

## MODEL GSVH1K

# HEPA FILTRATION & FRESH AIR VENTILATION FOR THE ENTIRE INDOOR ENVIRONMENT

The GuardianPlus™ Air Systems from Broan-NuTone feature whole-house HEPA\* filtration combined with a fresh air supply and patent pending technologies and manufacturing processes. Experts agree, fresh air combined with HEPA filtration will ensure the best indoor air quality and comfort in residential spaces.

Take advantage of eight "revolutionary" pending patents delivering Indoor Air Quality now setting the industry standard for optimal indoor air quality & comfort.

### HEPA FILTRATION WITH FRESH AIR VENTILATION

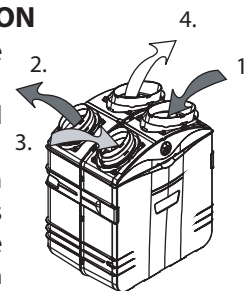
#### Control

The GSVH1K 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 operation mode (Off, Normal or Boost). 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  $\geq 0.3$  micron size particles.
4. Fresh filtered air is distributed throughout the house.



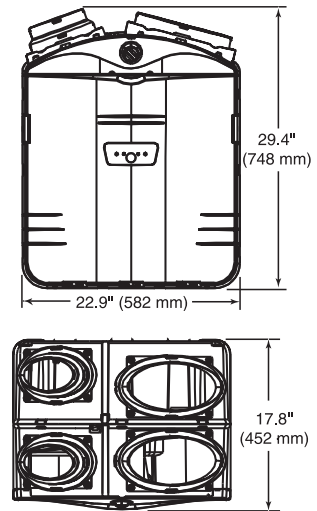
180 cfm (306 cubic meters/hr.) including 70 cfm (119 cubic meters/hr.) of air exchange to  
270 cfm (459 cubic meters/hr.) including 105 cfm (178 cubic meters/hr.) of air exchange

FEATURES	BENEFITS	MODEL GSVH1K
<p>ONE ENCLOSURE</p> <p><b>Most affordable solution in the industry!</b></p>	<p>Integrated whole-house HEPA filtration and Fresh air exchanger in one box!</p> <ul style="list-style-type: none"> <li>• Industries lowest total:               <ul style="list-style-type: none"> <li>• product cost for these two functions</li> <li>• installed cost for these two functions</li> <li>• servicing cost for these two functions</li> </ul> </li> <li>• Industries lowest operating cost:               <ul style="list-style-type: none"> <li>• product requires only one blower, thereby reducing annual operating costs</li> </ul> </li> </ul>	
<p>HEPA Filtration System</p>	<ul style="list-style-type: none"> <li>• True HEPA filter with 99.97% efficiency on particles <math>\geq 0.3\mu\text{m}</math>.</li> <li>• Airborne particles trapped by our HEPA filter include:               <ul style="list-style-type: none"> <li>• Pet Dander</li> <li>• Dust</li> <li>• Pollen</li> <li>• Fungal spores</li> <li>• Mold Spores</li> <li>• Bacterial spores</li> <li>• Airborne dust mites/cochroach fecal antigens and proteins</li> </ul> </li> <li>• Pre-filter with a &gt;90% efficiency on 3.0 – 10<math>\mu\text{m}</math> size particles to extend the life and performance of our HEPA filter</li> </ul>	
<p>Fresh Air Features</p> <p>Tandem™</p> <p>AirDuo™**</p> <p>AirChoke™**</p> <p>AirDiffuse™**</p>	<ul style="list-style-type: none"> <li>• 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</li> <li>• 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)</li> <li>• AirChoke™**, in response to Outdoor Air Temperature, our system's AirChoke automatically attenuates air flows to increase system performance and owner comfort</li> <li>• AirDiffuse™** product mixing cavity is specifically designed to ensure proper mixing of external and internal air, which possess differing airflow rates, while ensuring consistent HEPA filtration and ventilation</li> <li>• GuardianPlus™ Air Systems' fresh air exchange eliminates excess humidity during cold weather "heating" seasons</li> </ul>	
<p>Industries first combination Air Ventilation and True HEPA Filtration unit</p>	<ul style="list-style-type: none"> <li>• 270 cfm (459 m<sup>3</sup>/hr) of True HEPA filtered air (containing up to 105 cfm [178 m<sup>3</sup>/hr] of fresh filtered outdoor air)</li> <li>• Suitable for an entire home with as many as six bedrooms*</li> </ul> <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>Installation Ready</p>	<ul style="list-style-type: none"> <li>• Installs in less then three hours</li> <li>• Installation kit included (ducting not included)</li> <li>• Integral AirSnap™, snap-on duct ports; facilitate rapid installation and eliminates air leakage</li> <li>• Lightweight enclosure with integrated carrying handles</li> <li>• Unit allows for vertical or horizontal installation</li> </ul>	
<p>Designed for serviceability</p>	<ul style="list-style-type: none"> <li>• Self-lubricating motor needs NO service!</li> <li>• FilterGlide™** system, ensures trouble free prefilter and HEPA filter replacement</li> <li>• Filters are changed in less than five minutes!</li> </ul>	
<p>Owner interface</p>	<p>Electronic, low voltage owner interface features:</p> <ul style="list-style-type: none"> <li>• No high voltage wiring, no electrician required</li> <li>• LED indication of the products mode of operation</li> <li>• LED indication of filter alert logic facilitates owner filter maintenance to ensure peak performance, indoor air quality, comfort and system efficiency, which extends the product motor life</li> <li>• LED indication of wiring errors facilitate installation</li> <li>• Remote control (no need to go to the mechanical room or attic) of the systems filtration operating modes including; normal, and boost modes</li> </ul>	
<p>Agency Approvals or Certifications</p>	<ul style="list-style-type: none"> <li>• UL listed</li> <li>• Certified HVI airflow</li> <li>• A key component in the compliance to ASHREA 62-1999</li> </ul>	
<p>Warranty</p>	<ul style="list-style-type: none"> <li>• Fully protected by a 2-year warranty on all parts. (See manufacturer warranty for complete details)</li> </ul>	

