18-HE56D1-3

Installation Operation Maintenance

Whole House Air Cleaner Upgrade Kit

Upflow Furnace Models	*Downflow Furnace Models*	*Air Handler Models*
***FD145ALUPGRDA**	***FD14DALUPGRDA**	***FD215ALUPGRDA**
***FD175ALUPGRDA**	***FD17DALUPGRDA**	***FD235ALUPGRDA**
***FD210ALUPGRDA**	***FD21DALUPGRDA**	***FD260ALUPGRDA**
***FD245ALUPGRDA**	***FD24DALUPGRDA**	*May be "A" or "T"

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

IMPORTANT — This Document is **customer property** and is to remain with this unit.
Please return to service information pack upon completion of work.

Contents

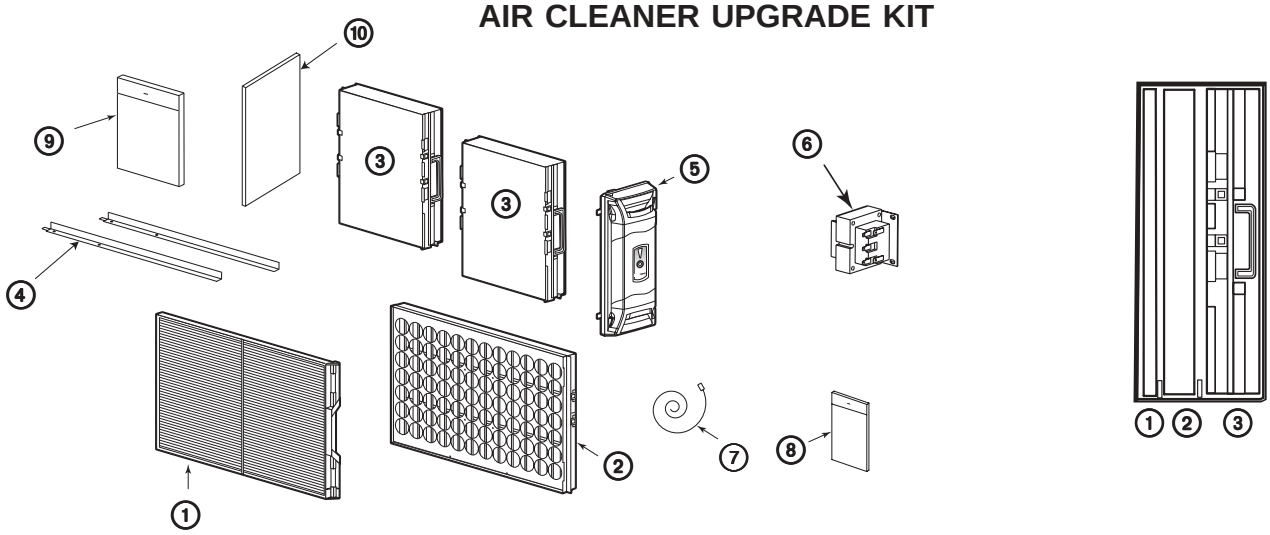
⚠ WARNING

RISK OF ELECTRIC SHOCK: These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in these operating instructions unless you are qualified to do so.

⚠ 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.

Figure 1. COMPONENTS OF THE AIR CLEANER UPGRADE KIT



Unpack the Air Cleaner and check to make sure all components are included. They consist of:

1) PRE-FILTER - traps large particles such as hair and lint before they can enter the COLLECTION CELL section.

2) FIELD CHARGER - Charges the contaminants

3) COLLECTION CELL (2) - removes and collects small impurities from the air.

4) Filter Mount Rail (2) - mounts into existing cabinet and is used to hold the components in place. Rail is also used to activate the safety power switch.

5) Power Door - the solid state power supply components that convert the 24 Volt AC to the high-voltage, direct current required to power the FIELD CHARGER and COLLECTION CELLS. Allows access to the fluted COLLECTION CELLS, FIELD CHARGER and PRE-FILTER.

6) Transformer - supplies 24 Volts to the indoor unit and air cleaner

7) 24 Volt Power / Control Cable

8) Gasket, Literature and Hardware Packet

9) Template, Screws and Drill Bit Kit - used to mount rails

10) Insulator Film

Check carefully for any shipping damage. This must be reported to and claims made against the transportation company immediately. Check to be sure all major components are in the unit. Any missing parts should be reported to your supplier at once, and replaced with authorized parts only.

INSTALLATION, LOCATION & LIMITATIONS

NOTE: Do not install the air filter in the discharge air stream of either the heating or cooling unit.

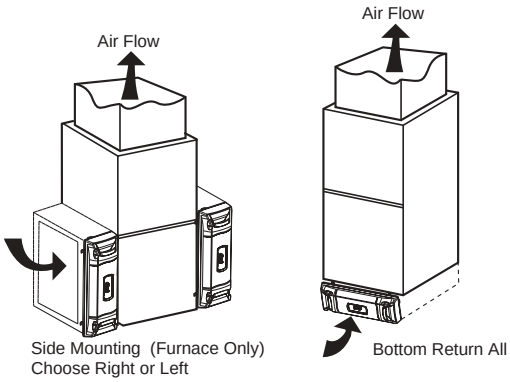


Figure 2. Mounting Location of Air Cleaner

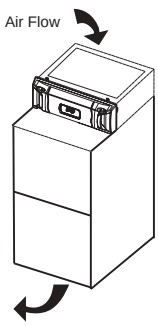


Figure 3. Downflow

This air cleaner cabinet must be mounted in the return air duct of a central forced-air furnace/air handler.

Select a location that meets the following:

1. The face of the cell must be at a right angle to the air stream.
2. Allow a minimum of 28 inches clearance in front of the air cleaner to permit removal of cells and pre-filter.
3. Flow-through Bypass Humidifiers
   Excessive bypass air may cause water blow-off, which will adversely affect system operation and Air Cleaner performance. To verify bypass airflow, follow the Bypass Humidifier Pre-Installation Checkout and Set-Up Procedures available through your local distributor. Ask for publication number 18-CH37D1-1.
4. Steam and Flow-through Fan Power Duct-mounted Humidifiers
   Follow the humidifier installation instructions. These should only be installed on the supply air side of the system.

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5. Other Duct Mounted Humidifiers
   Not recommended for installation with the air cleaner.

DO NOT operate the air cleaner during construction of a home. The air cleaner is designed for use in normal living conditions to capture small particles. The volume of dust and condensate in the presence of chlorides and fluorides from paint, varnish, stains, adhesives, cleaning compounds, and cement creates a corrosive condition which may cause rapid deterioration of the cabinet and internal components of the air cleaner and the heater/furnace.

NOTE: Do NOT use a silicon base sealant. This causes a coating on the FIELD CHARGER pins that will decrease the efficiency of the air cleaner.

