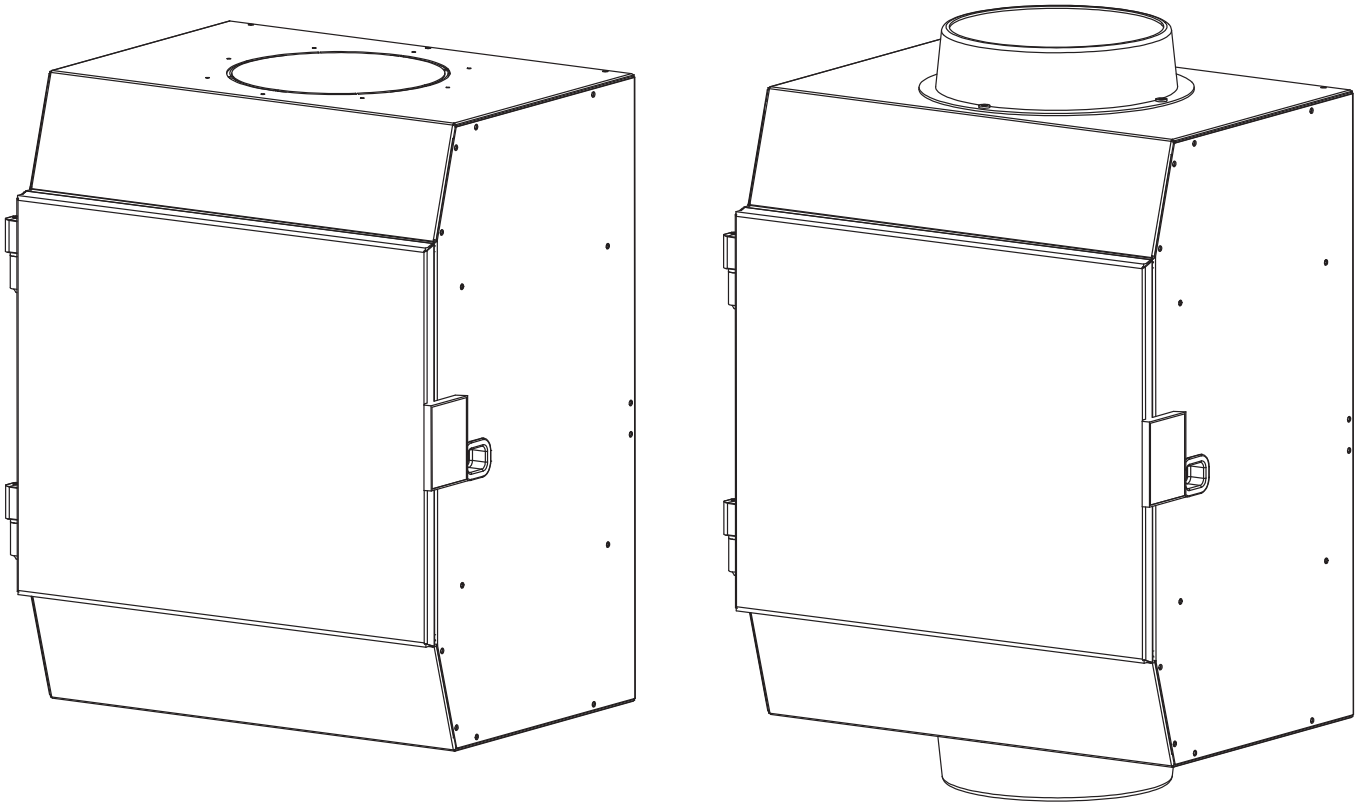


INSTALLATION GUIDE

RESIDENTIAL USE ONLY

Greentek Models HS3.0 HEPA (Item No. 463081)



Product of Greentek

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Greentek

50 Kanalfakt Way, Bouctouche, NB E4S 3M5
1-888-724-5211 Fax 1-866-426-7430

www.Greentek.ca

Item# 463625 JANUARY 2021



IMPORTANT - PLEASE READ MANUAL BEFORE INSTALLATION

NOTICE: Prior to installing, serious consideration must be taken to insure this filtration system will operate properly if integrated to any other type of mechanical system, i.e. a forced air system, or an air handling unit. To insure proper operation & compatibilities of both system, it is required that you follow the instructions in this manual.

LIMITATIONS: The product is for residential applications only. Must be installed in accordance with all national and local regulations, building and safety codes.



