>™</sup> - 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

nite**care**™ - Night Setback System

#### NU-437 Features

FLOWGARD<sup>™</sup> 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 nite**care™** - Night Setback System

#### NU-425 Features

\*Specify model with appropriate letter suffix for electrical specifications. "NU-425-300E" for 230

#### ESSENTIALS Control System

Power Switch Controls For: Blower/Motor Lights UV Light Outlet(s) Window Alarm

Minihelic Pressure Gauge Audible and Visual Window Alarm









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 $^{3}\!\!/_{8}x25^{1}\!\!/_{2}x23^{1}\!\!/_{2}$ [ 1178 x 648 x 597 ]	53 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1362 x 1600 x 835 ]	550 lbs. / 249 kg.
NU-427-600	6 ft.	E: 230 VAC / 50 Hz-60 Hz	70 <sup>3</sup> / <sub>8</sub> x 25 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 1788 x 648 x 597 ]	77 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 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**

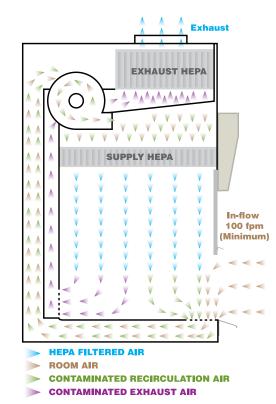
HEPEX Zero Leak Airflow System **TOUCHLINK** System Large HEPA Filters 99.99% Efficiency Rated External Fluorescent Lighting Front Filter Removal Sliding Tempered Glass View Screen Removable Work Tray Metal Diffuser Over Supply Filter **Removable Control Center** Spill Trough with Drain Valve Armrest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

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#### 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









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 volitile 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 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 956 x 1600 x 835 ]	460 lbs. / 231 kg.
NU-430-400	4 ft.	E: 230 VAC / 50 Hz-60 Hz	46 $^{3}\!/_{8}x25^{1}\!/_{2}x23^{1}\!/_{2}[1178x648x597]$	53 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1362 x 1600 x 835 ]	520 lbs. / 236 kg.
NU-435-400	4 ft.		46 $^{3}\!/_{8}x25^{1}\!/_{2}x23^{1}\!/_{2}[1178x648x597]$	53 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1362 x 1600 x 835 ]	520 lbs. / 236 kg.
NU-430-600	6 ft.		70 $^{3}\!/_{8}x25^{1}\!/_{2}x23^{1}\!/_{2}$ [ 1788 x 648 x 597 ]	77 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1972 x 1600 x 835 ]	710 lbs. / 322 kg.
NU-435-600	6 ft.		70 <sup>3</sup> / <sub>8</sub> x 25 <sup>1</sup> / <sub>2</sub> x 23 <sup>1</sup> / <sub>2</sub> [ 1788 x 648 x 597 ]	77 <sup>5</sup> / <sub>8</sub> x 63 x 32 <sup>7</sup> / <sub>8</sub> [ 1972 x 1600 x 835 ]	710 lbs. / 322 kg.

#### **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)

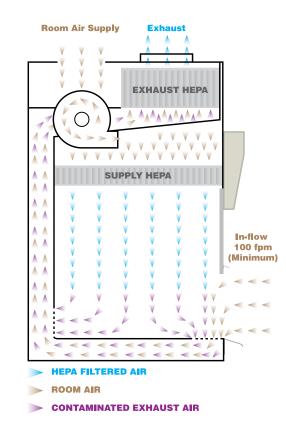
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# Optional Features and Accessories

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

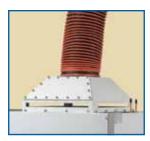
\*Specify model with appropriate letter suffix for electrical specifications. "NU-425-300E" for 230 VAC / 50 Hz



# **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



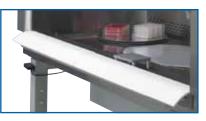
Elbow Rest



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** 



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