Note: Dual Circuited Air Handlers matched with heat pumps will require an accessory Wall Mounted Transformer KIT # BAYTRANS12024A to power the air cleaner. Do not replace air handler transformer with the transformer supplied with the air cleaner.

⚠ WARNING

Disconnect ALL power to the indoor air handler, furnace, and air cleaner. NOTE: There may be more than one electrical disconnect switch. Electric shock can cause personal injury or death.

⚠ CAUTION

Do not install air cleaner where the filter can be exposed to UV light. UV light can cause the plastic material to deteriorate, which may lead to filter damage.

For Non-TFE models, skip the section below and go to the next page.

TFE Models only - Remove Existing Electrical Hardware:

Identify the existing air cleaner located in the return air duct of a central forced-air furnace/air handler. The air cleaner is typically installed as shown in Figures 2 or 3 on the previous page.

Furnace and Air Handler – (120VAC models) If the existing air cleaner is an electronic type Perfect Fit filter (EAC), switch the POWER button to the "OFF" position. All furnace applications, and some air handler applications use 120VAC 3 prong power cord. This should be unplugged from the electrical outlet.

Air Handler – (240 VAC models) If the EAC is internally wired into the air handler, the power cord and polarized connector adapter will need to be removed from the air handler system.

1. Disconnect the strain relief connector (see Figure 4 to the right).
2. Remove the six pin polarized connector on the adapter located between the female polarized connector on the heater and the male polarized connector from the air handler control box. See Figure 4 to the right.
3. Reconnect the female polarized connector on the heater and the male polarized connector from the air handler control box.
4. Disconnect the green ground wire on the plug adapter from the heater barrier.
5. Seal the knockout used by the previous power wires.

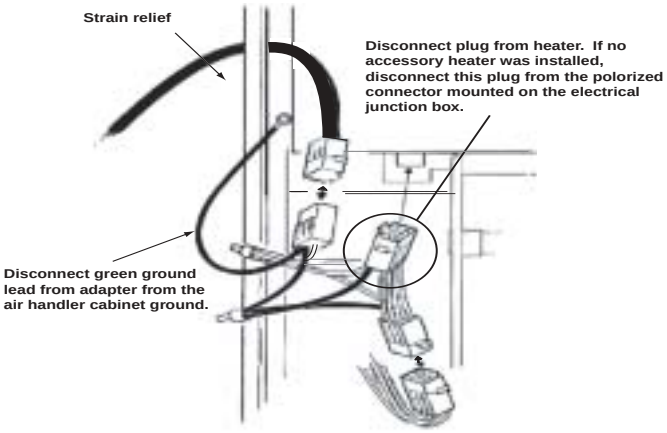
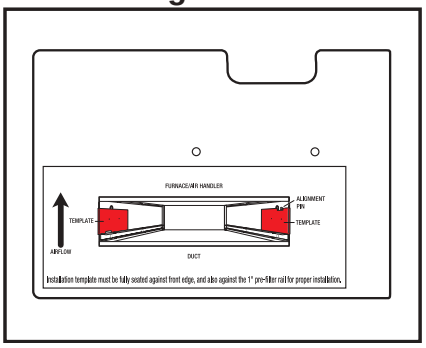


Figure 4. TFE wiring

Figure 5



ENCLOSURE UPGRADE

Figure 5 shows the template for drilling the rail positioning holes. Figure 6 shows a close up of the label on the installation template. The same template will be used on both sides of the air cleaner enclosure.

Figure 6

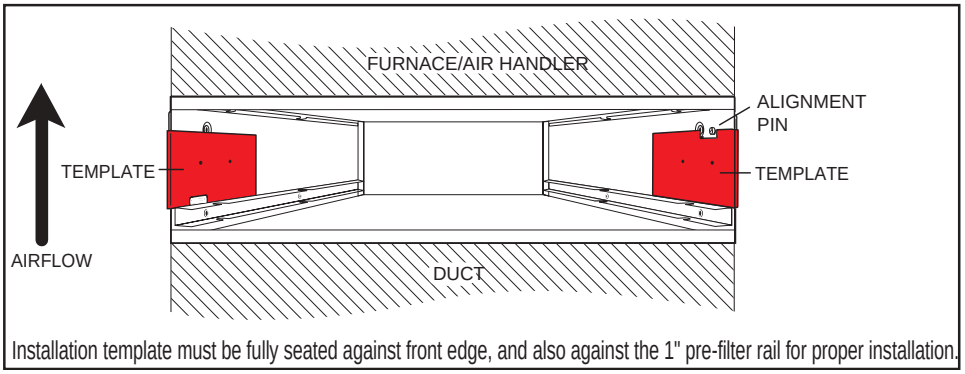
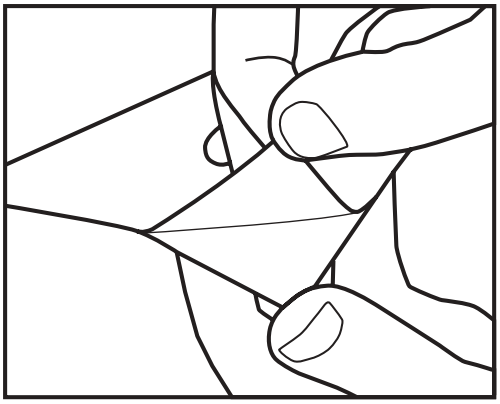


Figure 7



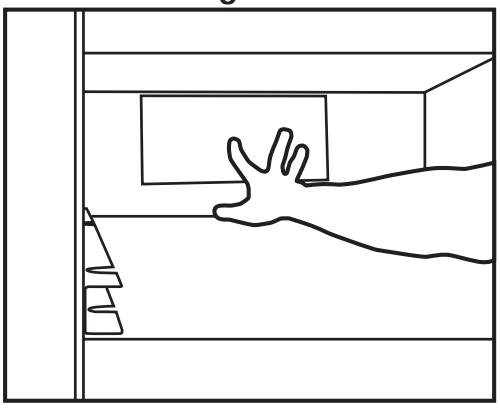
INSTALLATION OF THE FILTER MOUNT RAILS

Remove all existing filters and PRE-FILTERs from the air cleaner enclosure and discard.

1. Identify the back insulator film. Remove the backing material to expose the adhesive.

NOTE: Clean the back of the existing cabinet to insure that it is dust free before adhering the new insulator film.

Figure 8



2. Center the insulator on the back wall against the cabinet flange closest to the indoor unit as shown in Figure 8. Press the insulator film against the back wall to secure.

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3. Identify the installation template from the upgrade kit packaging. Install the template onto the air cleaner enclosure as shown in Figure 9.

