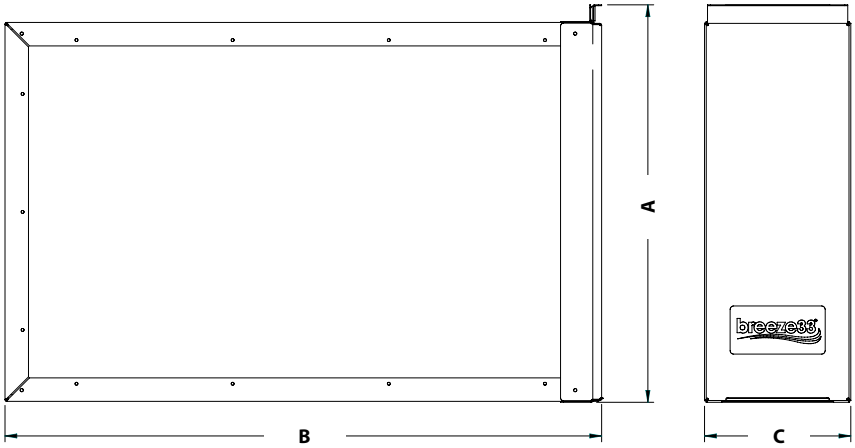
MEDIA AIR CLEANER
INSTALLATION GUIDE



TOOLS NEEDED FOR INSTALLATION

- Standard screwdriver
- Phillips screwdriver
- Metal cutter
- Drill
- Duct sealant

SPECIFICATIONS

Model	Nominal Size	Replacement Filter (MERV 11)	A	B	C
BZ33-MAC16255	16" x 25" x 5"	BZ33MAF16255	16-15/16"	25-7/16"	6-5/8"
BZ33-MAC20255	20" x 25" x 5"	BZ33MAF20255	20-15/16"		

Maintenance Note: Recommended to replace air filter after 12 months of use. More frequent replacement may be advised dependent on indoor air quality conditions.

WHAT TO EXPECT FROM YOUR MEDIA AIR CLEANER

Breeze33 Media Air Cleaners effectively capture and remove a substantial amount of airborne particles through their top-performing pleated media filters. They can be easily mounted in any position within the return air duct of gas, oil, and electric forced warm air furnaces, as well as compressor cooling systems up to 5 tons. In addition, they require no electrical connections and minimal maintenance, needing only periodic media filter replacements.

WHEN INSTALLING YOUR MEDIA AIR CLEANER

1. Please read instructions carefully - failure to do so could damage the product or could create a hazardous condition.
2. Verify the rating specified in the instructions and on the product to ensure it is suitable for your application.
3. Installer must be a trained/experienced service technician.
4. After installation, refer to the Installation Checklist at the end of this document to ensure product operation.

APPLICATION CONSIDERATIONS

Designed to work with gas, oil, and electric forced warm air furnaces and with compressor cooling, the Breeze33 Media Air Cleaners can also be used with heat pumps, provided the filter is changed regularly to prevent excessive pressure drop. However, they are not recommended for applications where pressure drop may be critical.

AIR CONDITIONING

Mount the Media Air Cleaners upstream of the evaporator coil in a cooling system. The filter will assist in maintaining the cleanliness of the coil and minimize the need for maintenance.

HUMIDIFIERS

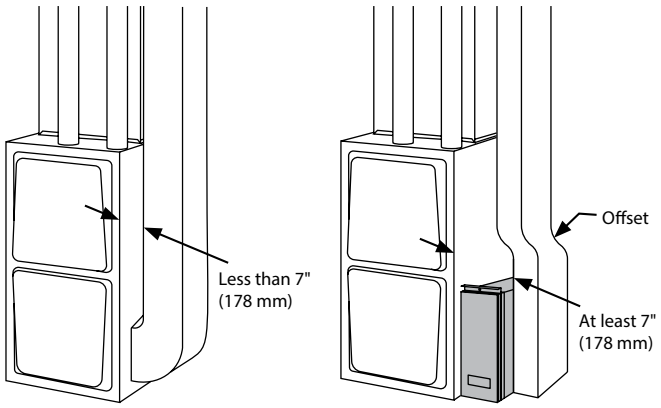
The Media Air Cleaners are compatible with humidifiers. However, avoid situations where water mist can come into contact with the media. If an atomizing humidifier is used, the media filter will need to be replaced more frequently due to mineral buildup from the water.

