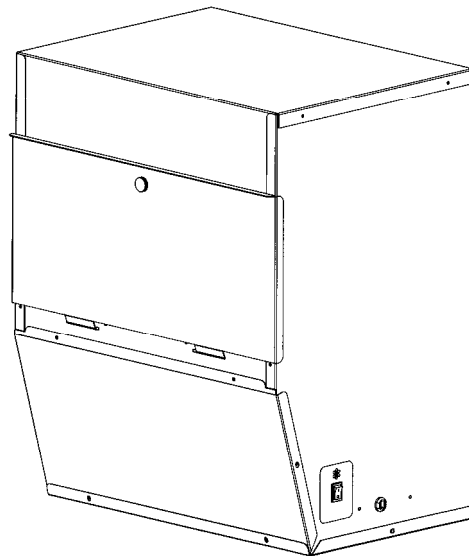




OWNER'S MANUAL

MODEL DM400 WHOLE-HOUSE DUCT MOUNT HEPA AIR CLEANER

IMPORTANT: PLEASE READ MANUAL BEFORE OPERATING UNIT



Features

- Long-life, HEPA (High Efficiency Particulate Air) Media Filter is 99.97% efficient at removing particles 0.3 micron
- MERV 11 Prefilter removes lint and large particles to extend life of HEPA Filter
- Activated Carbon Prefilter removes unpleasant odours
- Easy-to-change filters
- Powerful motor delivers 320 CFM of filtered air
- Heavy gauge steel cabinet and powder-coat paint finish provide rigid installation and durability
- Plug-in Power Cord provides easy electrical connection
- Duct-mountable for convenient installation

SAFETY CONSIDERATIONS

Read and follow instructions carefully. Follow all local electrical codes during installation. All wiring must conform to local and national electrical codes. Improper wiring or installation may damage the HEPA Air Cleaner.

Understand the signal words **WARNING** and **CAUTION** which are present in the Owner's Manual. **WARNING** and **CAUTION** signify a hazard which could result in property damage, personal injury or death.

WARNING

Before beginning any installation or modification, be certain that the main line electrical disconnect switch is in the **OFF** position. Electric shock could result. Tag disconnect switch with suitable warning labels.

Only a heating/air conditioning installer or qualified service person should install, repair, or service your Whole-House HEPA Air Cleaner.

Homeowners or untrained personnel can perform the basic maintenance functions of replacing filters.

When working on air cleaning equipment, observe precautions in the Owner's Manual, labels attached to the unit, and other safety precautions that may apply. Follow all safety codes. Wear safety glasses and work gloves.

WHAT THE HEPA AIR CLEANER DOES

The Whole-House HEPA Air Cleaner has been designed to remove particulate such as atmospheric and household dust, coal dust, insecticide dust, mites, pollen, mold spores, fungi, bacteria, viruses, pet dander, cooking smoke and grease, tobacco smoke and more. It also removes odours with the Carbon Filter.

BENEFITS

- Helps provide relief from allergies, asthma, and other respiratory illness.
- Helps reduce housekeeping time and redecorating costs.
- Helps provide a healthier, more comfortable environment, year-round.

HOW IT WORKS

Millions of airborne pollutants are carried through the return air ducts of the heating/cooling system. The HEPA Air Cleaner has been designed to be installed on the return air duct. A portion of this return air is by-passed through an opening on the rear of the unit and passes through a 3-stage filtration system.

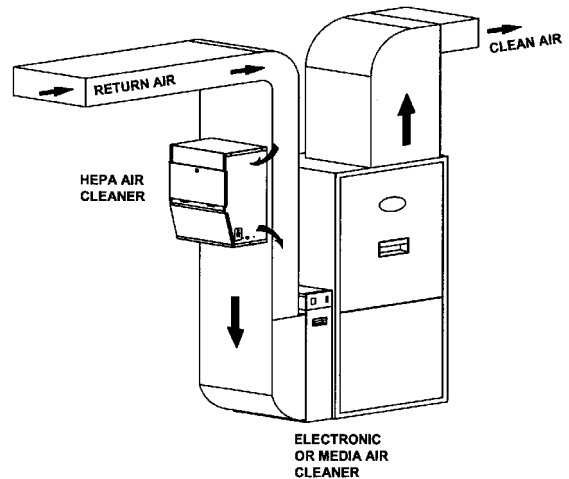
The air passes through an efficient pleated MERV 11 Prefilter to remove lint and large particles to extend the life of the HEPA filter.

The Activated Carbon Prefilter (activated carbon impregnated polyester filter) removes odours before they enter the HEPA filter.

Smaller particles then pass through a long-life, HEPA (High Efficiency Particulate Air) Media Filter which captures 99.97% of particles 0.3 micron (1/84,000 of an inch) and larger. This HEPA filter has more than 40 ft² of collection surface area.