NOTE: THE TEMPLATE MUST BE PUSHED TOWARDS THE BACK OF THE AIR CLEANER ENCLOSURE UNTIL THE FRONT FLANGE OF THE INSTALLATION TEMPLATE IS FULLY SEATED AGAINST THE LEADING EDGE ON THE ENCLOSURE. THE TEMPLATE MUST ALSO BE PUSHED TOWARDS THE ONE INCH U CHANNEL FILTER RAIL AS SHOWN IN FIGURE 8. IF THE TEMPLATE IS IMPROPERLY USED, THE FILTER COMPONENTS WILL NOT FIT INTO THE AIR CLEANER ENCLOSURE CORRECTLY.

Figure 9

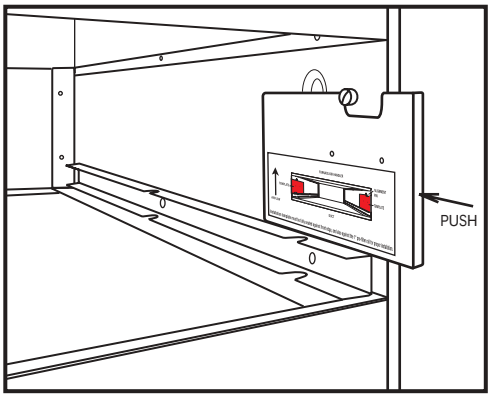
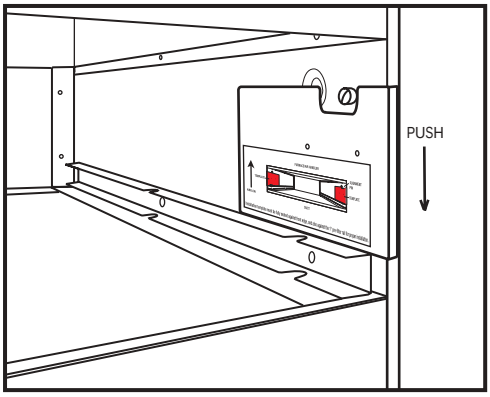
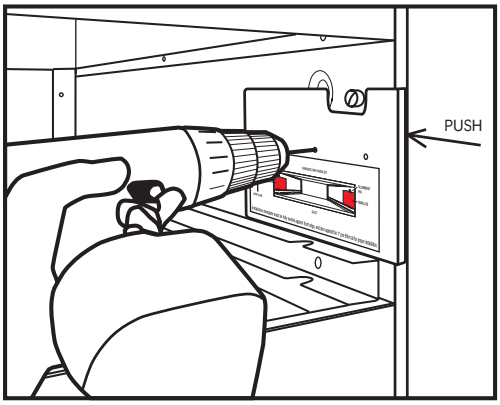


Figure 10



4. Leaving the template in place to prevent the drill bit from “walking”, use the provided drill bit to drill two holes in the air cleaner enclosure. Do not try to mark and then drill the holes, because the drill bit will have the tendency to “walk” on the flat sheet metal case. This will cause the metal rail to be installed incorrectly.

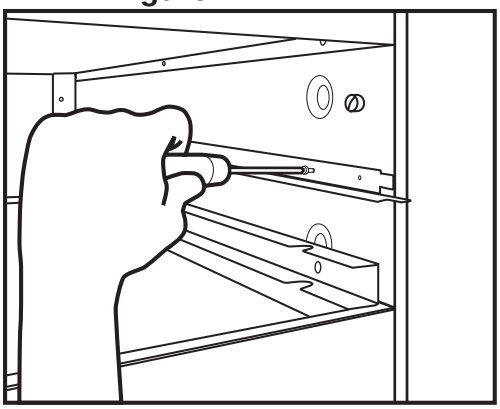
Figure 11



5. Use the provided screws to fasten the rail into place. The metal tabs on the rails should be facing the front of the air cleaner enclosure. After installed, one of the tabs will be flush with the front of the enclosure and the other will extend past the front edge of the enclosure.

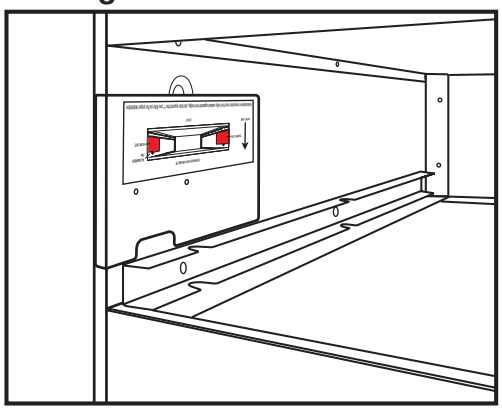
6. With the rail now firmly affixed to the air cleaner case with two screws, it may be desirable to add an optional third screw on the rail for extra support. A third hole is provided for this purpose, as well as a screw. Use the existing hole located in the center of the rail as a guide much like the installation template was used earlier to prevent the drill bit from walking.

Figure 12



7. Move the installation template to the other side of the air cleaner enclosure. Place the template onto the enclosure as indicated in Figure 13. The template must be pushed towards the back of the air cleaner enclosure until the front flange of the installation template is fully seated against the leading edge on the case. The template must also be pushed towards the one inch U channel filter rail as shown in Figure 13.

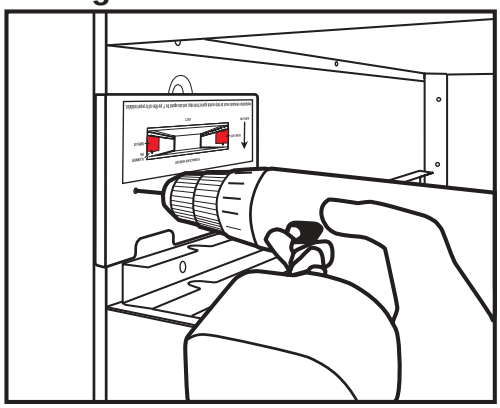
Figure 13



8. Drill two holes, using the template to guide the drill bit as done previously.

NOTE: The filter mount rails are not installed in the same orientation. If they are installed the same way, the screw heads will be in the way of the filter installation.

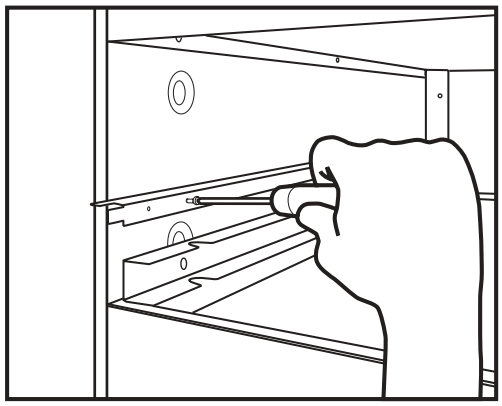
Figure 14



9. Secure the second rail into place using the provided screws. The metal tabs should be facing the front of the air cleaner enclosure. One of the tabs should be flush with the front of the enclosure and the other will extend past the front of the enclosure.

