

# INSTALLER'S GUIDE

18-HE17D8-1

ALL phases of this installation must comply with  
NATIONAL, STATE AND LOCAL CODES

## Air Cleaner Enclosure

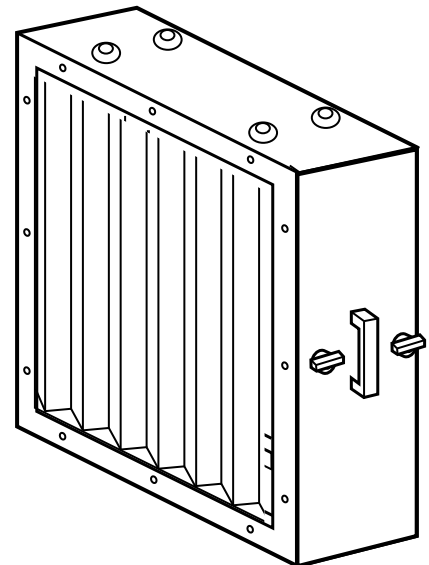
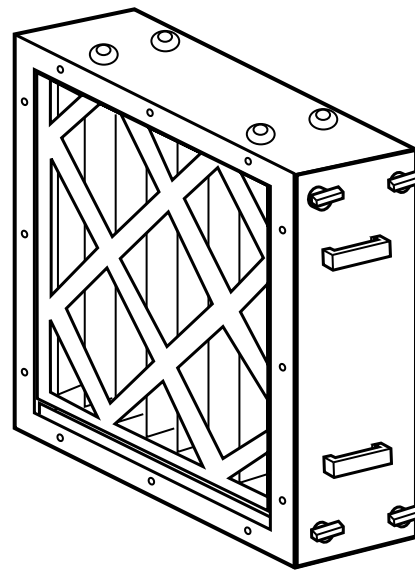
This document provides installation and maintenance information for the your Air Cleaner Enclosure.

### ⚠ WARNING

This information is for use by individuals having adequate backgrounds of electrical and mechanical experience. Any attempt to repair a central air conditioning product may result in personal injury and/or property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

MAINTENANCE/REPLACEMENT SCHEDULE				
Conditions	Continuous Fan		Auto Fan	
	Dusty	Normal	Dusty	Normal
1 Inch Filter	14-30 Days	30-60 Days	30-45 Days	45-90 Days
5 Inch Media	1-2 Months	3 Months	3 Months	6 Months

The Maintenance/Replacement Schedule is dependent on the amount of air passing through the filter as well as the amount of dust (pollen, smoke, etc.) in the air. This schedule shows estimated time periods and may be increased or decreased based on actual conditions.



## CONSTRUCTION OF THE AIR CLEANER

The basic components of the air cleaner enclosure, and their functions, are as follows (See Figures 1 and 2):

