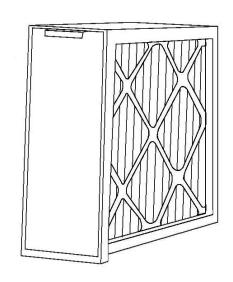




# Air Bear<sup>®</sup> Supreme<sup>™</sup> Series Duct Mount Media Air Cleaner



**Installation • Operation • Maintenance** 

# **CAUTION:**

READ INSTALLATION, OPERATION, AND MAINTENANCE INSTRUCTIONS CAREFULLY FOR SAFE OPERATION.

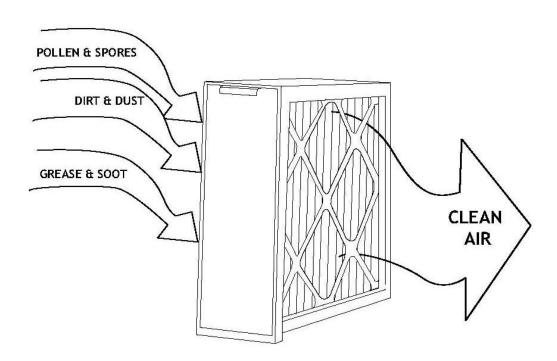
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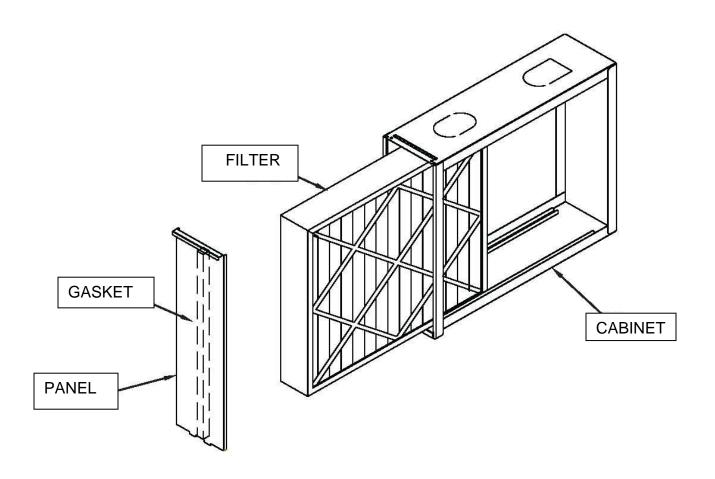
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Your media air cleaner is a high efficiency air filtration device designed to remove dirt, dust, pollen, and other microscopic particles from the air passing through it.

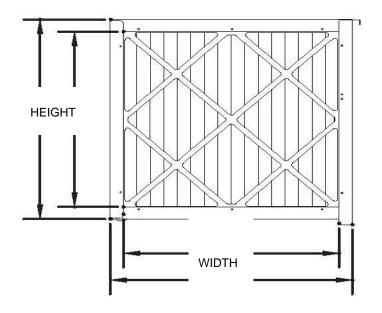
### **How the Air Cleaner Works**

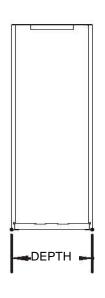
Dirty air enters the air cleaner by way of the return air duct system in your home. Particles are collected by the special pleated filter media. The pleats provide an exceptionally large filtering face area in a very compact space which allows maximum dirt holding capacities with minimum air flow resistance.





| MODEL                        | FILTER P/N | GASKET P/N  | PANEL P/N    |  |
|------------------------------|------------|-------------|--------------|--|
| AIR BEAR SUPREME 2000        |            |             |              |  |
| MERV 8: UNIT P/N 455602-025  | 255649-002 | 356066-1709 | 356066-1017  |  |
| MERV 11: UNIT P/N 455602-525 | 259112-002 | 330000-1709 |              |  |
| AIR BEAR SUPREME 20 X 20     |            |             |              |  |
| MERV 8: UNIT P/N 455602-225  | 255649-003 | 356066-1709 | 356066-1017A |  |
| MERV 11: UNIT P/N 455602-725 | 259112-003 | 330000-1709 | 330000-1017A |  |
| AIR BEAR SUPREME 1400        |            |             |              |  |
| MERV 8: UNIT P/N 455602-125  | 255649-005 | 356066-1710 | 356066-1030  |  |
| MERV 11: UNIT P/N 455602-625 | 259112-005 | 330000-1710 | 330000-1030  |  |
| AIR BEAR CUB                 |            |             |              |  |
| MERV 8: UNIT P/N 455602-425  | 255649-001 | 356066-1710 | 356066-1032  |  |
| MERV 11: UNIT P/N 455602-925 | 259112-001 | 330000-1710 |              |  |





