

Part Number P102-550

**SAFETY CONSIDERATIONS**

Installation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service air-conditioning equipment.

Untrained personnel can perform basic maintenance functions such as changing filters. All other operations should be performed by trained service personnel. When working on air-conditioning equipment, observe precautions in the literature, tags and labels attached to the unit or accessory, and other safety precautions that may apply.

Follow all safety codes. Wear safety glasses and work gloves.

**▲ WARNING**

Before installing air cleaner or performing maintenance or service on air cleaner, unplug the unit. Electrical shock can cause injury or death.

**GENERAL**

The Totalline residential whole-house HEPA air cleaner is designed to remove particulates from the air stream, such as atmospheric and household dust, coal dust, insecticide dust, mites, pollen, mold spores, fungi, bacteria, viruses, pet dander, cooking smoke and grease, and tobacco smoke. The air cleaner also removes odors with a carbon VOC afterfilter. With the addition of optional carbon/potassium permanganate VOC filters, noxious fumes can also be removed. The Totalline residential whole-house HEPA air cleaner helps provide relief from allergies, asthma, and other respiratory problems.

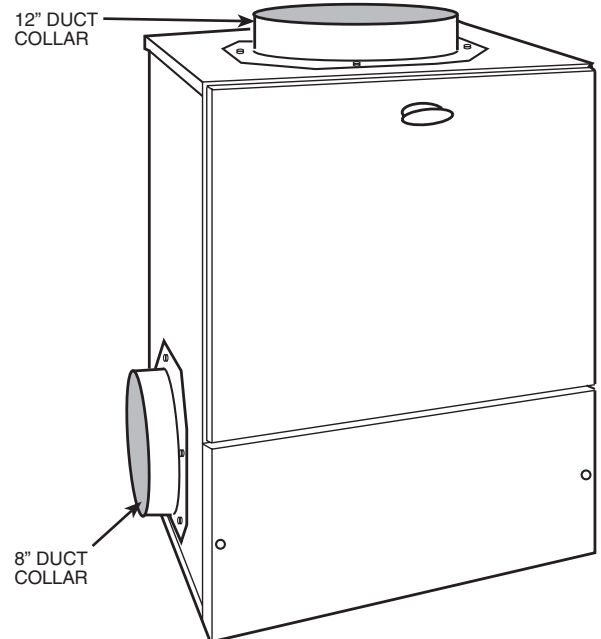
The air cleaner is installed in parallel to the return air duct. The air flows through a 3-stage air filtration system.

**FIELD-SUPPLIED REQUIRED  
COMPONENTS**

- 12-in. diameter, round duct adapter
- 12-in. diameter, round, flexible intake duct
- two 12-in. diameter, round duct clamps
- 8-in. diameter, round duct adapter
- 8-in. diameter, round, flexible exhaust duct
- two 8-in. diameter, round duct clamps
- deflector (optional)
- duct tape

**COMPONENTS**

See Fig.1 for a picture of the air cleaner. See Table 1 for air cleaner specifications.

**Fig. 1 — Whole House HEPA Filter**

**Cabinet** — The cabinet is constructed of heavy gage steel. The cabinet can be adapted to mount on a wall or be suspended from a ceiling.

**Activated Carbon Prefilter** — The activated carbon prefilter removes lint and odors from the airstream. The filter is a 1-in., pleated, activated carbon impregnated, polyester filter.

**HEPA Filter** — The HEPA (High Efficiency Particulate Air) filter captures 99.97% of particles 0.3 microns (1/84,000-in.) and larger. The 6-in. filter has more than 175 sq ft of collection surface area.

**Carbon VOC (Volatile Organic Compound) Afterfilter** — The carbon VOC afterfilter removes remaining odors from the airstream after the airstream has passed through the prefilter and HEPA filter. The filter is a 2-in., pleated, activated carbon impregnated, polyester filter.

**Carbon/Potassium Permanganate VOC Filter (Optional)** — Used in place of the carbon VOC afterfilter, the optional carbon/potassium permanganate VOC filter removes noxious odors and fumes from the airstream, such as formaldehyde, heptane, tetrachloroethylene, toluene. These gases are often emitted from new carpets, cabinets, furniture, paints, pesticides, personal care products, and cleaners.

## INSTALLATION

**Location** — The air cleaner should be located as close to the return air duct as possible. This allows shorter ducting to the air cleaner and keeps static pressure lower.

The unit can be adapted to mount on a wall or be suspended from a ceiling. The unit should not be installed outside or in an area where moisture may leak on the unit.

There must be 36-in. clearance to remove and change filters.

### ⚠ CAUTION

Do not connect to the supply side of the system. Damage to equipment could result. Unit must be installed on the return side of system only. Do not install in a cooking area or connected directly to an appliance.