**Enclosure** - mounts between air handler or furnace and ductwork and houses the 1 inch filter or 5 inch media.

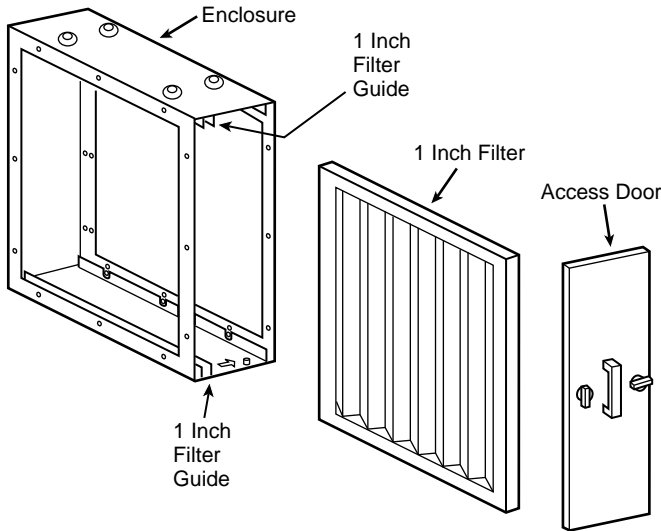


Fig 1. Filter Enclosure with 1" Filter

**Filter Media** - either a 1 inch filter or 5 inch media. Traps large particles such as hair, lint and visible dust.

**Access Door** - Allows access to the filter.

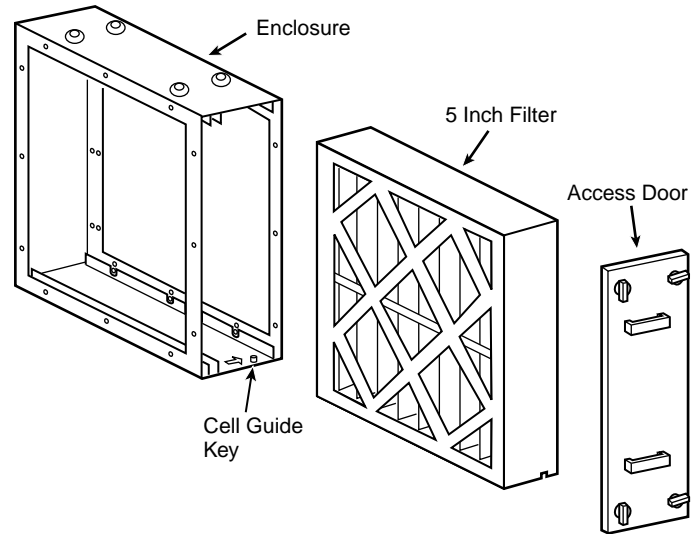


Fig. 2. Filter Enclosure with 5" Media Filter

## PREINSTALLATION

### LOCATING THE AIR CLEANER ENCLOSURE

This air cleaner enclosure is mounted in the return air stream of a central forced-air system. (See Figure 3 for example.)

Select a location that meets the following:

1. The face of the filter will be at a right angle to the air stream.
2. Allow clearance of 28 inches to permit removal of filter.
3. If an atomizing spray type humidifier is used, it must be installed totally downstream away from the filter.

**NOTE:** The air filter is NOT to be placed in the discharge of either the heating or cooling unit.

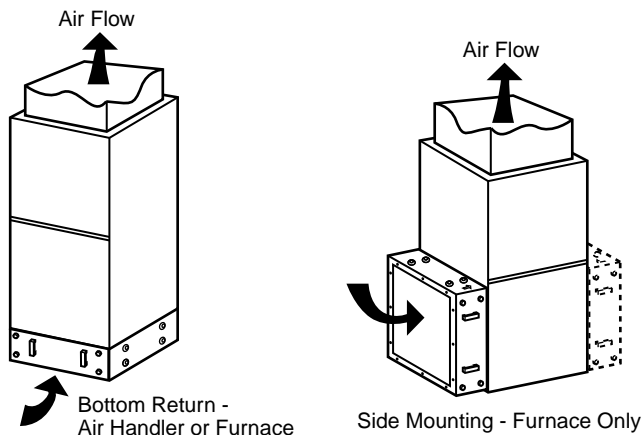


Figure 3. Mounting Location of Air Cleaner

### DIRECTION OF AIR FLOW THROUGH THE AIR CLEANER ENCLOSURE

The air cleaner is shipped from the factory with single-direction air flow. An arrow on the enclosure shows the direction air must flow.

The 1 inch filter guides must be on the entering air side of the enclosure. The mounting flange on this side of the enclosure has the single holes for attaching ductwork. (See Figure 4.)

If necessary for proper air flow direction, turn enclosure upside down. This will reposition the 1" filter on the entering air side. Air flow direction must agree with arrows embossed on the enclosure.

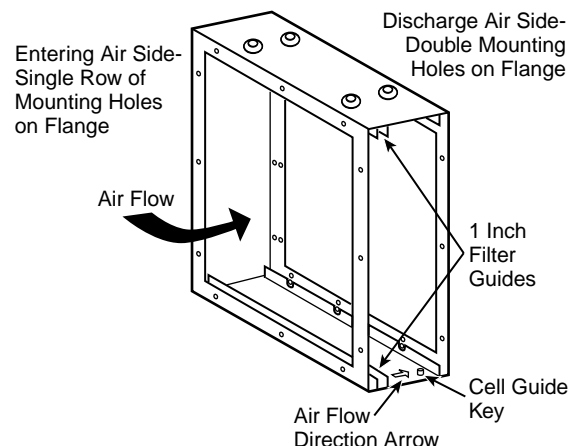


Figure 4. Air flow Direction

## INSTALLATION

### Bottom Installation (Air Handler and all Furnace sizes)

1. Rotate the knobs on the access door counterclockwise to remove the door from the enclosure and set it aside. Remove the filter and set aside in a safe location until the enclosure is installed.
2. Position the air handler or furnace on a protective pad on the floor with the bottom of the unit in the up position (see Figure 5).