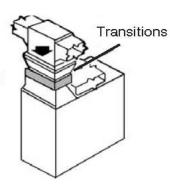
| UNIT  | AIR BE   | AR 2000                                    | AIR BE                                    | <b>AR</b> 20X20                    | AIR BEA                                   | AR 1400                                    | AIR BEA                                   | AR CUB                                     |
|---|--|--|---|------------------------------------|---|--|---|--|
| MODEL   | <b>MERV 8</b> :<br>UNIT P/N<br>455602-025  | <b>MERV 11</b> :<br>UNIT P/N<br>455602-525 | <b>MERV 8</b> :<br>UNIT P/N<br>455602-225 | MERV 11:<br>UNIT P/N<br>455602-725 | <b>MERV 8</b> :<br>UNIT P/N<br>455602-125 | <b>MERV 11</b> :<br>UNIT P/N<br>455602-625 | <b>MERV 8</b> :<br>UNIT P/N<br>455602-425 | <b>MERV 11</b> :<br>UNIT P/N<br>455602-925 |
| CAPACITY  | 600 – 20   | 600 – 2000 CFM                             |   | 600 – 1800 CFM 600 – 1400<br>CFM   |   |  | 600 – 12                                  | 00 CFM                                     |
|   |  |  |   |                                    |   |  |   |  |
|   |  | ER RESIS                                   |   |                                    | _   |  | 1   | I  |
| 600 CFM   | 0.04   | 0.05                                       | 0.04                                      | 0.05                               | 0.06                                      | 0.07                                       | 0.07                                      | 0.09                                       |
| 800 CFM   | 0.07   | 0.07                                       | 0.08                                      | 0.09                               | 0.09                                      | 0.12                                       | 0.11                                      | 0.14                                       |
| 1000 CFM  | 0.09   | 0.10                                       | 0.12                                      | 0.13                               | 0.13                                      | 0.17                                       | 0.16                                      | 0.21                                       |
| 1200 CFM  | 0.11   | 0.13                                       | 0.15                                      | 0.17                               | 0.17                                      | 0.23                                       | 0.22                                      | 0.29                                       |
| 1400 CFM  | 0.14   | 0.17                                       | 0.18                                      | 0.22                               | 0.22                                      | 0.30                                       | -   | -  |
| 1600 CFM  | 0.17   | 0.21                                       | 0.21                                      | 0.27                               | -   | -  | -   | -  |
| 1800 CFM  | 0.20   | 0.26                                       | -   | -                                  | -   | -  | -   | -  |
| 2000 CFM  | 0.23   | 0.31                                       | -   | -                                  | -   | -  | -   | -  |
|   |  |  |   |                                    |   |  |   |  |
| CABINET OUTSIDE DIMENSIONS (HEIGHT X WIDTH X DEPTH) |  |  |   |                                    |   |  |   |  |
| HEIGHT  |  | 1/4"                                       | 20-1/4"                                   |                                    | 16-1/4"                                   |  | 16-1/4"                                   |  |
| WIDTH   | 24-  | 24-7/8"                                    |   | 21-3/8"                            |   | 7/8"                                       | 24-                                       | 7/8"                                       |
| DEPTH   | 7-1  | /8"  | 7-1/8"                                    |                                    | 7-1/8"                                    |  | 5-1/4"                                    |  |
| CADINET DUCT OPENING DIMENSIONS (HEIGHT V MIDTH )   |  |  |   |                                    |   |  |   |  |
| HEIGHT  | CABINET DUCT OPENING DIMENSIONS (HEIGHT X WIDTH ) HEIGHT 17-7/8" 17-7/8" 13-7/8" 13-7/8" |  |   |                                    |   |  |   |  |
|   |  |  |   |                                    |   |  |   |  |
| WIDTH   | 22-  | 1/2"                                       | 1   | 9"                                 | 22-                                       | 1/2"                                       | 22-                                       | 1/2"                                       |