UV LIGHTS

Germicidal UV lights have the potential to deteriorate the media filter. To prevent this, the UV light should be positioned out of the filter's line of sight or a minimum of 3 feet away. Failure to do so may result in the need for more frequent filter replacements.

OFFSETS

If the duct connection to the furnace in a side installation provides less than 7" (178 mm) for mounting Media Air Cleaner, then you should attach an offset to the elbow. See figure below.

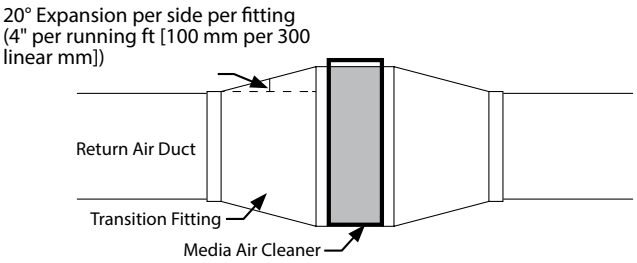


TRANSITIONS

To achieve optimal air purification, ensure that the airflow is evenly distributed across the surface of the media. If the duct size differs from the media air filter cabinet, it is essential to implement gradual transitions. Please adhere to the following instructions during the fabrication process:

- Implement gradual transitions to minimize air turbulence and enhance efficiency.
- Limit the expansion to no more than 20° (about 4" per running ft. [100 mm per 300 linear mm]) on either side of a transition fitting. See figure below.

DUCT SIZE CHANGED GRADUALLY TO PREVENT TURBULENCE.



SHEET METAL

The Media Air Cleaner can be easily integrated into any new or current forced air heating and cooling systems commonly found in residential settings. In certain cases, transitions might be necessary to ensure optimal performance of the Media Air Cleaner.

⚠ **CAUTION: Sheet metal has sharp edges. Handle product carefully.**

Failure to adhere to these instructions will lead to nullification of the warranty, incorrect installation, and additional service callbacks.

PERSONAL SAFETY

- Always wear protective eyewear when setting up the equipment.
- Avoid cutting into any HVAC or electrical wiring.
- Adhere to industry safety protocols and all plumbing, electrical, and mechanical regulations in your area.

CHOOSING A MOUNTING POSITION

The Breeze33 Media Air Cleaner mounts can be installed in any orientation within the return air duct, typically adjacent to the furnace blower compartment.

However, it is essential that the arrow on the cartridge aligns with the direction of airflow. Refer to Figs. 1-8 to determine the correct placement of the Media Air Cleaner for different setups.

NOTE: The Media Air Cleaner is robust enough to effortlessly bear the weight of the furnace and evaporator coil.

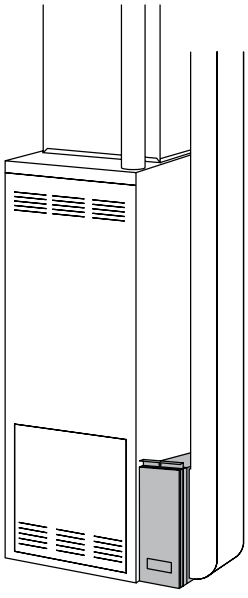


Fig. 1 Highboy furnace with side installation, featuring a vertically mounted Media Air Cleaner positioned at the side inlet where the return enters.

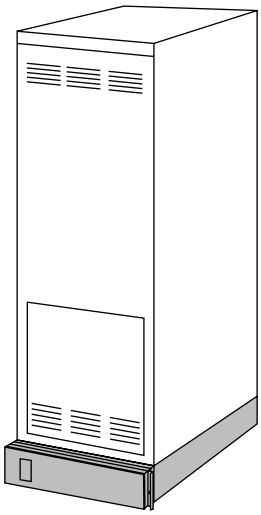


Fig. 2 Highboy furnace with the Media Air Cleaner mounted horizontally below the furnace, to accommodate the return entering from below.