CAUTION: TURN OFF ALL INTEGRAL DISCONNECTS BEFORE SERVICING

TO REDUCE OR AVOID THE HAZARDS OF ELECTRIC SHOCK AND FIRE: CAUTIONS CONCERNING THE OPERATION AND FULL EFFICIENCY OF THIS PRODUCT:

- Before servicing or cleaning the system, always remove the power cord from the AC wall outlet.
- To reduce the hazards of electric shock or fire, do not perform any service to the system other than those stated in the operating manual instructions.
- To reduce the risk of electric shock, this filtration system comes equipped with a 3-prong plug-in. This plug will fit in a polarized outlet only one way.
- Do not use filtration system for outdoor application.
- Do not pull or twist power cord when disconnecting it from the ventilation system. Grasp the plug firmly, not the cord.
- Do not modify the power plug in any way; if modified, risk of electric shock fire or even damage to the unit may occur.
- Do not use the filtration system for removal of flammable fumes or gases.

- Use a dedicated AC 120V outlet only.
- Do not obstruct or cover the air intake or air outlet of the filtration system.
- Do not modify, repair or disassemble this system. These tasks are to be performed by authorized serviced personnel only. Fire, electrical shock and/or bodily injury may occur if these warnings are not followed.
- To prevent injuries, do not operate the filtration system, while servicing or maintaining. There is an impeller wheel turning at a very high speed that must fully stop rotating prior to accessing the inside of the unit.
- Always assess the operation of the filtration system on how it may interact with vented combustion equipment (ie. Gas Furnace, Oil Furnace, Combustion, Appliances, etc.)

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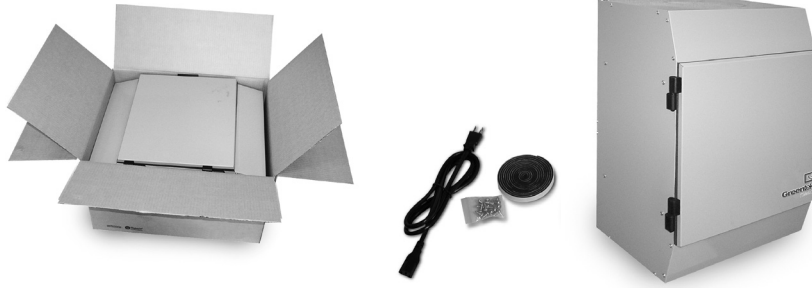
1. Unpacking and inspection	3	5. Installing the unit.	5
2. Technical data	3	6. General Operating Information	7
3. Planning the installation	4	7. Contact Information	8
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1. UNPACKING AND INSPECTION

BOX CONTENT

Includes:

- Whole House HS 3.0
- Power cord, 5 FT
- Plenum seal, 7.5 FT
- Screws, (16) 8 x 32 x 1/2"
- Template



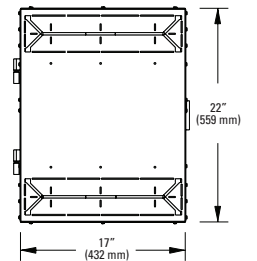
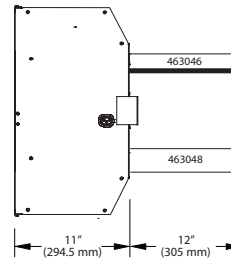
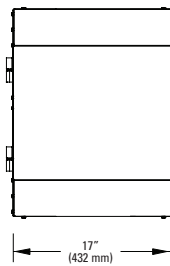
2. TECHNICAL DATA

SPECIFICATIONS

Model HS 3.0	
Filtration Stage 1 & 2	Prefilter/ Carbon (463046)
Filtration Stage 3	HEPA filter (463048)
Weight	28 lbs (12.7 kg)
PlenumMount	16" x 3.5"
Port Openings	(406mm x 89mm)
Collar Mount Port Openings	8" (203mm) Round*
Installation type	Plenum,Wall* or Floor*Mounted
Electrical Supply	120 VAC @ 60 Hz
Power Consumption	134 W
Certification	CCSA US
Air flow data	220-300 CF.M.
* Installation requires kit No.463085	

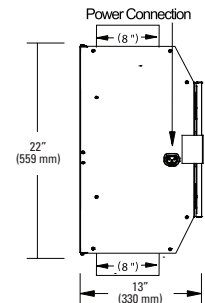
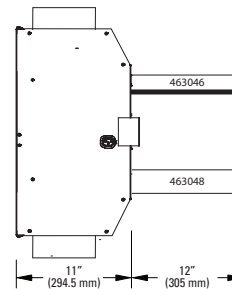
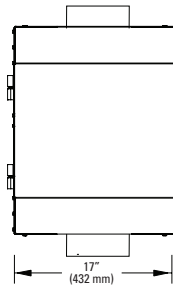
RETURN AIR PLENUM INSTALLATION

