



MODEL GSHH3K

HEPA FILTRATION & FRESH AIR VENTILATION & HEAT RECOVERY FOR THE ENTIRE INDOOR ENVIRONMENT

The GuardianPlus™ Air System from Broan-NuTone is much more than just a standard heat recovery ventilator; our system preheats the outdoor air prior to circulating it and features whole-house HEPA* filtration combined with a fresh air supply and patent pending technologies and manufacturing processes. Experts agree, fresh air Heat Recovery combined with HEPA filtration will ensure the greatest indoor air quality and comfort in residential spaces.

Our GuardianPlus™ Air Systems offers the following specific features and benefits:

HEPA FILTRATION WITH FRESH AIR AND HEAT RECOVERY

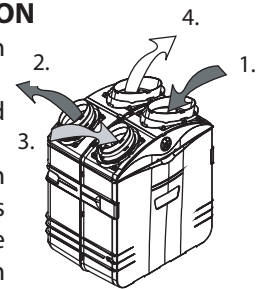
Control

The GSHH3K is very simple to operate: once installed, simply turn the switch (located on the front panel of the unit) to the "normal" setting and use the wall control to select the units operation mode (Off, Normal, Boost or Recirculation). This control is equipped with filter maintenance indicators to remind you when it is time to change the HEPA or pre-filters.



VENTILATION AND HEPA FILTRATION

1. Stale air from the house is drawn inside the unit.
2. A portion of the stale air is exhausted outside the house.
3. Fresh air from outside is blended with interior air. Then, the airflow goes through the prefilter (catching large particles) and the HEPA filter, which catches up to 99.97% of ≥ 0.3 micron size particles.
4. Fresh filtered air is distributed throughout the house.



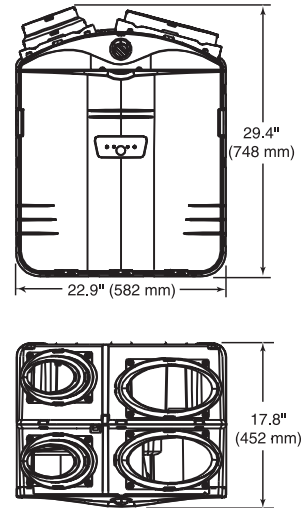
180 cfm (306 cubic meters/hr.) including 70 cfm (119 cubic meters/hr.) of air exchange to 270 cfm (459 cubic meters/hr.) including 105 cfm (178 cubic meters/hr.) of air exchange