10. With the rail now firmly affixed to the air cleaner enclosure with two screws, it may be desirable to add an optional third screw on this rail for extra support. A third hole is provided for this purpose, as well as a screw. Use the existing hole located in the center of the rail as a guide much like the installation template was used earlier to prevent the drill bit from walking.

Figure 15



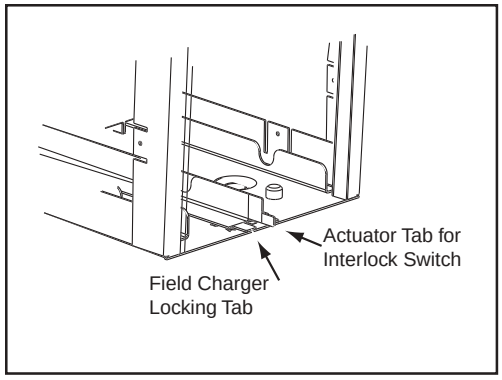
11. Install the FIELD CHARGER and lock into place by bending one locking tab on the cabinet. See Fig. 16.

12. Install the PRE-FILTER and COLLECTION CELLS.

13. Each COLLECTION CELL must be oriented with the handles toward the front.

14. The door can be installed in **either direction**. Determine which direction will best allow access to the latches and 24 volt power cord. Insert the 2 tabs on the door behind the front cabinet flange and rotate the door into the closed position. Rotate the two quarter-turn latches on the Power Door inward.

Figure 16



NOTE: The door has a safety switch to ensure power is interrupted when the door is removed. This switch is open when the door is removed from the cabinet. When the door is properly installed, an actuator tab located in the cabinet will close the switch, allowing power to the electronics.

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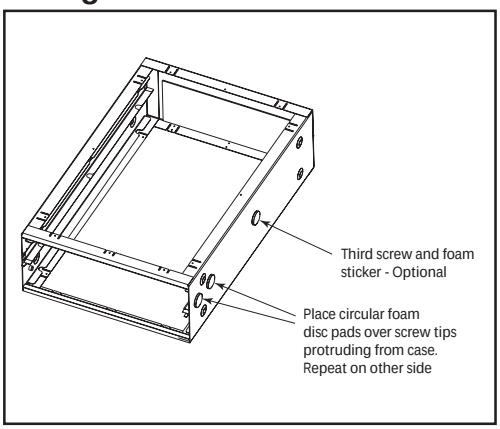
15. After installing the middle filter mount rails into the existing air cleaner enclosure with the provided blunt tip screws, it is necessary to cover the exposed screw tips on the outside of the cabinet.

    Locate the six 1-1/4" foam disc pads from the hardware packet and apply them over the screw tips on the outside of the cabinet. This will protect the homeowner from any contact with these screw tips.

Figure 17



16. Remove Model number / Serial number label from the kit and place on the bracket as shown in Figures 18 and 19.

    Note: Pictured enclosure is not installed on a furnace.

Figure 18

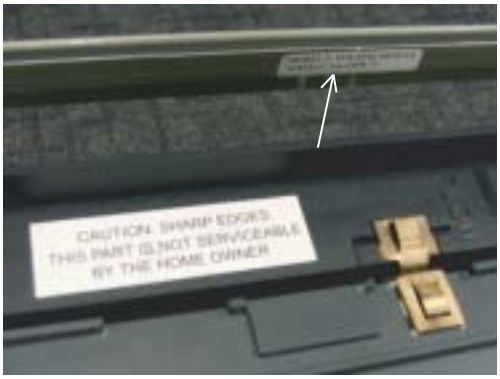


Figure 19

17. Measure and cut the provided gasket to length. Place gasket material into the two channels located at each side of the opening as shown in Figure 20.

Figure 20

ELECTRICAL CONNECTIONS

The air cleaner requires 24 Volt AC power and indoor fan signal to operate. A transformer adequately sized to power both the system and air cleaner is provided with the air cleaner. Remove the transformer in the indoor unit and replace with the transformer provided.

NOTE: A 50 VA transformer is required for Trane/ American Standard Furnace applications and 75 VA required for Trane/ American Standard Air Handler applications. If the indoor air handler already has a properly sized transformer, no replacement is required.

WARNING: <u>DO NOT</u> attach the power/ control cable to a 110 Volt EAC tap. The air cleaner uses 24 Volt power.

Plug the air cleaner power/control cable into the air cleaner door and route the cable into the indoor unit low voltage wiring location.

NOTE : Provide adequate strain relief for the low voltage cable at the indoor unit.

NOTE: Wiring penetration must be sealed.

Connect the power/control wiring per Fig. 12.

For non-Trane/ American Standard systems an optional 120 AC to 24 VAC transformer, kit # BAYTRANS12024A can be used to provide 24 volt power only to the air cleaner.

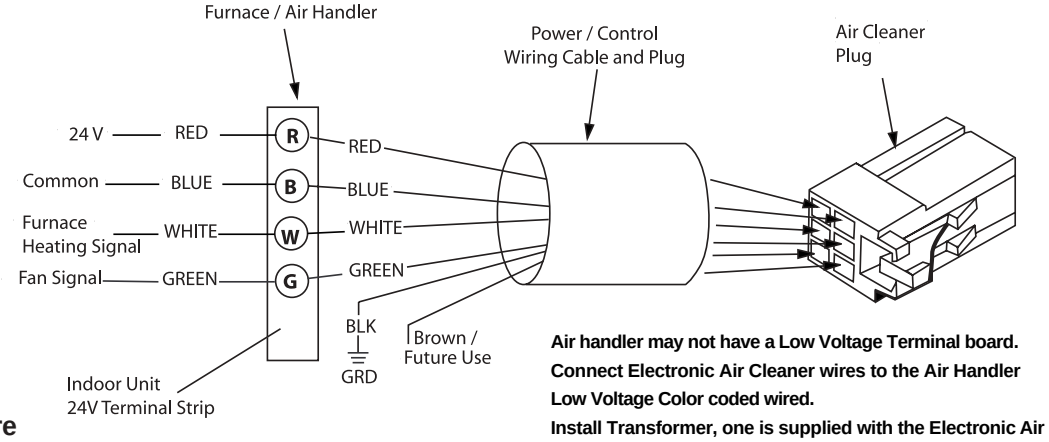
Connect the power/control wiring per Fig. 13.

Fig. 12

INTERNAL TRANSFORMER WIRING DIAGRAM

NOTE: A 50 VA transformer is required for Trane/ American Standard Furnace applications and 75 VA required for Trane/ American Standard Air Handler applications. If the indoor air handler already has a properly sized transformer, no replacement is required.

NOTE: The Black wire must be connected to chassis ground to ensure proper operation.