**NOTE:** This allows maximum downward force to be exerted on the power drill when installing the attaching screws.

3. Install the self-adhesive gasket material onto the flange of the discharge air side of the enclosure. This flange has double mounting holes (see Fig 6).

**IMPORTANT:** The gasket material provides a seal between the enclosure and the air handler or furnace. It should be placed toward the outside edge of the flange. The outer edge screw holes on the enclosure flange must be used to attach the enclosure to a furnace. (See Figure 8.)

4. Position the air cleaner enclosure on the air handler or furnace with the gasket against the unit. Align the rear of the enclosure flush with the rear of the unit and the two sides of the enclosure flush with the sides of the unit. The front of the enclosure will NOT align flush with the front of the air handler or furnace.
5. Check that the front of the air cleaner enclosure is facing the front of the air handler or furnace.
6. Securely attach the air cleaner enclosure to the air handler or furnace using all twelve heavy-duty self-tapping sheet metal screws provided. Use a power drill to install the screws.

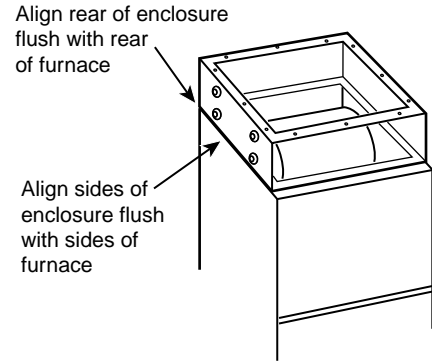
### Side Installation (14" and 17.5" sizes for Furnace Only)

1. Rotate the knobs on the access door counterclockwise to remove the door from the enclosure and set it aside. Remove the filter and set aside in a safe location until the enclosure is installed.
2. Lay the furnace on a protective pad on the floor with the side on which the air cleaner enclosure will be installed in the up position.

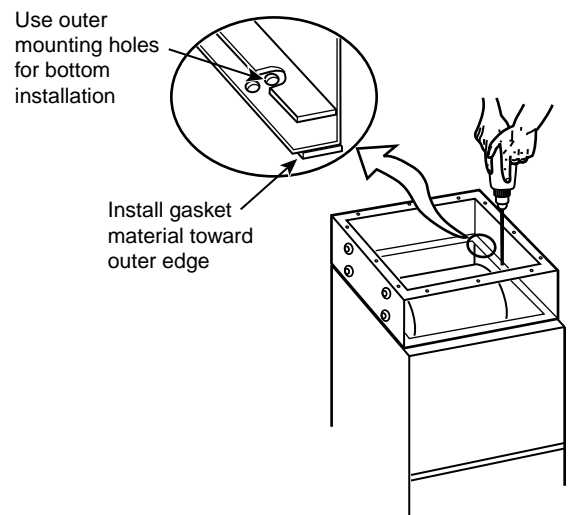
**NOTE:** This allows maximum downward force to be exerted on the power drill when installing the attaching screws.

3. Align the rear of the air cleaner enclosure flush with the rear of the furnace. Align the bottom of the air cleaner enclosure 1/8 inch above the bottom of the furnace (see Fig. 7). Scribe a line on the furnace as a guide to cut the opening to match the inside of the enclosure mounting flange. Move the enclosure and cut the opening.

