

NuAire LabGard® ES Air (NU-543 Series) Class II, Type A2 Biosafety Cabinet

An Access Opening that Meets Your Needs. Your choice of an 8, 10, or 12 inches (203, 254, or 305 mm) access opening offers you the option to lower your operating cost, have more moveability in the cabinet, or somewhere in between.

Rating: Not Rated Yet

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Description

LabGard® model NU-543 is available in an 8, 10, or 12 inches (203, 254, or 305 mm) access opening. NU-543 is an effective primary engineering control in obtaining the optimum product quality while reducing the potential for exposure of both product and personnel to airborne biological or particulate chemical agents in low to moderate risk-hazard research and drug preparation or product operations by monitoring and controlling real-time airflow to maintain accurate laminar airflow and a dynamic air barrier.

Protected by the industry's best warranty

5 Year Parts (including filters) and Labor Warranty (United States and Canada)

6 Year Parts (including filters) (Global)

Features

Standard Features

- Energy Saver (ES) DC/ECM Motor
- Motor Speed Control

- Internal Exhaust Dampener
- Monolithic Pressure Tight Design (Silicone Free)
- HEPEX™ Zero Leak Airflow
- Front Filter Removal
- Permanent Plenum with Quick Release Supply Filter
- Metal Frame Supply HEPA Filter
- 99.99% @ 0.3 Microns
- Metal Frame Exhaust HEPA Filter
- 99.99% @ 0.3 Microns
- 10" [254 mm] Access Opening
- Frame-less Sliding Tempered
- Glass View Screen
- External Fluorescent Lighting
- Plastic Armrest
- Removable Work Tray
- Work Surface Support System
- Metal Diffuser Over Supply Filter
- Spill Trough with Drain Valve
- Two Duplex Outlet Back-wall
- One Service Valve Right Side Wall
- One Service Coupling Right Side Wall
- Two Service Couplings Left Side Wall
- Power Cord

Ergonomically Designed Access Opening that Meets Your Needs

Your choice of an 8, 10, or 12 inches (203, 254, or 305 mm) access opening offers you the option to lower your operating cost, have more moveability in the cabinet, or somewhere in between.

Reduce Workplace Injuries

- LabGard® provides a shorter reach into the work zone bringing work materials closer to you relieving stress on your arms, back and neck.
- A standard heavy-duty plastic armrest eliminates cold conduction on forearms relieving tendons of any unnecessary stress.
- A recessed airfoil allows technicians to use the armrest without fear of blocking airflow.
- A further recessed work-tray with spill lip protection lowers the work zone making it easier for lab techs to use pipettes or creating additional space for machineries such as liquid handlers or TPN Compounding Systems

True Laminar Airflow

Unidirectional airflow moving along parallel flow lines at a constant velocity of 60 fpm (0.30 m/s) minimizes air turbulence within the work zone lessening the chance of cross contamination.

Dynamic Air Barrier

A steady inflow air velocity of 105 fpm (0.53 m/s) over an aerodynamic airfoil creates an active air barrier offering maximum personnel protection.

Monolithic Construction

The heart and core of any biosafety cabinet is construction. LabGard® AIR is constructed as a single piece. A stainless steel wrap is bent to create the cabinet's walls. Additional sheets of stainless steel are seam welded to make up the top and bottom. A second bent sheet of stainless steel is inserted and welded to create the work zone walls. A final piece of stainless steel is welded into place creating the foundation for the cabinet's plenum. The result is a monolithic shell created without the use of rivets or sealants creating a longer lasting safer product.

FlowGard™ Electronic Control System

The LabGard® AIR offers the latest digital microprocessor design technology for improved cabinet performance and safety. The FlowGard™ control system integrates a dual thermistor airflow sensor (intelliflow™) to monitor the cabinet's airflow performance. The FlowGard™ also controls the motor/blower, visible light, UV light (optional), outlet(s), alarms, and the sliding window position.

nitecare™ Night Setback Mode

Upon sliding the window sash into the closed position, the motor blower will continue to operate at a lower rate to save energy and maintain interior clean air conditions ready for use upon window sash opening.