Front View Side View - Clearance Back View



RETURN AIR PLENUM INSTALLATION AND STAND ALONE INSTALLATIONS* With optional collar mounting kit (Item No. 463085)

Front View Side View - Clearance Side View



IMPORTANT:

463046 - Pre+carbon filter kit is a universal filter

463048 - HEPA Filter kit is a universal filter

3. PLANNING THE INSTALLATION

SPECIAL CONSIDERATION

For integrated system installation

- Verify clearance on the ductwork to mount the unit using the Forced Air heating/cooling system
- Minimum clearance requirements for maintenance and service
- Electrical power requirements
- Interaction between the HEPA filter unit and other mechanical devices.

The Whole House HEPA unit is a versatile appliance with multiple installations configuration. It is recommended to take your time in planning the installation.

Several Installations are illustrated herein for Whole House filtration applications:

- Return to return integrated with the forced air heating/cooling system.
- Central draw points using dedicated duct system
- Consult the manufacturer for other special applications.

4. TYPE OF INSTALLATION: RETURN TO RETURN INTEGRATED SYSTEM

DUCTING FLAIR SYSTEM

Installation

The Whole House HEPA Filtration system is designed to install directly onto the return air plenum of the forced air heating/cooling system. Choosing this type of installation eliminates the need to externally duct the HEPA filter unit to the plenum system. If you choose this type of installation, it is recommended that you run the fan on your forced air system continuously to maximize its cleaning ability.

TIPS TO INSTALLER

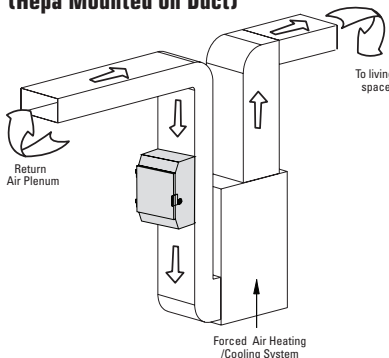
The Whole House HEPA Filtration system does not replace the filter from the forced air heating/cooling system. Regular maintenance of this filter is necessary to permit the good operation of the forced air heating/cooling system.

OPTIONAL COLLAR SYSTEM

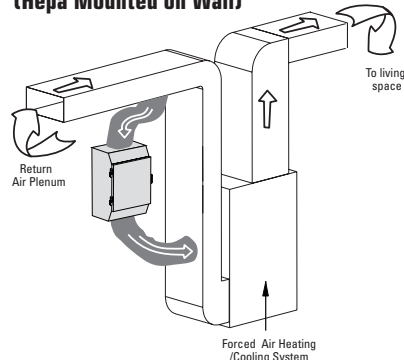
Installation

Using kit no. 463085 the Whole House HEPA Filtration system can be converted to use 8 inch round collars for application requiring ducting. The kit includes two, 8 inch round collars, two mounting brackets for wall or floor mounting, installation guide and fasteners.

DUCTING FLAIR SYSTEM (Hepa Mounted on Duct)



OPTIONAL COLLAR SYSTEM (Hepa Mounted on Wall)



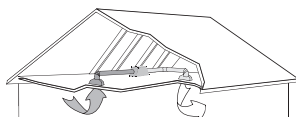
INSTALLATION SHOULD BE PERFORMED BY A CERTIFIED PROFESSIONAL.

Consult your HVAC product manufacturer if the usage of this product will affect the performance of your forced air heating / cooling system.

4. TYPE OF INSTALLATION: STAND ALONE

ATTIC INSTALLATION

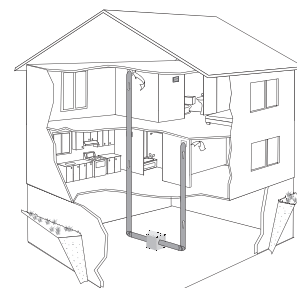
Ideal for homes without a forced air heating / cooling system. Allows for air filtration and circulation throughout the home.



HEPA system must be operated continuously whenever a part or all the system is located in an unconditioned space to avoid condensation in the ductwork below freezing (0°C, 32°F).

BASEMENT INSTALLATION

Ducting will usually consist of one return with grille from one side of the home, and one supply with grille at the opposite end of the home.