FEATURES	BENEFITS	MODEL GSHH3K
<p>ONE ENCLOSURE</p> <p>Most affordable solution in the industry!</p>	<p>Integrated whole-house HEPA filtration with Fresh air ventilation and heat recovery in one box!</p> <ul style="list-style-type: none"> Industries lowest total: <ul style="list-style-type: none"> product cost for these three functions installed cost for these three functions servicing cost for these three functions Industries lowest operating cost: <ul style="list-style-type: none"> product requires only one blower, thereby reducing annual operating costs. 	
<p>HEPA Filtration System</p>	<ul style="list-style-type: none"> True HEPA filter with 99.97% efficiency on particles $\geq 0.3\mu\text{m}$. Airborne particles trapped by our HEPA filter include: <ul style="list-style-type: none"> Pet Dander Dust Pollen Fungal spores Mold Spores Bacterial spores Airborne dust mites/cockroach fecal antigens and proteins Pre-filter with a >90% efficiency on 3.0 – 10μm size particles to extend the life and performance of our HEPA filter. 	
<p>Heat Recovery Core</p>	<ul style="list-style-type: none"> Apparent Sensible effectiveness of the core is: 50% @ 105 cfm @ 32°F (178 m³/hr @ 0°C) 60% @ 70 cfm @ -13°F (119m³/hr @-25°C) Long lasting polymeric heat recovery core Core and it's prefilter easy to access and clean 	
<p>Industries first combination Air Ventilation and True HEPA Filtration unit</p>	<ul style="list-style-type: none"> 270 cfm (459 m³/hr) of True HEPA filtered air (containing up to 105 cfm [178 m³/hr] of fresh filtered outdoor air) Suitable for an entire home with as many as six bedrooms* <p><small>* (Based on 15 cfm of fresh air per person, 2 people in first bedroom and one in all the rest, 105 cfm ventilates an entire home with up to 6 bedrooms. Local requirements may vary.)</small></p>	
<p>Fresh Air Features</p> <p>Tandem™</p> <p>AirDuo™**</p> <p>AirChoke™**</p> <p>SoftLinkage™**</p>	<ul style="list-style-type: none"> Tandem™ "Y" shaped transition provides a single home outlet; stale air is exhausted and fresh air drawn in simultaneously, without risk of contamination. The single hole in a home's exterior reduces product installation time, materials and costs AirDuo™**: duo-flow Air exhaust / intake outdoor hooded air vent PLUS integrated grille, featuring integral intake and exhaust filters, eliminates air cross-contamination. (Optional "pine tree spore" filter available for mild-climates with Alpine / Pine tree vegetation) AirChoke™**, in response to Outdoor Air Temperature, our system's AirChoke automatically attenuates air flows to increase system performance and owner comfort SoftLinkage™** Damper system. With a single motor we assure proper sealing of two dampers. The SoftLinkage wear resistant cable slides within a pulley to maintain even "sealing pressure" on both dampers with the use of a single damper motor. GuardianPlus™ Air Systems' fresh air exchange eliminates excess humidity during cold weather "heating" seasons 	
<p>Installation Ready</p>	<ul style="list-style-type: none"> Installs in less then three hours Installation kit included (ducting not included) Integral AirSnap™, snap-on duct ports; facilitate rapid installation and eliminates air leakage Lightweight enclosure with integrated carrying handles Unit allows for vertical or horizontal installation 	
<p>Designed for serviceability</p>	<ul style="list-style-type: none"> Self-lubricating motor needs NO service! FilterGlide™** system, ensures trouble free prefilter and HEPA filter replacement Filters are changed in less than five minutes! 	
<p>Owner interface</p>	<p>Electronic, low voltage owner interface features:</p> <ul style="list-style-type: none"> No high voltage wiring, no electrician required LED indication of the products mode of operation LED indication of filter alert logic to facilitate owner filter maintenance to ensure peak performance, indoor air quality, comfort and system efficiency, which extends the product motor life LED indication of wiring errors facilitate installation Remote control (no need to go to the mechanical room or attic) of the systems filtration operating modes including; normal, boost and recirculation mode 	
<p>Agency Approvals or Certifications</p>	<ul style="list-style-type: none"> UL listed Certified HVI airflow A key component in the compliance to ASHRAE 62-2001 	
<p>Warranty</p>	<ul style="list-style-type: none"> Fully protected by a 2-year warranty on all parts. (See manufacturer warranty for complete details) 	

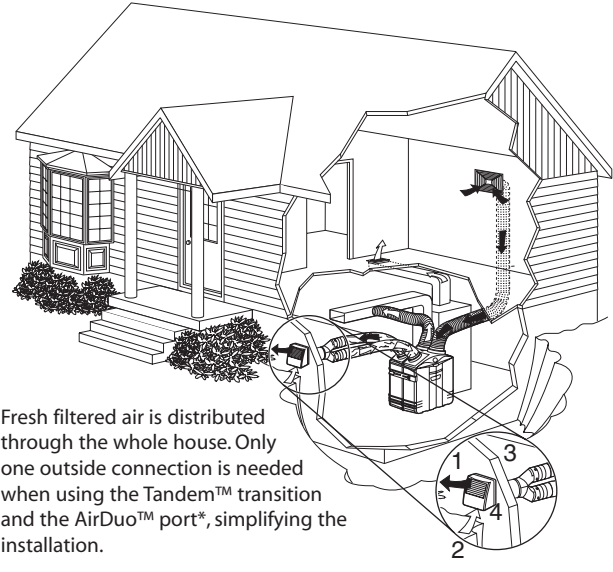
*HEPA- High Efficiency Particulate Air
** = Patent Pending