HEPEX™ Zero Leak Airflow System

A vacuum surrounds all LabGard® positive pressure plenums relative to the room. In the event of a leak via gasket failure, all contaminated air in

the plenum is forced through HEPA filtration. The HEPEX™ system also works to provide accurate laminar airflow by evenly distributing plenum air over the supply HEPA filter. The flexible design eliminates any vibration transfer from the motor blower as well as creates a serviceable work environment for Certifiers after decontamination.

Ultra High-Efficiency Motor

An ultra-high efficiency ECM motor automatically compensates for filter loading and line voltage variances maintaining proper airflow for the safest environment. Combined with the appropriately sized fan blade lowers energy usage while extending the life of filters.

Specifications

NuAire LabGard® ES Air (NU-543 Series) Class II, Type A2 Biosafety Cabinets				
Catalog Number	NU-543-300	NU-543-400	NU-543-500	NU-543-600
Nominal Size	3 foot (0.9m)	4 foot (1.2m)	5 foot (1.5m)	6 foot (1.8m)
Performance Specs	NSF/ANSI 49	NSF/ANSI 49	NSF/ANSI 49	NSF/ANSI 49
Personal Protection Product Protection				
Class, Type	Class II, Type A2	Class II, Type A2	Class II, Type A2	Class II, Type A2
Style of Cabinet	Bench top/console w/base stand/storage	Bench top/console w/base stand/storage	Bench top/console w/base stand/storage	Bench top/console w/base stand/storage
Cabinet Construction	Welded stainless steel 16/18 gauge, Type 304 pressure tight design	Welded stainless steel 16/18 gauge, Type 304 pressure tight design	Welded stainless steel 16/18 gauge, Type 304 pressure tight design	Welded stainless steel 16/18 gauge, Type 304 pressure tight design
Air Supply Diffuser (Metal)	Non-flammable	Non-flammable	Non-flammable	Non-flammable
HEPA Filter Seal Type	HEPEX Seal	HEPEX Seal	HEPEX Seal	HEPEX Seal
Supply Filter - 99.99% Eff. on 0.3 microns	Neoprene, Spring-loaded	Neoprene, Spring-loaded	Neoprene, Spring-loaded	Neoprene, Spring-loaded
Exhaust Filter - 99.99% Eff. on 0.3 microns				
Fumigation: per NINNSF Procedures	Yes	Yes	Yes	Yes
Standard Services	One Right Sidewall	One Right Sidewall	One Right Sidewall	One Right Sidewall
Service Coupling 3/8" NPT:	Two Left Sidewall	Two Left Sidewall	Two Left Sidewall	Two Left Sidewall
Gas Valve / Service Coupling 3/8" NPT: Duplex Outlet:	One Right Sidewall Two Backwall	One Right Sidewall Two Backwall	One Right Sidewall Two Backwall	One Right Sidewall Two Backwall
Optional Services	Up to 3 ex. Sidewall	Up to 3 ex. Sidewall	Up to 3 ex. Sidewall	Up to 3 ex. Sidewall
Gas Cock 3/8 NPT:	One - Backwall	One - Backwall	One - Backwall	One - Backwall
Ultraviolet Light:	Left or Rt. Surface	Left or Rt. Surface	Left or Rt. Surface	Left or Rt. Surface
Sed./Cup Sinks:				
Cabinet Size				