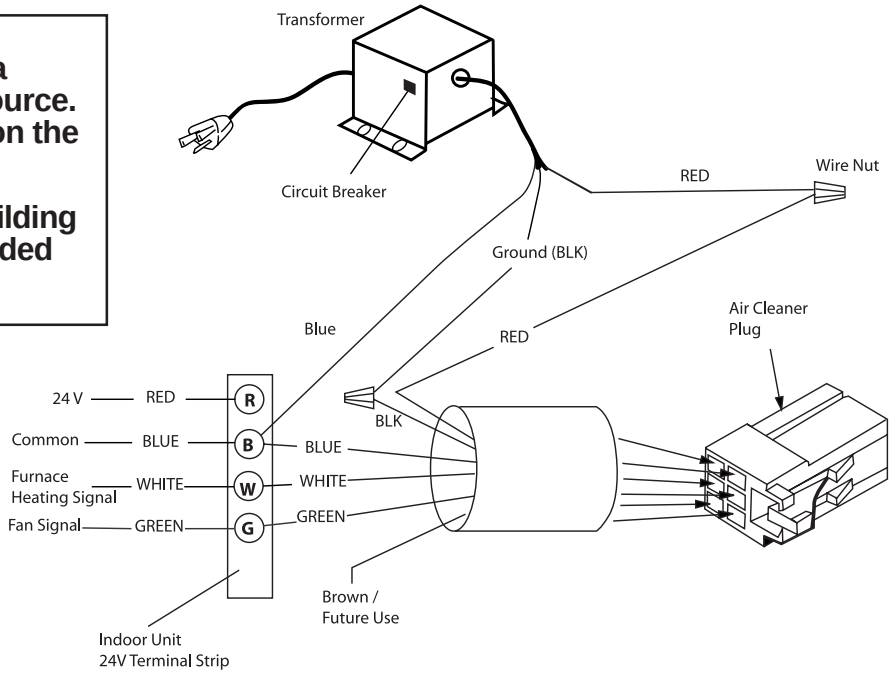


Air handler may not have a Low Voltage Terminal board.
Connect Electronic Air Cleaner wires to the Air Handler Low Voltage Color coded wired.
Install Transformer, one is supplied with the Electronic Air Cleaner, in the furnace or Air Handler.

Fig. 13

BAYTRANS12024A Transformer

- **Transformer must have a grounded 120VAC power source. Do not defeat ground plug on the transformer.**
- **Mount transformer to building structure with the four provided wood screws.**



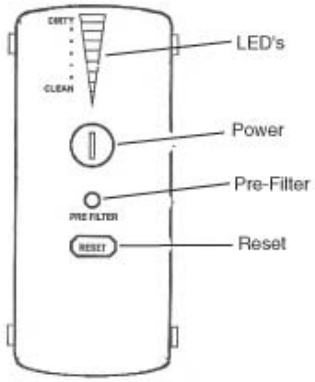


Figure 14. LED Display

DISPLAY FEATURES (Fig. 14)

The air cleaner display can be used for several functions:

- Provide the homeowner the operating status of the air cleaner, including an indication the PRE-FILTER or COLLECTION CELLS need cleaning.
- The installer accesses the Set-Up Mode to change the time to clean settings for the PRE-FILTER and COLLECTION CELLS as well as change the power level setting.
- The unit will display fault codes for the homeowner indicating there is a problem with the air cleaner and various fault codes for the service technician to assist in troubleshooting the problem.

AIR CLEANER OPERATION

Turn the air cleaner on by pushing the POWER button. The backlit POWER and Filter RESET buttons will illuminate along with the first green LED **(G1)** indicating 24 volt power is present to the air cleaner.

When the indoor fan is operating the first LED (G1) will slowly flash. This indicates the FIELD CHARGER and COLLECTION CELLS have power and the unit is operating normally. There is a slight time delay between the indoor fan starting and LED (G1) flashing.

In normal operation, the air cleaner makes a slight sound as the air passes through it and is cleaned. In some applications, you may notice this sound coming from the return air vent(s). If desired, this sound level can be reduced with minimal impact on air cleaning efficiency by reducing the power setting of the FIELD CHARGER in the Set-Up Mode, see page 8.

NOTE: There is a 10 minute delay after the indoor fan operates, before the air cleaner starts to operate, each time the power to the air cleaner is turned off/on. This can be bypassed by going into and then out of the Set-Up mode

SET-UP MODE

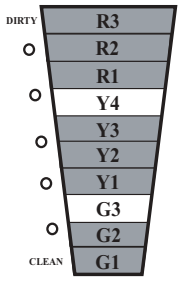
A combination of RED, YELLOW, and GREEN LED's are used to indicate the following settings.

- The three GREEN LED's are used to indicate PRE-FILTER cleaning interval. This is measured in actual run time of the indoor fan. The default setting is 2 months.
- The four YELLOW LED's indicate the collection cell cleaning interval. This is measured in actual run time of the indoor fan. The default setting is 6 months.
- The three RED LED's indicate the power level setting. The default is maximum.

SET-UP MODE OF OPERATION

To enter the Set-Up Mode press and hold both the POWER and RESET buttons for a minimum of 5 seconds. The current settings are then displayed. See Fig. 15 If this is the desired setting or at any time you want to exit the Set-Up mode, press and hold BOTH the POWER and RESET buttons for a minimum of 5 seconds to exit.

Fig. 15. Factory settings



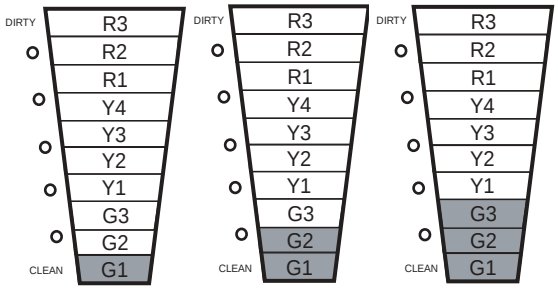
To change any of the settings, press the POWER button once.

PRE-FILTER SETTING (Fig. 16)

One or more of the GREEN LED's will come on indicating the PRE-FILTER cleaning time setting. Repeatedly press the RESET button to cycle through the time options for the PRE-FILTER cleaning cycle until the desired setting is displayed. Press the POWER button once to accept that setting and move to the cell cleaning settings.

FIG. 16 GREEN LED PRE-FILTER SETTINGS

1 Month 2 Months* 3 Months

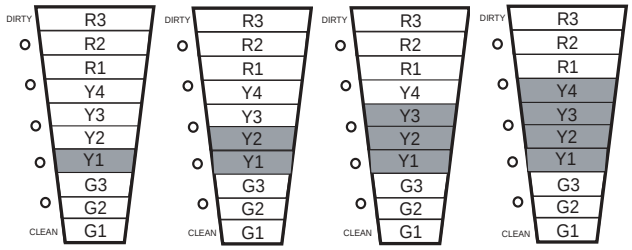


* Factory Setting

CELL CLEANING SETTING (Fig. 17)
One or more of the YELLOW LED's will come on indicating the COLLECTION CELL cleaning time setting. Repeatedly press the RESET button to cycle through the time options for the COLLECTION CELLS cleaning cycle until the desired setting is displayed. Press the POWER button once to accept that setting and move to the power settings.