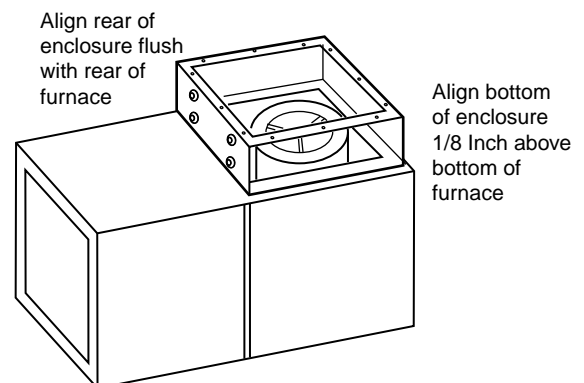
**NOTE:** Do NOT use the standard furnace indents for this opening. The opening for the air cleaner will be larger than the standard furnace opening.



**Figure 5. Bottom Installation (Air Handler or Furnace)**



**Figure 6. Bottom Installation Details**

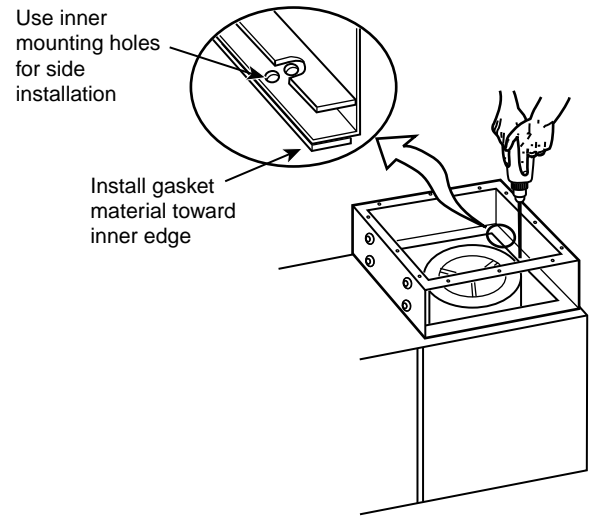


**Figure 7. Side Installation (Furnace Only)**

4. Install the self-adhesive gasket material onto the flange of the discharge air side of the enclosure. This flange has double mounting holes (see Fig 8).

**IMPORTANT:** The gasket material provides a seal between the enclosure and the furnace. It should be placed toward the inside edge of the flange. The inner edge screw holes on the enclosure flange will be used to attach the air cleaner. (See Figure 6.)

5. Position the air cleaner enclosure on the furnace with the gasket against the furnace. Align the rear of the enclosure flush with the rear of the furnace. Align the bottom of the enclosure 1/8 inch above the bottom of the furnace. The front of the enclosure will NOT align flush with the front of the furnace.
6. Check that the front of the air cleaner enclosure is facing the front of the furnace.
7. Securely attach the air cleaner enclosure to the furnace using all twelve heavy-duty self-tapping sheet metal screws provided. Use a power drill to install the screws.



**Figure 8. Side Installation Details**

### Installing Ductwork and Transition Fittings

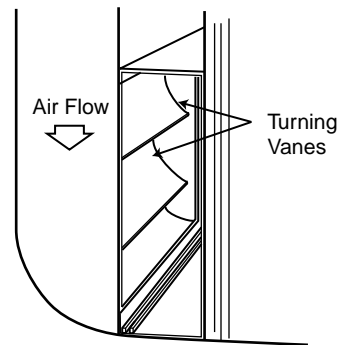
Attach duct work to the upstream side of air cleaner enclosure. If an elbow is attached, sheet metal turning vanes inside the elbow will improve air distribution over the face of the cells (Figure 9).

If the air duct does not fit the enclosure opening, a transition fitting should be used. Gradual transitions are preferred for greatest efficiency. Four inches per linear foot (approximately 20° angle) should be allowed, space permitting.

1. Connect the vertical duct section to the elbow.
2. Seal all joints in the return air system, downstream from the air cleaner with duct tape or mastic tape to prevent dust from entering the airstream. Tape is usually applied on the outside of ducts.

**NOTE:** Do not use a silicon base sealant. This will cause a coating on the ionizing wires of the electronic cells that will decrease the efficiency of the Electronic Air Cleaner, when installed.

3. After the air handler or furnace is installed, install the filter. A keyway in the air cleaner enclosure allows the 5 inch media filter to be installed only the proper way.
4. Replace the door on the front of the air cleaner enclosure and rotate the knobs clockwise to lock.



**Figure 9. Turning Vanes**