5. INSTALLING THE UNIT: STEP BY STEP

TOOLS REQUIRED

- Phillips #2 or Robertson #1 screwdriver
- 3/32" drill bit
- Tin snips or metal shear
- Power Drill

LOCATION

Return side connections is to be installed after the last branch on the return air plenum and minimum 2 linear ft distance from furnace.

A 5-ft power cord is supplied with the unit. If not available a 120VAC outlet needs to be supplied.

NOTE: Refer to Section 4 for details on how to remove the unit's door and filters

TIPS TO INSTALLER

Please consult local authorities to find out whether the installation of electrical products requires the services of a certified technician or electrician. Removing the filters from the unit will facilitate your job.

DUCTING FLAIRS MOUNTING SYSTEM

The Whole-House HEPA Plenum Systems are designed for single person installation.

Once the holes are made in the main return duct and the unit is aligned, the installer just has to unfold the «Ducting Flairs» and screw the unit in place.

TIPS TO INSTALLER

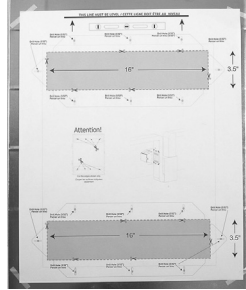
It is recommended that the filtration unit have a devoted receptacle with 120V. It is not recommended to connect unit with an extension cord. If no receptacle is available please call an electrical contractor to have one installed.

STEP BY STEP INSTALLATION

Steps involved in the preparation of the plenum mount system are as followed:

Step 1 Preparing return air plenum

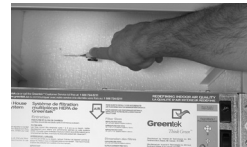
Find a location that satisfies both service and maintenance requirements and proceed to cut holes as illustrated below.



Tap template to return air plenum. Cut opening with metal shears, predrill for the securing screws and remove template.

Step 2 Preparing ducting flairs

Remove the door and filters and proceed to cut the insulation as illustrated below.

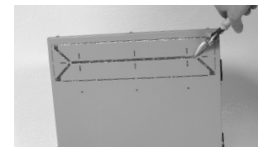
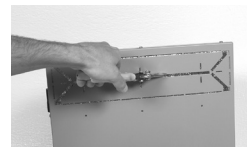
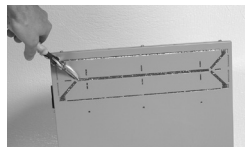


Cut the insulation along the inside edge of both inlet and outlet ports to remove the insulation from the port openings.

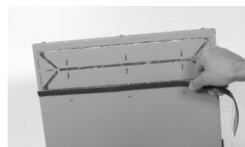
One cut permits the clean removal of the insulation piece.

The unit should look like this when the foam piece is removed.

Cut the four metal tabs to release the mounting flairs for the inlet and outlet ports.

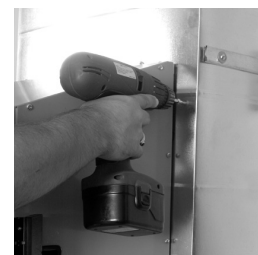


Apply plenum seal tape all around both openings on the back of the unit. Bend tabs outward approximately 90 degrees.



Step 3 Mount Hepa

Align unit into place. Unfold the ducting flairs completely to sandwich the return air plenum between the ducting flair and the filtration unit. Install unit as usual using all supplied fastening hardware.



5. INSTALLING THE UNIT: STEP BY STEP (continued...)

MAKE SURE TO INSTALL FILTER ACCORDING TO AIR FLOW DIRECTION FOR MAXIMUM PERFORMANCE

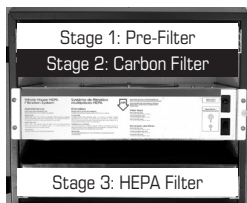


Check for this symbol on each filters and it is located on the unit's motor plate.

STEP BY STEP INSTALLATION

Steps involved in the preparation of the plenum mount system are as followed:

Step 4 Finishing



Remove protective plastic covers from all filters and replace them in their proper location (Stage 1, 2 and 3).



Replace door and insert power cord into the receptacle of the filter units and the other end into wall outlet.

6. GENERAL OPERATING INFORMATION

DOOR SWITCH



FUNCTION

The Whole House HEPA system is comprised of a ventilator, speed selection switch, 3 stages of filtration and the cabinet enclosure system. The ventilator pulls air through the pre-filter and then through the impregnated carbon pad for odor control and finally the last stage of filtration is the HEPA filter which removes 99.97% of particles 0.3µm in size.