**Install Filters** — Remove plastic wrapping from each filter. Slide filters into appropriate brackets. Pay close attention to airflow direction indicated on each filter. (See Fig. 2.)

NOTE: The 2-in. Carbon VOC Afterfilter (bottom filter) can be replaced with a carbon/potassium permanganate VOC filter.

**Connect Ductwork** — To connect the ductwork to the air cleaner, perform the following:

NOTE: Any outside air added to the system from a HRV (Heat Recovery Ventilator) or directly must be introduced before the filtration system.

1. Open the access panel. Remove the filters from inside the air cleaner.
2. The intake and exhaust duct collars are reverse mounted for shipping. Remove the intake and exhaust duct collars and save all screws.
3. Install intake duct collar on top of air cleaner with screws saved from Step 2.
4. The exhaust collar can be mounted on either side of the air cleaner, depending on location of ductwork and heating/cooling system. Install exhaust collar onto correct side of air cleaner with screws saved from Step 2. Cover the opposite side of the air cleaner with the exhaust cover. The exhaust cover must be installed for the air cleaner to function properly.
5. Install field-supplied duct adapter on cold air return duct in proper location. Inlet location should be far enough away (min. 6 ft) from air cleaner outlet air so airstream will not short cycle. An air deflector must be installed in the duct if the distance between the inlet and outlet is less than 6 ft. See Fig. 3 for typical installation.
6. Attach field-supplied 12-in. duct to duct adapter installed in Step 5, using field supplied clamp.
7. Attach other end of flexible duct to air cleaner inlet collar with field-supplied clamp. Make sure there are no kinks or sharp bends in the hose that will impede air flow to the air cleaner. Seal flexible duct connections with duct tape.
8. Reinstall filters.

## OPERATION

### ⚠ WARNING

DO NOT operate unit without a complete filter set installed.

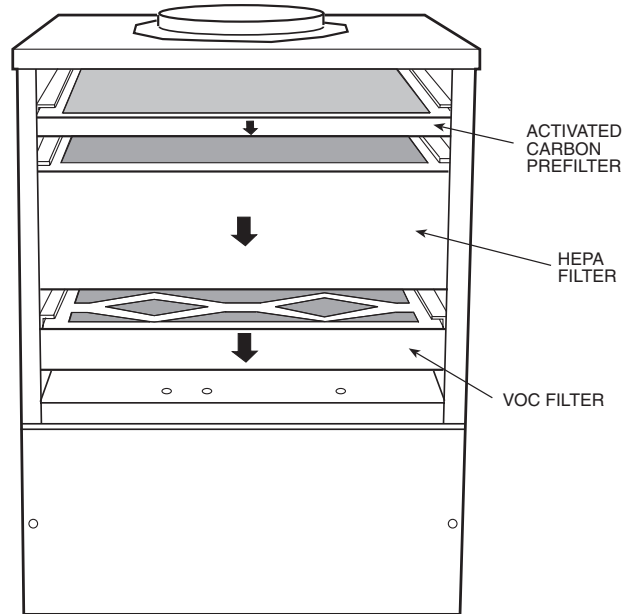
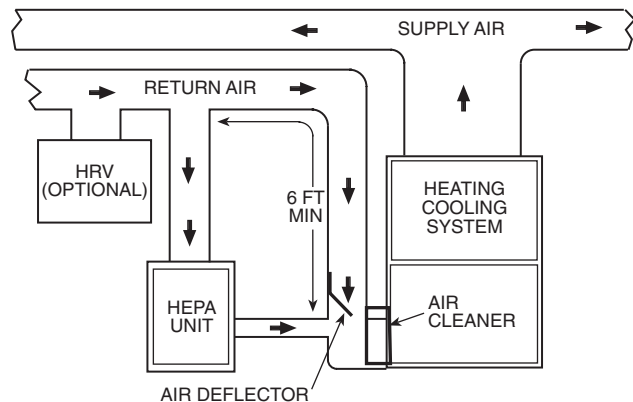


Fig. 2 — Filter Installation



#### LEGEND

HRV — Heat Recovery Ventilator

Fig. 3 — Typical Air Cleaner Installation

The HEPA Air Cleaner is designed to operate continuously. The heating/cooling system that the air cleaner is connected to should be set accordingly. If the heating/cooling system is set on “automatic” the HEPA Air Cleaner should be connected to an air switch or relay to turn the unit on when the system is operating.

The HEPA Air Cleaner is equipped with a standard 120 v power cord that can be plugged into any 120 v outlet.

NOTE: Avoid unit damage and possible personal injury. DO NOT place cord in high traffic areas.

All filters must be installed correctly and the filter access panel must be secured for proper unit operation.

## MAINTENANCE

### ⚠ WARNING

Unplug unit before performing any maintenance or service on air cleaner. Electrical shock can cause injury or death.