Fig. 17 YELLOW LED COLLECTION CELL SETTING

2 Month 4 Months 6 Months* 9 Months



*Factory Setting

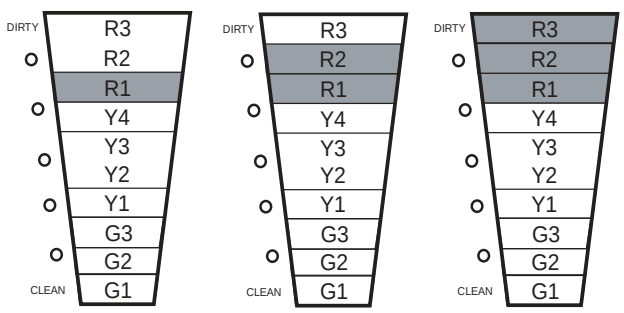
FIELD CHARGER POWER LEVEL
The RED LED lights are used to set the power level of the FIELD CHARGER for maximum, medium, or minimum. The number of illuminated RED LED lights indicates the current setting. The factory setting is for maximum.
Lower settings will reduce the slight sound emitted by the unit with minimal loss of air cleaning efficiency, if desired. Lower settings will also further reduce the very low ozone produced by the air cleaner. The U.S. Food and Drug Administration recommends indoor ozone concentrations should not exceed 50 parts per billion. Your air cleaner will contribute only 5 parts per billion at the factory setting and can be reduced to 3 parts per billion at the minimum setting.

FIELD CHARGER POWER LEVEL SETTINGS
One or more of the RED LED lights will illuminate. To change the power level setting, press the RESET button until the desired setting is indicated.

To save your new settings and exit the Set-Up mode, press and hold BOTH the POWER and filter RESET buttons for a minimum of 5 seconds.

Fig. 18 RED LED POWER LEVEL SETTINGS

Minimum Medium Maximum*



*Factory Setting

MAINTENANCE

For maximum efficiency the COLLECTION CELLS and PRE-FILTER should be inspected and cleaned on a regular basis.

The FIELD CHARGER should only be removed and cleaned annually by an authorized service professional.

⚠ CAUTION

High Voltage is present within the air cleaner for operation. Before removing the door, turn the power off and wait at least 15 seconds to allow voltage to discharge.

NOTE: Before cleaning the coil or ducts in the air handler or furnace, remove the COLLECTION CELLS, FIELD CHARGER, and PRE-FILTER from the air cleaner. Chemicals used during the cleaning of the air handler, furnace, or ductwork can damage the air cleaner components and degrade the performance of the air cleaner.

CLEANING

1. Turn the air conditioning system off at the thermostat.
2. Turn off power to the air cleaner by pushing and holding the POWER button for three seconds. The LED's will remain on until the voltage has discharged and it is safe to remove the door. This requires approximately 15 seconds. Do not remove the door until all lights are off.
3. Disconnect the power/control cable if required to place the door in a secure location.

PRE-FILTER CLEANING

The PRE-FILTER can be vacuumed or washed to clean. The PRE-FILTER should be completely dry before re-installing.

NOTE: Do not replace the plastic PRE-FILTER with a metal type PRE-FILTER. A metal PRE-FILTER will cause reduction in efficiency and potential failure of the electronics in the air cleaner

COLLECTION CELL CLEANING

The COLLECTION CELLS can be cleaned either by vacuuming (recommended method) or by washing.

VACUUM CLEANING

Vacuum both sides of the COLLECTION CELLS to clean.

WASHING

Use low-pressure water spray, such as a sink sprayer or garden hose to clean the cells. Some residue may require warm water to be removed.

• DO NOT USE SOAP OR DETERGENT IN CLEANING THE COLLECTION CELLS.
• DO NOT IMMERSE THE CELLS COMPLETELY IN WATER.
• DO NOT PLACE THE CELLS INTO A DISHWASHER TO CLEAN.

Slightly tap the COLLECTION CELLS to remove water retained in the filter. Allow the COLLECTION CELLS to dry before re-installing.

Re-install the PRE-FILTER and COLLECTION CELLS. Be sure to fold the collection cell handles flat. Install the door and plug in the power/control cable if removed. Turn on power to the air cleaner.

NOTE: The first green LED will be on but will not flash for the first 10 minutes the indoor fan is operating. This is a drying cycle for the PRE-FILTER and COLLECTION CELLS

RESET TIMERS

To reset the PRE-FILTER timer, press and hold the RESET button until the PRE-FILTER LED turns off. (1 to 2 seconds) To reset the collection cell timer, press and hold the RESET button until the collection cell LED's turn off. (4 to 5 seconds)

FAULT CODES

The air cleaner LED's will display a fault indication, three yellow or three red LED's, when a fault has been detected. A log of the last three faults is recorded and can be accessed by going into the Set-Up mode. The unit will repetitively check the system to determine if the fault persists. The fault indication will be displayed as long as the fault condition remains.

If the fault is no longer present, the system will return to normal operation and no longer display the fault indication. Even if the fault has been cleared, a log of the last 3 faults is recorded.

REPETITIVE ARC FAULT INDICATION

If the unit detects 10 consecutive run cycles where an arc occurs during the cycle, it will go into a lock out period for one hour. This is indicated by three FLASHING YELLOW LED's. The PRE-FILTER and COLLECTION CELLS should be cleaned to ensure no large material is trapped in the filters and causing the fault. Check the FIELD CHARGER for material that can cause the fault.

If the unit detects any other type of fault, this will be indicated by three FLASHING RED LED's. See the Service Facts for fault code information.

FUSE REPLACEMENT

A fuse, located inside the Power Door, protects the power supply components against damaging electrical currents. This fuse has a rating of 3 amps and is a Purple color automobile style fuse.

TO CHECK OR REPLACE THE FUSE

Disconnect the power cord from the front of the power pack door. On the inside of the door remove the screws along the outer edge to separate the metal door from the plastic cover.

The Purple Colored 3 amp fuse is located on the main printed circuit board. Replace the fuse if blown and reassemble the Power Door.

NOTE: When reassembling the inner panel to the Power Door, ensure that the wiring is positioned to avoid interference.

Re-install the door on the cabinet, plug in the power/control cable and check for proper operation of the electronic air cleaner.

The other electrical components inside the Power Door are not field replaceable, the Power Door is available as a complete assembly from your distributor.