MODE SELECTOR



- II (300 CFM)
- I (220 CFM)

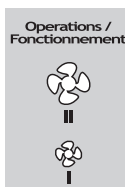
OPERATION MODE OPTIONS

The unit features two speeds of operation for your convenience. The speed selection switch is located on the front of the motor assembly. At lowest speed the unit will provide 220 CFM of clean air while at highest speed, the unit will provide 300 CFM of clean air. It is recommended that the unit be operated on highest speed at all times to maximize the benefits of the HEPA filtration system. If for some reason the filtration needs are not as important then one might operate the unit at low speed.

An access door is provided at the front of the unit to permit access to the filters and speed selection switch. Opening the latch on the right side of the unit will permit the door to swing open. A safety door interlock switch cuts the power to the motors for your safety. If needed the door can be removed from the cabinet hinges by holding the top part of the door with one hand and gently taping on the bottom edge of the door with the other hand to release the door from its hinges.



OPERATIONS



Maximum Filtration
(300 cfm)

Normal Filtration
(220 cfm)

RECOMMENDED OPERATION

The return plenum mount model operates in conjunction with your forced air heating/cooling system. A forced air distribution system continuously circulates the same air inside your home. The whole house HEPA filtration system operates on the principal of bypass filtration, which means that a portion of the air being returned into the furnace is filtered on each pass. Over time all the air in the home gets cleaned. It is recommended that the furnace blower be in operation whenever the filtration system is in operation.

For stand-alone attic installation, the HEPA filtration system must be operated continuously whenever a part of all the system is located in an unconditioned space to avoid condensation in the ductwork below freezing (32°F, 0°C)

Maintenance of the unit should be performed at regular interval to keep the benefits of the HEPA filtration unit.

7. GENERAL MAINTENANCE INFORMATION

WHEN SHOULD I SERVICE MY UNIT?

SERVICE AND ACCESSORIES

Detailed maintenance information is located on the front decal on motor plate.

PRE-FILTER AND CARBON FILTER (463046)

Replace filters every 3 to 6 months or as needed.

HEPA FILTER (463048)

Replace filter every 2 to 3 years or as needed. Check regularly to maintain maximum performance from your HVAC system.

For replacement filters, contact your local HVAC contractor.

INSIDE THE UNIT

Once a year or as needed, clean the interior of the unit (Wall and Motor Plate) with a mild and non-abrasive soap. It is recommended to use products that are environmentally friendly.



WARNING : ALWAYS UNPLUG UNIT BEFORE SERVICING

4.1 CHANGING FILTERS

After opening the unit's door, grasp both edges of filter and pull with equal force to slide out the filter.



4.2 CLEANING

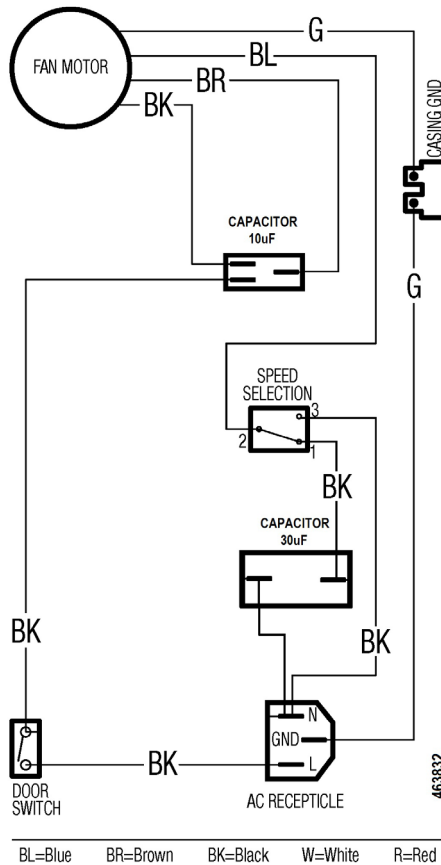
Once a year or as needed, clean the interior of the unit (Wall and motor plates) using mild non-abrasive soap and water. It is recommended to use products that are environmentally friendly.



4.3 TROUBLESHOOTING

TROUBLESHOOTING	SUGGESTIONS
Unit does not operate	<ul style="list-style-type: none"> Is power cord fully inserted in the unit's connector? Is outlet powered? Is door interlock switch operating?
Unit operates only on one speed.	Possible loose wire inside electrical box, contact you local contractor.
Unit vibraes	Check for excessive dust build up or missing balancing weight on the impeller wheel.

4.3 ELECTRICAL WIRING DIAGRAM





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