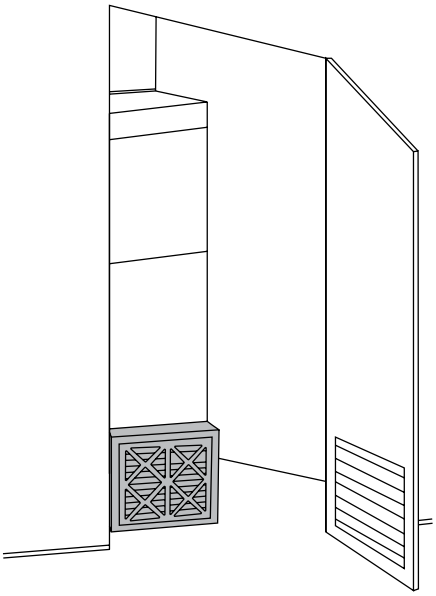


Fig. 3 Highboy furnace is installed within a closet. The Media Air Cleaner is mounted vertically on furnace, positioned between furnace and louvered return air opening in the closet door.

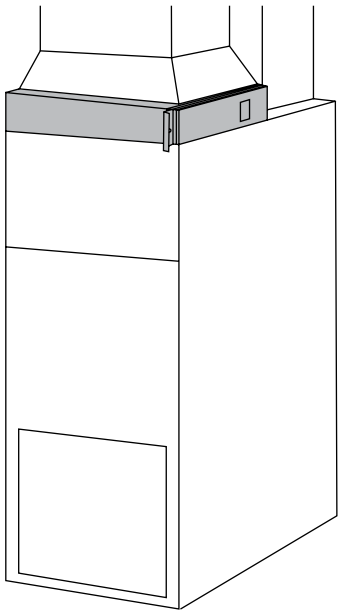


Fig. 4 Lowboy furnace is installed with the Media Air Cleaner mounted horizontally in the return plenum, positioned just above the furnace and across from the heating plenum.

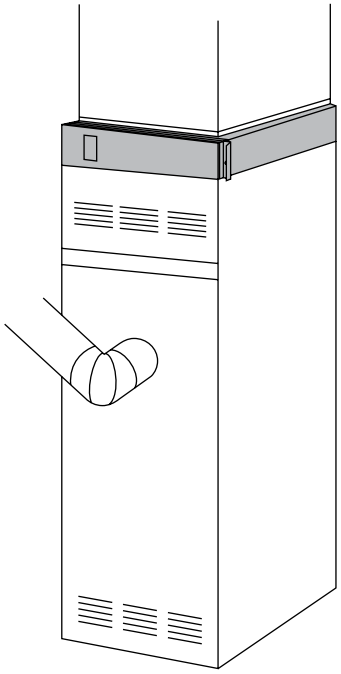


Fig. 5 Counterflow furnace is installed with the Media Air Cleaner mounted horizontally in the return duct or plenum, positioned just above furnace.

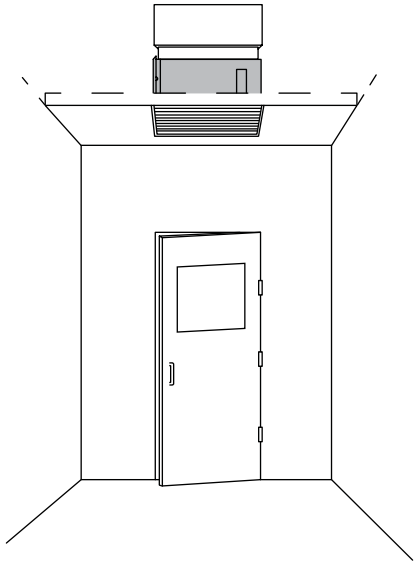


Fig. 6 Central fan installation where the Media Air Cleaner is positioned horizontally in the central return duct.