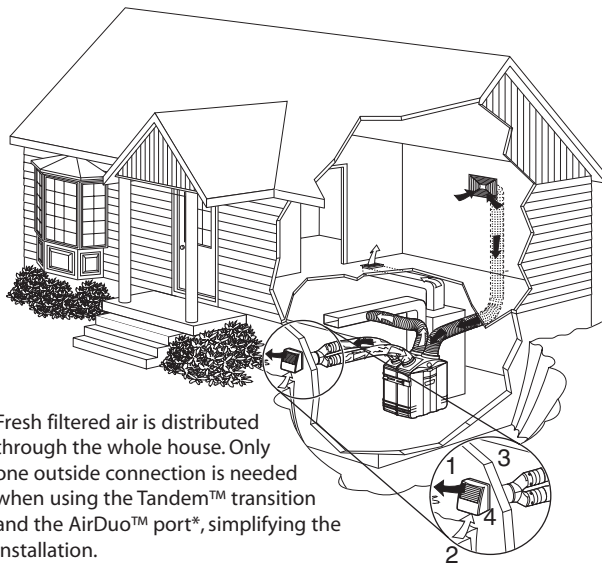
\*HEPA- High Efficiency Particulate Air  
\*\* = Patent Pending

TECHNICAL SPECIFICATIONS	MODEL GSVH1K
Max purification area	<b>Designed for (Numbers published)</b> 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 <sup>3</sup> /hr)
Voltage (power requirements)	120 V ac
Frequency	60 hz
Power consumed	
Normal mode	152W
Boost mode	218W
Dimensions Height x Length x Depth	29.4" x 22.9" x 17.8" (737mmx582mmx452mm)
Weight	42 lbs (19.1 kg)
Shipping weight	52 lbs (23.6 kg)
Materials (enclosure & insulation)	ABS & EPS
Agency compliances	UL
<b>AIR-FLOWS (where applicable)</b>	
Fresh outdoor air intake	5" duct [12.7cm]
	6" duct [15.2cm]
Stale indoor air drawn from the space	8" duct [20.3 cm duct]
Filter/Fresh Air distributed to the indoor space	8" duct [20.3 cm duct]
	95 cfm high speed with 5" ducts (161 m <sup>3</sup> /hr) 65 cfm low speed with 5" ducts (110 m <sup>3</sup> /hr) 105 cfm high speed with 6" ducts (178 m <sup>3</sup> /hr) 70 cfm low speed with 6" ducts (119 m <sup>3</sup> /hr) 270 cfm high speed (459 m <sup>3</sup> /hr) 180 cfm low speed (306 m <sup>3</sup> /hr) 270 cfm high speed (459 m <sup>3</sup> /hr) 180 cfm low speed (306 m <sup>3</sup> /hr)
<b>FILTER EFFICIENCY</b>	
Normal mode	99.97% ≥ 0.3 micron @ 180 cfm (306 m <sup>3</sup> /hr)
Boost mode	99.82% ≥ 0.3 micron @ 270 cfm (459 m <sup>3</sup> /hr)
<b>UNIT EFFICIENCY (FILTRATION)</b>	
Normal mode	> 87% @ 0.3 micron
Boost mode	> 85% @ 0.3 micron

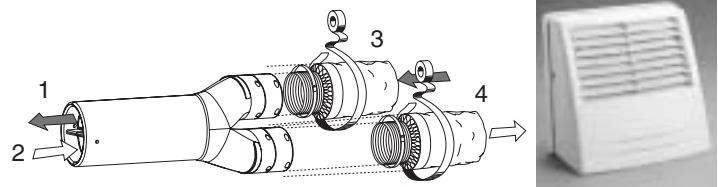
### DIMENSIONS



### 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 and 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%.

### ATTIC INSTALLATION

As a stand-alone system independent of any HVAC equipment or in conjunction with equipment already located in the attic space. Ideal for attics that have easy access for maintenance of equipment. Suitable for hot and cold climates. Requires no provision for drain. Stale air drawn to the unit by the register located in the ceiling. Filtered air is pulled to principal living area farthest away from pick-up point to maximize air turn over rate and diffusion.