Clean air is discharged back into the return air duct.

INSTALLATION



Duct Mount Installation

LOCATION

WARNING

This unit must be installed on the return air side of the system only. Do not connect to supply side. Do not install in a cooking area or connect directly to any appliance.

The HEPA Air Cleaner can be installed directly on the return air duct eliminating the need for external ducting. The unit can also be mounted on the floor, a wall or be suspended from the ceiling and with the use of collars be ducted into the return air plenum. It can also be used as a free standing unit. Care should be taken to keep the unit away from an area where there is a possibility of moisture leaking on to it. **Ensure there is 13 inches in front of the unit to remove the filters for replacing.**

GENERAL INSTALLATION STEPS (Duct Mount)

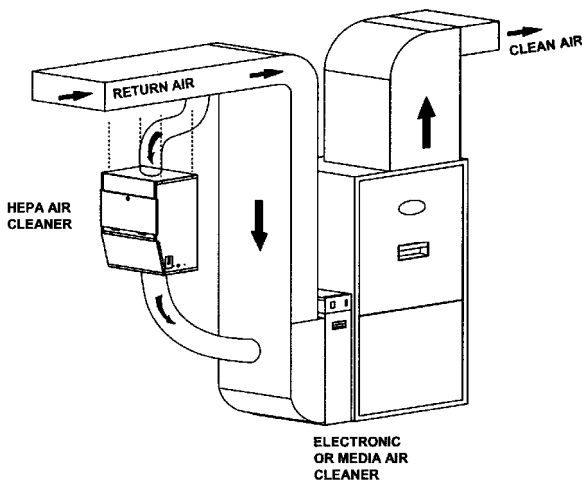
1. Remove any packaging, as well as the door and filters before installing. See Maintenance for instructions to remove the filters.
2. If the unit is to be mounted on the return air plenum, it must be installed after the last return branch connection on the plenum. If outside air is introduced into the return air duct, either through a HRV (Heat Recovery Ventilator) or direct, it should be added to the system before the intake inlet to the Air Cleaner.

3. Tape the mounting template level on the plenum and proceed to cut and drill the necessary holes as marked.
4. Cut the small joints on the mounting flaps on the back of the unit as indicated. Bend all the flaps outward slightly less than 90 degrees, except for the upper bottom flap which is only bent up 45 degrees. This bottom flap will act as a deflector for the exhaust air entering back into the plenum.
5. Place the gasket material around the two openings on the back of the air cleaner. Place the unit on the plenum so the flanges are placed through the holes cut in the duct. Fold all the flanges, except the upper bottom flap over, to enclose the duct between the flanges and the unit. The upper bottom flap is only bent up 45 degrees.
6. Secure the unit to the duct with the screws provided.

4. The 8 inch intake collar (top) must draw air from the return duct at a location that will be ahead of the clean exhaust air, that will be returned to the duct from the Air Cleaner.
5. An 8 inch collar will be installed on the return duct and a length of 8 inch flexible hose or duct is required to attach between the 8 inch intake collar and the collar on the return duct. When running the hose, make sure that there are no kinks or sharp bends that will impede the air flow to the unit. Secure and seal the hose and connections to prevent air leakage.
6. The 8 inch exhaust collar can be mounted in the same manner to the bottom of the unit. An 8 inch collar will be installed on the return duct close to the furnace and a length of 8 inch flexible hose or duct is required to attach between the exhaust collar and the collar on the return duct. The ideal location is low on the return air boot pointing at the furnace. To prevent air shear inside the duct, it is recommended that you install a deflector inside the boot, so the discharged air is deflected down into the boot. When running the hose, make sure that there are no kinks or sharp bends that will impede the air flow from the unit. Secure and seal the hose and connections to prevent air leakage.

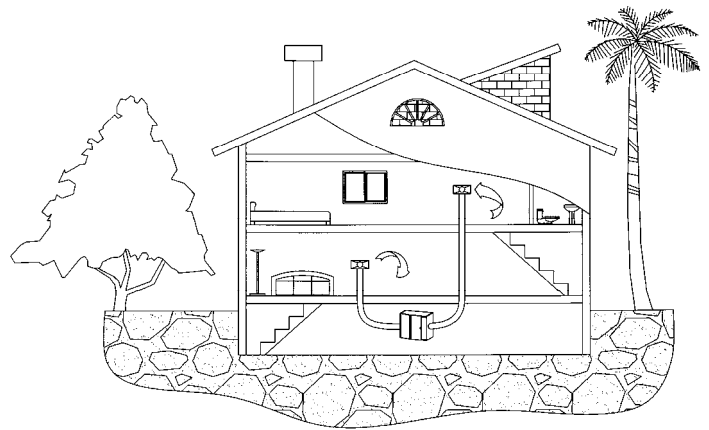
GENERAL INSTALLATION STEPS (Collar Mount)