### TYPICAL MOUNTING POSITIONS

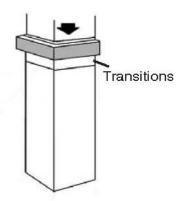
(Air cleaner shown shaded in illustrations)

### WARNING

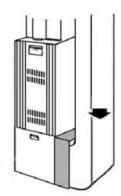
Before making changes to a HVAC system that may affect the ventilation of fuel-burning appliances, contact your heating contractor.



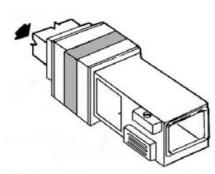
Basement Furnace (Lowboy) -Mounted horizontally in return plenum- just above the furnace.



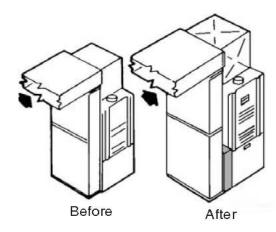
Counterflow
Furnace—
Mounted
horizontally in
return duct— just
above the
furnace.



Space Saver Furnace (Highboy)- Side installation. Mounted vertically, where return air enters side inlet of furnace.



Horizontal Furnace- Mounted vertically in return duct as close to the furnace as possible.



Offset Installation—If there is less than 7-in. for mounting the air cleaner between the duct and the fumace, move the return air drop.

### **Application**

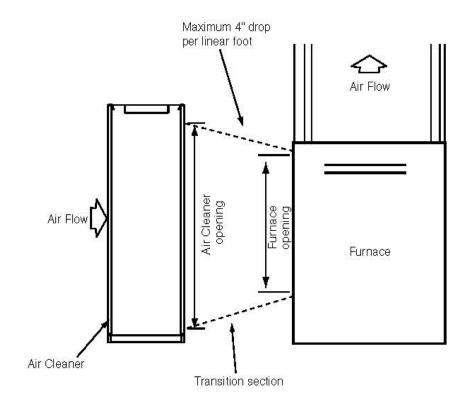
This air cleaner is used in forced air heating, cooling, and ventilating systems. The air cleaner should be installed in the system such that all the system air is circulated through the air cleaner. Maximum performance is obtained with the system blower set for continuous operation.

### **Installation Requirements**

The best location for the air cleaner is in the return air duct next to the blower compartment. In this location, the blower motor and cooling coils will be kept clean. Do not install the air cleaner in the discharge air duct. Do not install the air cleaner directly exposed to UV lighting. Before installing the air cleaner, consider the application. If a transition between the ductwork and air cleaner is required, refer to section entitled **Transitions**, below. The unit must be readily accessible for periodic inspection and replacement of the filter cartridge to maintain maximum efficiency and trouble-free operation. A clean coil will reduce utility costs by maintaining the coil's efficiency. Failure to replace filter cartridge can cause damage to the cooling system. Allow a minimum of 26" clearance in front of the access panel for filter cartridge replacement.

### **Transitions**

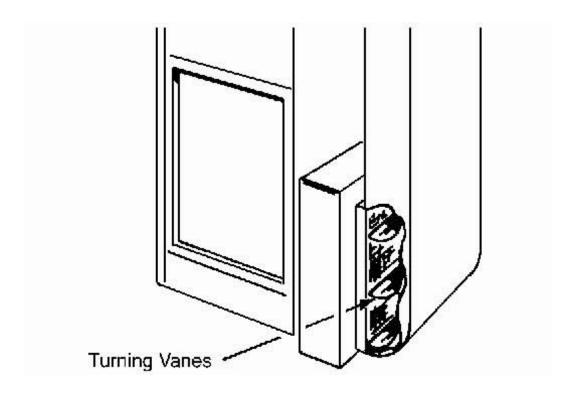
If the air duct does not fit the air cleaner cabinet opening, gradual transitions are recommended to reduce air turbulence through the air cleaner and maximize efficiency. Not more than 20° (about 4" per running foot) of expansion should be used on each side of the transition fitting.