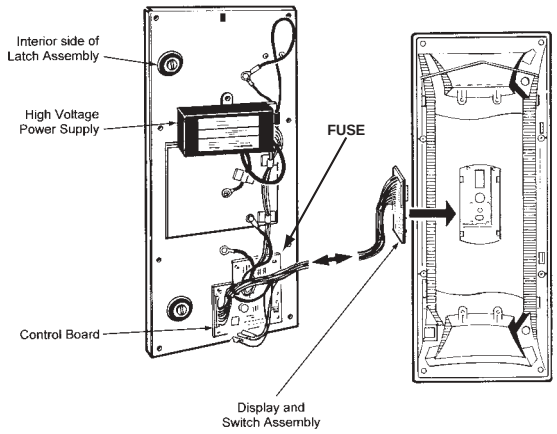


Fig. 19

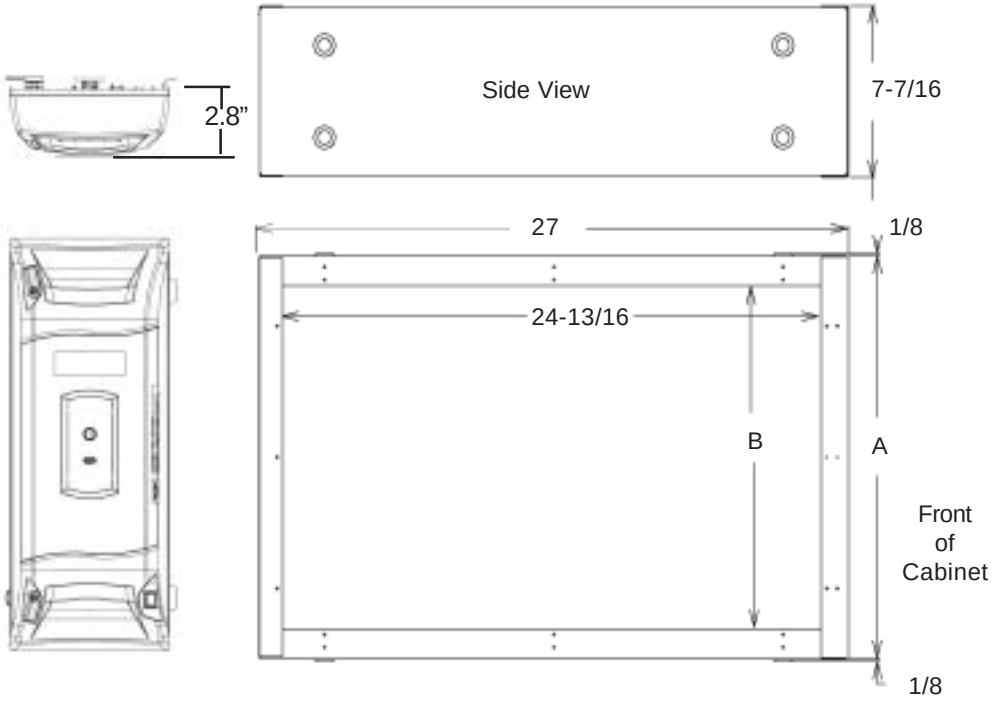
TROUBLESHOOTING	
Service Indications	Service Checks
Indoor Blower ON/ Air Cleaner First Green LED OFF	1. Check that the Power Door is installed correctly and the latche is closed. The actuator tab must engaged the door safety switch.
	2. Check the air cleaner power/control cable.
	3. Push the power button once. Button back light should be on
	4. Check for 24 Volts AC at the Air Cleaner Power plug. A Yellow LED on the door by the air cleaner plug should turn on for one second then turn off immediately after 24VAC power is applied to the unit.
	5. Check the Fuse inside the Power Door.
Indoor Blower ON/ Air Cleaner First Green LED ON, Not Flashing	1. Air Cleaner is in the 10 minute DRY CYCLE.
	2. No call for Air Cleaner operation due to no 24 volts AC call going to G or W from the Furnace or Air Handler
	3. There is no High Voltage being provided to the FIELD CHARGER or the COLLECTION CELLS. Inspect the FIELD CHARGER assembly and COLLECTION CELLS for any foreign material that may be lodged in them. Clean as needed, reassemble and test.
	4. If the Air Cleaner still does nto work, remove Power Door from the Air Cleaner Housing.
CAUTION HIGH VOLTAGE WILL BE PRESENT FOR THE REMAINDER OF THIS TEST.	
	5. With the indoor blower running and the power cord plugged into the Air Cleaner, use a tool to activate the Power Door interlock switch. Push the power button once. The first green LED should come on and after the time delay it should start to flash.
	If the first Green LED does not start to flash the fault is with the Power Door.
Indoor Blower ON/ Four Yellow LEDs Flashing	1. Remove the Power Door, FIELD CHARGER & COLLECTION CELLS. Inspect for foreign material, clean if needed.
Indoor Blower ON three Red LEDs Flashing	1. This indicates service is needed. See Service Facts for fault code information.