TECHNICAL SPECIFICATIONS	MODEL GSHH3K
Max purification area	Designed for (Numbers published) • Suitable for an entire home with as many as six bedrooms* <i>* (Based on 15 cfm of fresh air per person, 2 people in first bedroom and one in all the rest, 105 cfm ventilates an entire home with up to 6 bedrooms. Local requirements may vary.)</i>
HVI Rated of air flow	105 CFM (178 m ³ /hr)
Voltage (power requirements)	120 V ac
Frequency	60 hz
Power consumed (max)	
Normal Mode	170W
Boost Mode	232W
Recirculation Mode	165W
Dimensions Height x Length x Depth	29.4" x 22.9" x 17.8" (737mmx582mmx452mm)
Weight	48 lbs (21.8 kg)
Shipping weight	58 lbs (26.3 kg)
Materials (enclosure & insulation)	ABS & EPS
Agency compliances	UL
AIR-FLOWS (where applicable)	
Fresh outdoor air intake 5" duct [12.7 cm]	95 cfm high speed with 5" ducts (161 m ³ /hr) 65 cfm low speed with 5" ducts (110 m ³ /hr)
6" duct [15.2 cm]	105 cfm high speed with 6" ducts (178 m ³ /hr) 70 cfm low speed with 6" ducts (119 m ³ /hr)
Stale indoor air drawn from the space (8" duct) [20.3 cm duct]	270 cfm high speed (459 m ³ /hr) 180 cfm low speed (306 m ³ /hr)
Filter/Fresh Air distributed to the indoor space (8" duct) [20.3 cm duct]	270 cfm high speed (459 m ³ /hr) 180 cfm low speed (306 m ³ /hr)
FILTER EFFICIENCY	
Normal mode	99.97% ≥ 0.3 micron @ 180 cfm (306 m ³ /hr)
Boost mode	99.82% ≥ 0.3 micron @ 270 cfm (459 m ³ /hr)
Recirculation mode	99.97% ≥ 0.3 micron @ 180 cfm (306 m ³ /hr)
UNIT EFFICIENCY (FILTRATION)	
Normal mode	> 87% @ 0.3 micron
Boost mode	> 85% @ 0.3 micron
Recirculation mode	> 87% @ 0.3 micron
HEAT RECOVERY	
Apparent Sensible effectiveness of the core	50% @ 105 cfm and 32°F (178m ³ /hr and 0°C) 60% @ 70 cfm and -13°F (119 m ³ /hr and -25°C)

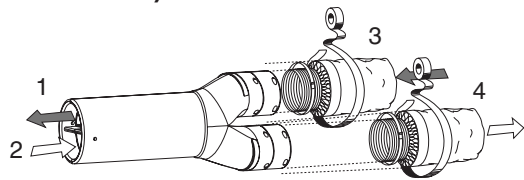
DIMENSIONS



INSTALLATION (TYPICAL BASEMENT, CENTRAL DRAW POINT)



Fresh filtered air is distributed through the whole house. Only one outside connection is needed when using the Tandem™ transition and the AirDuo™ port*, simplifying the installation.



Our exclusive Tandem™ transition never mixes stale inside air (1) (coming from its unit duct (3)) and fresh air from outside (2) (going through its unit duct (4)). Both transition AirSnap™ ports can be fitted with 5" and 6" diameter insulated flexible ducts.

**Patent pending.*

Also shown is our AirDuo™ exhaust/intake air vent which mounts on the exterior of the house. AirDuo™ is paintable and UV-ray protected. The AirDuo typical cross contamination is < 3%.

ORDERING INFORMATION:



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