# Installation

# **Turning Vanes**

If the air cleaner is installed adjacent to a 90° duct elbow, add turning vanes inside the duct to improve the air distribution across the face of the air cleaner.



# **Direction of Air Flow through the Air Cleaner**

The air cleaner is set up for left to right air flow, when facing the access door. For right to left air flow, remove filter cartridge, turn it around and replace in cabinet. The directional arrows on the filter cartridge must point in the direction of air flow.

### **Humidifiers**

Location of the system humidifier is important to the operation of the air cleaner. When an evaporative type humidifier is used, it may be installed between the furnace warm air duct and the return air duct without affecting the air cleaner. Atomizing and spray type humidifiers should be installed downstream of the air cleaner. If the humidifier must be installed upstream, allow at least 6 feet between the air cleaner and humidifier.

### **Physical Installation**

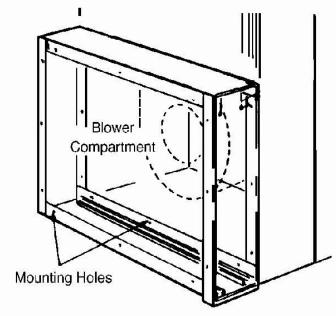
The air cleaner cannot be installed with the access door facing down. The section entitled **Typical Mounting Positions** (page 4) shows examples of proper air cleaner mounting with a variety of furnace installations.

# **Prior to Installing this Product**

- 1. Read rules and instructions carefully for safe operation. Failure to follow them could damage the product or cause a hazardous condition.
- 2. Check the ratings given on the product to make sure it is suitable for your application.
- 3. Remove the old furnace filter and discard.
- 4. The air cleaner cannot remove existing dirt from the blower and ducts. Clean the area thoroughly before beginning installation.

NOTE: The following is a typical installation of the air cleaner on a highboy furnace. You may have to alter the installation to fit your specific application.

- 5. Locate the cabinet in the cold air return duct such that all of the return air flows through the unit. If the furnace and air cleaner openings are different, use a transition.
- 6. Mounting holes are provided in the air cleaner cabinet for ductwork attachment. The .140" diameter holes are sized for #8 sheet metal screws, or 1/8" rivets. If the adjoining ductwork is flanged, install the screws with the screw heads inside the cabinet, to prevent damage to the filter cartridge during removal and installation.
- 7. Remove the plastic bag from the filter cartridge and replace filter cartridge in cabinet.
- 8. After the unit has been secured, seal seams air tight with duct tape or caulking. Reinstall access door to ensure a tight seal.



# **Maintenance**

### **How to Maintain Your Air Cleaner**

The media filter cartridge in your air cleaner must be replaced periodically. The frequency of filter replacement is best determined by visual examination. On average, filter cartridges with normal usage should be replaced as follows:

MERV 8 Filters - Replace every 9 - 12 months

MERV 11 Filters - Replace every 4 - 6 months

### Steps for replacing filter cartridge

- 1. Open access door by pulling the handle. Remove door completely.
- 2. Pull used filter straight out of cabinet and place to side.
- 3. Remove new filter cartridge from plastic bag and save the bag.
- 4. Slide new filter cartridge into cabinet with "AIR-FLOW" arrow pointing in the direction of airflow.
- 5. Replace door and place used filter in plastic bag for easy disposal.