Fig. 20

Dimensions

OUTLINE DRAWING FOR UPFLOW FURNACES

27” DEPTH CABINET
ADD DOOR DEPTH FOR TOTAL

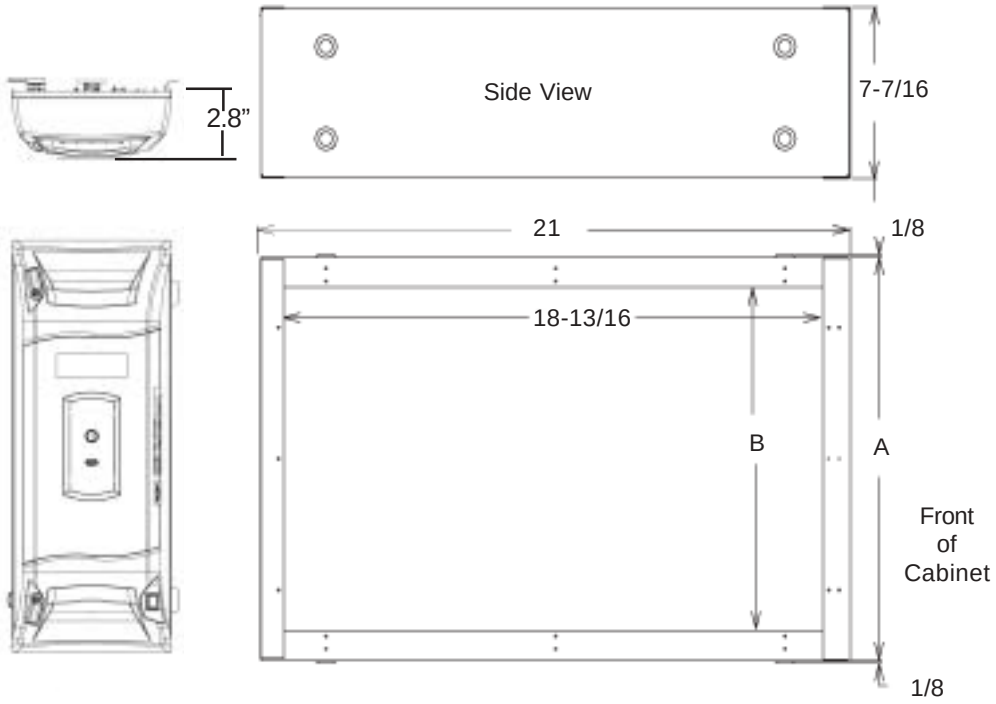


UPFLOW FURNACE MODEL NUMBERS		
ifD Air Cleaner	A	B
*FD145ALFR000A *FD145ALUPGRDA	14.5	12.38
*FD175ALFR000A *FD175ALUPGRDA	17.5	15.38
*FD210ALFR000A *FD210ALUPGRDA	21.0	18.88
*FD245ALFR000A *FD245ALUPGRDA	24.5	22.38
* May be "A" or "T"		

Dimensions

OUTLINE DRAWING FOR DOWNFLOW FURNACES

21” CABINET DEPTH
ADD DOOR DEPTH FOR TOTAL

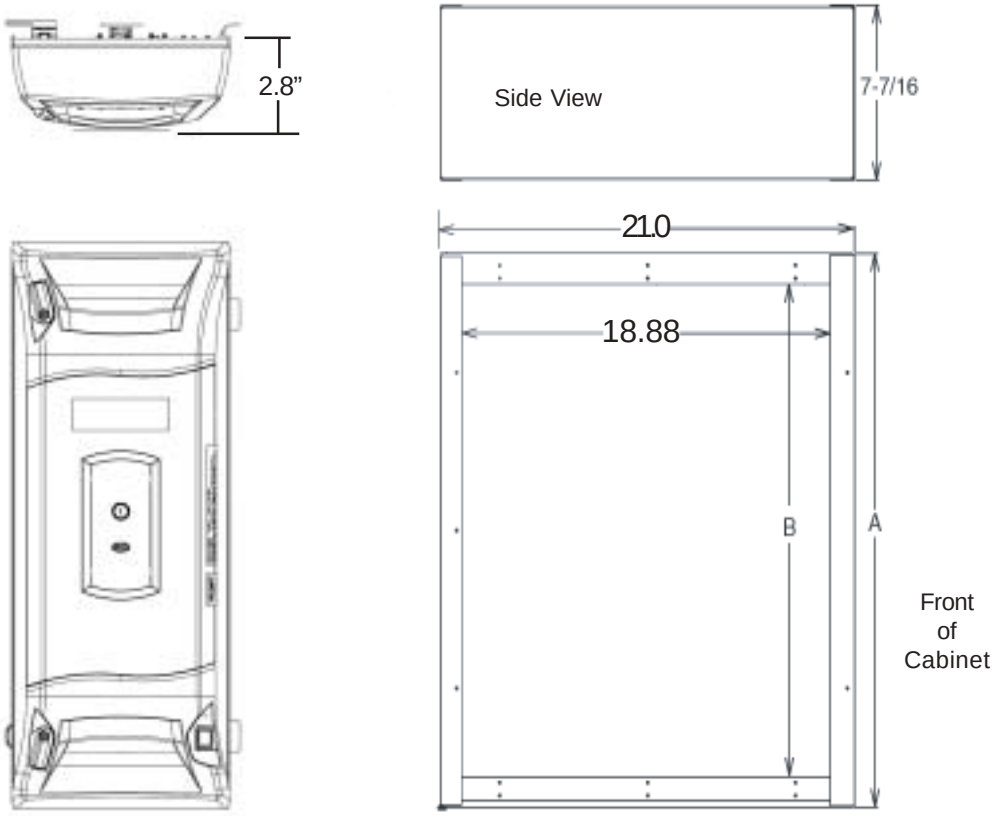


DOWNFLOW FURNACE MODEL NUMBERS		
ifD Air Cleaner	A	B
*FD14DALFR000A *FD14DALUPGRDA	14.5	12.38
*FD17DALFR000A *FD17DALUPGRDA	17.5	15.38
*FD21DALFR000A *FD21DALUPGRDA	21.0	18.88
*FD24DALFR000A *FD24DALUPGRDA	24.5	22.38
* May be "A" or "T"		

Dimensions

OUTLINE DRAWING FOR AIR HANDLERS

21” DEPTH CABINET
ADD DOOR DEPTH FOR TOTAL



AIR HANDLER MODEL NUMBERS		
ifD Air Cleaner	A	B
*FD215ALAH000A *FD215ALUPGRDA	21.5	19.38
*FD235ALAH000A *FD235ALUPGRDA	23.5	21.38
*FD260ALAH000A *FD260ALUPGRDA	26.0	23.88
* May be "A" or "T"		

PRESSURE DROP AT SPECIFIC AIRFLOW PER MODEL									
	400 CFM	600 CFM	800 CFM	1000 CFM	1200 CFM	1400 CFM	1600 CFM	1800 CFM	2000 CFM
*FD145ALFR000A *FD145ALUPGRDA	0.04	0.09	0.14	0.20	0.27				
*FD175ALFR000A *FD175ALUPGRDA	0.03	0.06	0.10	0.14	0.19	0.24	0.30		
*FD210ALFR000A *FD210ALUPGRDA	0.02	0.04	0.07	0.10	0.13	0.17	0.21	0.26	0.31
*FD245ALFR000A *FD245ALUPGRDA	0.01	0.03	0.05	0.07	0.10	0.13	0.16	0.19	0.23
*FD14DALFR000A *FD14DALUPGRDA	0.07	0.14	0.22	0.32	0.44				
*FD17DALFR000A *FD17DALUPGRDA	0.05	0.09	0.15	0.22	0.30	0.39	0.49		
*FD21DALFR000A *FD21DALUPGRDA	0.03	0.07	0.11	0.15	0.21	0.27	0.34	0.42	0.50
*FD24DALFR000A *FD24DALUPGRDA	0.02	0.05	0.08	0.12	0.16	0.20	0.25	0.31	0.37
*FD215ALAH000A *FD215ALUPGRDA	0.03	0.06	0.10	0.15	0.20				
*FD235ALAH000A *FD235ALUPGRDA	0.02	0.05	0.09	0.12	0.17	0.22	0.27		
*FD260ALAH000A *FD260ALUPGRDA	0.02	0.04	0.07	0.10	0.14	0.18	0.23	0.28	0.33

* May be "A" or "T"

Notes

American Standard Inc.
6200 Troup Highway
Tyler, TX 75707

For more information contact your local dealer (distributor)