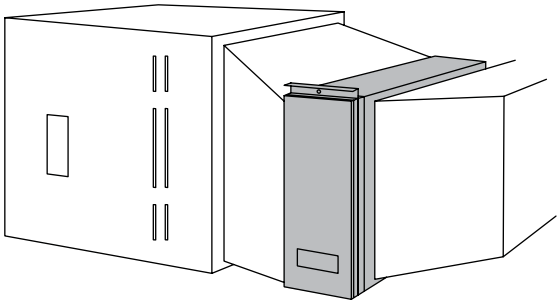


Fig. 7 Horizontal furnace is equipped with a Media Air Cleaner that is installed vertically in return duct close to the furnace.

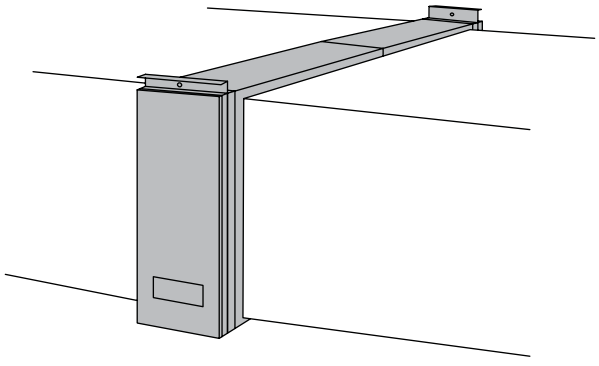


Fig. 8 Two or more Media Air Cleaners are utilized within a high capacity system.

MOUNTING THE MEDIA AIR CLEANER

STEP 1 Review the Installation Plan

Place the cabinet on the floor in the exact orientation it will be installed in. Test inserting and removing the cartridge to ensure that there is enough clearance for easy removal and replacement of the cartridge.

STEP 2 Fasten the Cabinet to the Furnace

a. Adjust the cabinet to align with the return air opening.

b. Position blocks underneath the cabinet to ensure the unit is stable.

c. Make an opening in the furnace to correspond with the cabinet opening.

d. Securely affix the cabinet to the furnace. Connect the unit directly or use a starting collar in the furnace opening. Either drill holes and use sheet metal screws or rivets to fasten, or utilize slip joints. If drilling holes, use locking pliers to assist in holding the unit steady while drilling.

STEP 3 Fasten Cabinet to Ductwork

Secure the cabinet's side to the ductwork using the suitable method of sheet metal screws, rivets, or slip joints.

STEP 4 Connect Ductwork

a. Join the vertical duct section with the elbow. If the vertical descent of the duct is under 7" (178 mm) from the furnace's side, adjust the horizontal trunk or connect an offset fitting to the elbow.

b. Ensure that the vertical duct is connected to the horizontal trunk when the ductwork is correctly aligned.

STEP 5 Seal Joints

Make sure all connections in the return air system between the media air filter and the furnace are properly sealed to avoid dust contamination in the purified airflow.

STEP 6 Install Filter Cartridge

Insert the filter cartridge into the cabinet, ensuring that the arrow on the cartridge is facing the direction of airflow. Then replace the access door by inserting the tab on the bottom of the door into the slot in the cabinet. Finally, swing the door closed and press it into place.

INSTALLATION CHECKLIST

Visually check the installation and make sure that:

- ☐ Airflow follows the direction of the arrow indicated on the media air filter cartridge.
- ☐ Proper installation of transitions, if applicable, are ensured.
- ☐ Sealing of joints in the sheet metal between the media air filter and furnace is completed.
- ☐ All sheet metal connections are fully assembled.
- ☐ Original furnace filter has been taken out and the blower compartment has been cleaned.

When you have verified that the steps above has been completed:

- Replace any access doors that were removed during the installation process.
- Ensure that the furnace or cooling system runs through a full cycle to verify that it is functioning as intended.

Pressure Drop vs. Airflow

MERV Rating: MERV 11
Test Sample Size: 24" x 24"
Test Sample Depth: 4"
Static Pressure Drop: 0.248" w.c.
Test Velocity Sample: 500 fpm

Efficiency Definition

Small Particles:	E1 =	46%	0.3 to 1.0 µm
Medium Particles:	E2 =	77%	1.0 to 3.0 µm
Large Particles:	E3 =	87%	3.0 to 10 µm