**Carbon Prefilter** — Replace every 3 to 6 months. Vacuum with a soft brush attachment between changes.

**HEPA Filter** — Replace every 3 to 5 years. The HEPA filter's service depends on the amount of contaminants in the air and the frequency of prefilter cleaning/changes. The filter surface is fragile. Vacuum with a soft brush attachment regularly. If possible, vacuuming should be done outdoors.

NOTE: Handle the HEPA filter by the frame only. Any tears or punctures in the filter material will reduce efficiency.

**Carbon VOC Afterfilter** — The activated carbon VOC afterfilter should be replaced every 6 to 12 months. Heavy odors in filtered space (from cooking, smoking, painting, etc.) will decrease filter longevity.

**Carbon/Potassium Permanganate VOC Filter (Optional)** — The VOC filter must be replaced every 6 to 12 months.

**Filter Replacement** — Unit filters must be changed on a regular basis to maintain unit efficiency. The prefilter and

HEPA filter should be vacuumed regularly to reduce the static pressure drop of the filters between filter changes. Use Totaline replacement filters only; contact the original installer for replacement parts.

To replace filters:

1. Turn power off and remove filter access door.
2. Carefully remove each filter and clean or dispose of as needed.
3. Remove plastic from the new filter. Be careful not to damage filter.
4. Date replacement filter(s) in the space provided.
5. Slide each filter into the proper bracket, make sure the arrows point in the direction of airflow.
6. Reinstall and secure filter access door and turn power on.

**Table 1 — Air Cleaner Specifications**

<b>Dimensions (in.)</b>	
Length	21.5
Width	20.5
Height	28.0
<b>Inlet Duct Size (in.)</b>	12.0
<b>Outlet Duct Size (in.)</b>	8.0
<b>Unit Weight (lbs)</b>	88.0
<b>Input Voltage (V/Hz)</b>	120/60
<b>Power Consumption (watts)</b>	215
<b>Airflow (cfm)</b>	560
<b>Cabinet (gage)</b>	18
<b>Power Cord (ft)</b>	9.0
<b>Filter Dimensions (in.)</b>	
Carbon Filter	19.5 x 19.5 x 1
HEPA Filter	19.5 x 19.5 x 6
Carbon VOC Afterfilter	19.5 x 19.5 x 2
Carbon/Potassium Permanganate VOC Filter	19.5 x 19.5 x 2
<b>Carbon Prefilter Collecting Surface Area (sq ft)</b>	6.3
<b>HEPA Collecting Surface Area (sq ft)</b>	180
<b>Carbon VOC Afterfilter Collecting Surface Area (sq ft)</b>	9.5

LEGEND

**HEPA** — High Efficiency Particulate Air  
**VOC** — Volatile Organic Compound



**Your Assurance of Quality**

**ALL Totaline® products are backed with a one-year warranty by Carrier Corporation, the world's largest manufacturer of air conditioning, heating, and refrigeration products.**

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

**FIVE-YEAR WARRANTY** — This CARRIER CORPORATION product is warranted to be free from electrical and mechanical defects in material and workmanship, under normal use within its listed capacity and maintenance, for a period of FIVE (5) years from the date of original installation, excluding the fan/motor assembly which is warranted for ONE (1) year from the date of installation. This warranty does not include the Carbon Prefilter, HEPA Filter, Carbon VOC Afterfilter or Carbon/Potassium Permanganate VOC Filter. This CARRIER CORPORATION 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 CARRIER CORPORATION service dealer, provided the defective part is returned to the Distributor. The replacement part assumes the unused portion of the warranty. **Proof of Purchase and Installation** must be provided. Failing this, CARRIER CORPORATION will guarantee the unit for a period of sixty (60) months from the date of manufacture, according to the manufacturer's records and the conditions within this warranty.

**THIS WARRANTY DOES NOT INCLUDE ANY ADDITIONAL LABOR ALLOWANCE OR OTHER COSTS** incurred for diagnosis, repairing, removing, installing, shipping, servicing, or handling of either defective parts or replacement parts. SUCH COSTS MAY BE COVERED BY a separate warranty provided by the installer.

**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.

**CARRIER CORPORATION WILL NOT BE RESPONSIBLE FOR:**

1. Normal maintenance as outlined in the Installation, Operation And Maintenance Instructions including cleaning and/or replacement of filters.
2. Damage or repairs required as a consequence of faulty installation or application by others.
3. Damage or repairs needed as a consequence of any misapplication, abuse, improper servicing, unauthorized alteration, or improper operations.
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 CARRIER CORPORATION.
6. CARRIER CORPORATION products installed outside the continental U.S.A., Alaska, Hawaii, and Canada.
7. Any special indirect or consequential property or commercial damage of any nature whatsoever. Some States do not allow the exclusion of incidental or consequential damages, so the above limitation may not apply to you.

Model No.	Serial No.
Date of Installation	Installed by
Name of Owner	Address of Installation