# Replacement Filter Cartridges for your Media Air Cleaner

Remember, periodic inspection and replacement of your filter will ensure high efficiency air cleaning. Contact your HVAC dealer for replacement filter cartridges.

| AIR CLEANER<br>MODEL                  | FILTER<br>CARTRIDGE SIZE | MERV 8 FILTER<br>CARTRIDGE<br>PART NUMBER | MERV 11 FILTER<br>CARTRIDGE<br>PART NUMBER | FILTERS<br>PER<br>CARTON |
|---------------------------------------|--------------------------|---|--|--------------------------|
| AIR BEAR<br>SUPREME 2000<br>(20"X25") | 19/3/4"X24-1/4"X4-15/16" | 255649-102                                | 259112-102                                 | 3                        |
| AIR BEAR<br>SUPREME 1400<br>(20"X20") | 19/3/4"X20-3/4"X4-15/16" | 255649-103                                | 259112-103                                 | 4                        |
| AIR BEAR<br>SUPREME 1400<br>(16"X25") | 15/3/4"X24-1/4"X4-15/16" | 255649-105                                | 259112-105                                 | 3                        |
| AIR BEAR CUB<br>(16"X25")             | 15/3/4"X24-1/4"X3-1/16"  | 255649-101                                | 259112-101                                 | 6                        |



# Warranty -

### MEDIA AIR CLEANER LIMITED TEN-YEAR WARRANTY

This limited warranty covers Trion Residential Media Air Cleaners, excluding door latch, disposable media cartridge, charcoal filter, accessories, ductwork, and installation. Trion warrants that all new Trion Residential Media Air Cleaners are free from defects in material and workmanship under normal, noncommercial use and service. Trion will remedy any such defects if they appear within ten years from the date of original installation as evidenced by Proof of Purchase from an Authorized Trion Dealer, subject to terms and conditions of this Limited Ten-Year Warranty stated below:

- 1. THIS LIMITED TEN-YEAR WARRANTY IS GRANTED BY TRION, 101 MCNEILL ROAD, SANFORD, NC 27330.
- 2. This warranty shall extend only to any noncommercial owner who has purchased the residential Media Air Cleaner other than for purposes of resale.
- 3. All components are covered by this limited warranty except expendable items such as charcoal filters and filter cartridges.
- 4. If within the warranty period, any Trion Residential Media Air Cleaner unit or component requires service, it must be performed by a competent heating and/or air conditioning contractor (preferably the installing contractor). Trion will not pay shipping charges or labor charges to remove or replace such defective parts or components. If the part or component is found by inspection to contain such defective material and workmanship, it will be either repaired or exchanged-free of charge at Trion's option, and returned freight collect.
- 5. In order to obtain the benefits of this limited ten-year warranty, the owner must notify the dealer or distributor in writing or by phone, of any defect within 30 days of its discovery. If after reasonable time you have not received an adequate response from the dealer or distributor, notify in writing, by phone, or email: Trion, 101 McNeill Road, Sanford, NC 27330 / 1-800-884-0002 / customerservice@trioninc.com
- 6. This limited warranty does not apply to any part or component that is damaged in transit or when handling, has been subject to misuse, neglect or accident, has not been installed, operated, and serviced according to Trion's instruction, has been operated beyond the factory rated capacity, or altered in any such way that its performance is affected. There is no warranty due to neglect, alteration, or ordinary wear and tear. Trion's liability is limited to the replacement of defective parts or components and does not include the payment of labor charges to remove or replace such defective parts.
- 7. TRION WILL NOT BE RESPONSIBLE FOR LOSS OF USE OF ANY PRODUCT, LOSS OF TIME, INCONVENIENCE, OR ANY OTHER INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES WITH RESPECT TO PERSON OR PROPERTY, WHETHER AS A RESULT OF BREACH OF WARRANTY, NEGLECT, OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE LIMITATION OR EXCLUSION IN THE PRECEDING SENTENCE MAY NOT APPLY TO YOU.
- 8. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
- 9. Any warranty (express, implied, or statutory), representation, or guarantee other than those set forth herein, shall expire at the expiration date of this express limited warranty. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE LIMITATION IN THE PRECEDING SENTENCE MAY NOT APPLY TO YOU.
- 10. Trion reserves the right to make changes in the design and material of its products without incurring any obligation to incorporate such changes in units manufactured before the effective date of such a change.