(Inlet collars are available as a kit from your distributor)

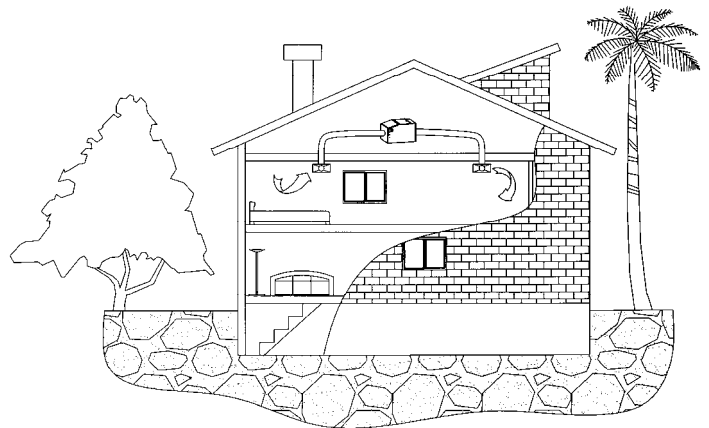


Collar Mount Installation

1. This unit can be installed with collars and flexible ducting if desired. Openings are prepunched on the top and bottom of the unit for this purpose. Remove the plastic film over the holes and snip out the joints to open the hole. Do not open the holes in the back of the unit if you are collar mounting the air cleaner.
2. The collar is installed with the flange on the inside of the cabinet with only the collar ring on the outside of the cabinet. Compress the collar until you can insert the flange into the opening in the enclosure. Enlarge the collar to its maximum and install two screws into the ring to hold it to the proper diameter. Turn the collar in the hole until the holes in the enclosure line up to the holes on the collar flange. Secure with the screws provided.
3. The intake collar on the return duct must be installed after the last return branch connection on the plenum. If outside air is introduced into the return air duct, either through a HRV (Heat Recovery Ventilator) or direct, it should be added to the system before the intake inlet to the Air Cleaner.



Self-Contained Basement Installation



Self-Contained Attic Installation

OPERATING INSTRUCTIONS

WARNING

Never use the unit without all of the filters in place.

The HEPA Air Cleaner is designed to run continuously to provide clean, filtered air 24 hours a day. The fan on the heating/cooling system, to which the HEPA Air Cleaner is dependent on for circulated air, should be on 'continuous'.

Note: If the system fan setting is on 'automatic', it is recommended the HEPA Air Cleaner be operated through an air switch or relay to turn the Air Cleaner off, when there is no system fan on.

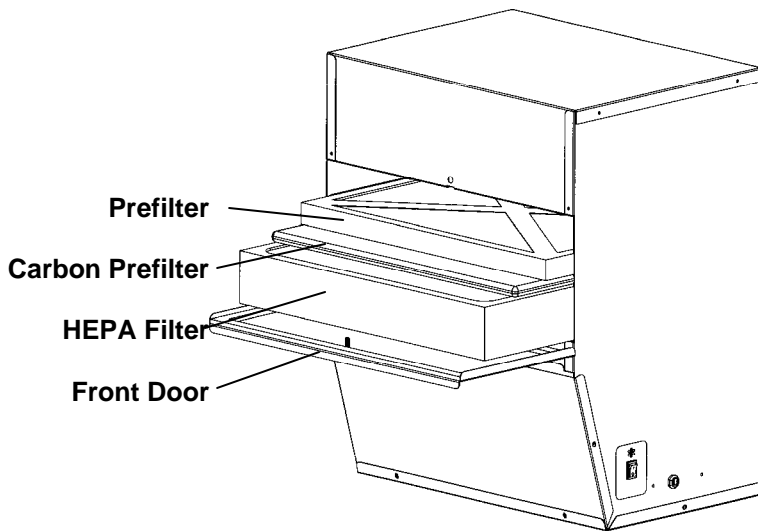
The unit plugs into a regular 120 volt outlet and is controlled by a switch located on the bottom of the unit, near the cord.

Note: Do not allow the cord to be placed where it may be walked on or allow anything to roll over it.

The door must be secured for the Air Cleaner to operate. All filters must be in place for the unit to operate properly.

MAINTENANCE

For efficient operation, the filters must be changed on a regular basis. If you notice a reduction in air flow from the system, check the filters.



CAUTION

Make sure to turn Air Cleaner **OFF** before performing any maintenance or removing any components.