Inches (mm)	61 7/8" (1572)	61 7/8" (1572)	61 7/8" (1572)	61 7/8" (1572)
Height Assembled:	50" (1499)	50" (1499)	50" (1499)	50" (1499)
Height (Transport):	41 5/8" (1057)	41 5/8" (1057)	41 5/8" (1057)	41 5/8" (1057)
Width Assembled:	31 7/16" (799)	31 7/16" (799)	31 7/16" (799)	31 7/16" (799)
Depth w/o Armrest:				
Work Access				
Opening Inch (mm)	10" (254)	10" (254)	10" (254)	10" (254)
Standard Height:	8" (203)	8" (203)	8" (203)	8" (203)
Optional Height:	N/A	12" (305)	12" (305)	12" (305)
Optional Height:	105 FPM (.53 m/s)	105 FPM (.53 m/s)	105 FPM (.53 m/s)	105 FPM (.53 m/s)
Std Inflow Velocity:				
Work Zone				
Inches (mm)	28 1/2" (724)	28 1/2" (724)	28 1/2" (724)	28 1/2" (724)
Height:	34 3/8" (873)	46 3/8" (1178)	46 3/8" (1178)	70 3/8" (1788)
Width:	25 3/4" (654)	25 3/4" (654)	25 3/4" (654)	25 3/4" (654)
Window Height:				
Viewing Window: inches (mm):	Fully closed to 21" (533) open	Fully closed to 21" (533) open	Fully closed to 21" (533) open	Fully closed to 21" (533) open
Standard is safety plate sliding glass				
Required Exhaust CFM (CMH) Opening				
Standard:	10" (254)	10" (254)	10" (254)	10" (254)
Optional:	8" (203)	8" (203)	8" (203)	8" (203)
Optional:	12" (305)	12" (305)	12" (305)	12" (305)
Canopy Variable Flow Thimble (NU-911)				
Canopy Fixed				
Flow Thimble (NU-907)	276-501 (649-851) 255-450 (383-765) 341-554 (576-933)	363-588 (617-1000) 295-520 (502-884) 430-655 (731-1113)	451-678 (786-1149) 365-590 (621-1003) 531-700 (909-1291)	538-763 (915-1287) 436-661 (741-1124) 634-865 (1086-1470)
	320 (844) 289 (657) 387 (850)	426 (724) 359 (810) 483 (821)	531 (902) 445 (755) 610 (1036)	634 (1077) 532 (904) 763 (1251)
Plant Duct Static Pressure Inch/Metric	0.05-0.1" / 1.27-2.54mm H2O	0.05-0.1" / 1.27-2.54mm H2O	0.05-0.1" / 1.27-2.54mm H2O	0.05-0.1" / 1.27-2.54mm H2O
Heat Rejected, BTU, Per Hour (opening):	10" (254) / 8" (203)	10" (254) / 8" (203) / 12" (305)	10" (254) / 8" (203) / 12" (305)	10" (254) / 8" (203) / 12" (305)
(non-vented):	903 / 826	1146 / 1020 / 1256	1768 / 1611 / 1884	1884 / 1768 / 2041
(vented):	120	157	198	198
Electrical				
Volts, AC 60 Hz	U.L./UL-C Listed 115	U.L./UL-C Listed 115	U.L./UL-C Listed 115	U.L./UL-C Listed 115
•Amps:				
Blower / Lights	2.3 / 2.1 / N/A	2.9 / 2.6 / 3.2	4.5 / 4.1 / 4.8	4.8 / 4.5 / 5.2
(100/12 openings):	3	3	3	3
Amps: (Duplex)	10	14	16	16
Rated Amps:	14ga - 3 Wire, 15A	12ga - 3 Wire, 20A	12ga - 3 Wire, 20A	12ga - 3 Wire, 20A
12 ft. Power Cord:				
Crated Shipping Wt. / Net Weight	460 lbs. / 209 kg 410 lbs. / 186 kg	530 lbs. / 240 kg 480 lbs. / 218 kg	620 lbs. / 281 kg 570 lbs. / 256 kg	680 lbs. / 313 kg 640 lbs. / 290 kg

*Crated shipping weight does not include weight for accessories or options + Based on cabinet with new filters running at 115VAC.

Reviews

There are yet no reviews for this product.