1. To access the filters, turn the Air Cleaner **OFF** at the switch and remove the front door.
2. Carefully remove filters to avoid spilling of collected contaminants. Dispose of filters in a plastic bag and discard with regular household trash.
3. Remove plastic from new filters before installing. Discard plastic safely. Take care not to damage the filters. Hold by the frame only.
4. Date the replacement filter in the space provided.
5. Place the filters in their appropriate track with the arrows pointing toward the fan.
6. Use genuine replacement filters only. Call the original installer for parts.

Note: When the filters are new, you may notice a new smell from the system. This is normal and will dissipate within a few hours.

Prefilter (#DMH4-0855): This must be replaced every 3-6 months. A clean prefilter will increase the life of the HEPA filter and improve airflow.

Carbon Prefilter (#DMH4-0810): This must be replaced every 3 - 6 months. If there are heavy odors in the home from cooking, smoking, painting or other sources, the filter will require changing more often.

HEPA Filter (#DMH4-0400): Replace every 2-3 years. The life of this filter depends on the amount of contaminants in the air and the frequency in which the prefilter has been changed. Renovations in the home that create wood, drywall dust or similar contaminants will shorten the life expectancy of the HEPA filter.

Note: Handle the HEPA filter by the frame only. The paper is fragile and a puncture or tear will reduce efficiency.

TECHNICAL DATA

Dimensions	Height Width Depth	20.125 in 16.25 in 12.75 in	51.1 cm 41.3 cm 32.4 cm
Intake		14.5 x 3.75 in or 8 in (dia)	36.8 x 9.5 cm or 20.3 cm (dia)
Outflow		14.5 x 4.37 in or 8 in (dia)	36.8 x 11.1 cm or 20.3 cm (dia)
Unit Weight		38 lbs	17.2 kg
Input Voltage		120 V 60 Hz	
Power Consumption		125 Watts	
Air Flow		320 CFM	544 m ³ /hr
Cabinet		22 gauge	
Power Cord		10.0 ft	3.05 m
Filter Dimensions	Prefilter Carbon Prefilter HEPA Filter	16 x 12 x 1 in 16 x 12 x 0.5 in 16 x 12 x 2.5 in	40.6 x 30.5 x 2.5 cm 40.6 x 30.5 x 1.3 cm 40.6 x 30.5 x 5 cm
HEPA Collecting Surface Area		40 ft ²	3.7 m ²

WHOLE-HOUSE HEPA AIR CLEANER LIMITED FIVE (5) YEAR WARRANTY

This EVOLUTION AIR product is warranted to be free from electrical and mechanical defects in material and workmanship, under normal use and maintenance, within its listed capacity.

1st Year From Date of Purchase:

Parts and labor at no cost.

2nd - 5th Year From Date of Purchase:

Parts only, excluding fan/motor assembly, at no cost. Labor charges extra.

The warranty does not include the Prefilter, Carbon Prefilter or HEPA Filter. The EVOLUTION AIR product must not have been moved from the site of original installation. A new or remanufactured part to replace the defective part will be provided without charge for the part itself, through an authorized EVOLUTION AIR service dealer, provided the defective part is returned to the EVOLUTION AIR distributor **prepaid**. The replacement part assumes the unused portion of the warranty. **Proof of Purchase and Installation** must be provided. Failing this, EVOLUTION AIR will guarantee the unit for a period of sixty (60) months from the date of manufacture, according to the manufacturer's records and conditions stated in this warranty.

LIMITATIONS OF WARRANTY - All implied warranties (including implied warranties of merchantability) are hereby limited in duration to the period for which the limited warranty is given. The expressed warranties made in this warranty are exclusive and may not be altered, enlarged, or changed by any distributor, dealer or other person whatsoever.

WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance as outlined in the Owner's Manual including cleaning and/or replacement of filters.
2. Damage or repairs needed as a consequence of any misapplication, negligent handling, improper servicing, unauthorized alteration, or improper operations.
3. Damage or repairs required as a consequence of faulty installation or application by others.
4. Failure to start due to voltage conditions, blown fuses, open circuit breakers or other damages due to the inadequacy or interruption of electrical service.
5. Damage as a result of floods, winds, fires, lightning, accidents, corrosive atmosphere, or other conditions beyond the control of EVOLUTION AIR.
6. Parts, including filters, not supplied or designated by EVOLUTION AIR.
7. EVOLUTION AIR products installed outside of the continental Canada, U.S.A., Alaska and Hawaii.
8. Any personal injury, special indirect or consequential property or commercial damage of any nature whatsoever.

Model No.

Serial No.

Date of Installation

Installed By

Owner's Name & Address

RETAIN THIS CERTIFICATE WITH YOUR DOCUMENTS



EVOLUTION AIR

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