



INSTALLATION, OPERATION, AND MAINTENANCE INSTRUCTIONS

Residential Duct Mount Media Air Cleaner

Part Numbers: P101-MF12 and P101-MF20

IMPORTANT: Read entire instructions before installing the media air cleaner.

IF YOU NEED HELP call toll free: 1-800-267-8305.

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SAFETY CONSIDERATIONS

Read and follow manufacturer instructions carefully. Improper installation may damage media air cleaner.

Recognize safety information. This is the safety alert symbol . When the safety alert symbol is present on equipment or in the instruction manual, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety alert symbol. DANGER identifies the most serious hazards which will result in severe personal injury or death. WARNING signifies a hazard which could result in personal injury or death. CAUTION is used to identify unsafe practices which would result in minor personal injury or property damage.

WARNING

Before beginning any installation or modification, be certain that the main line electrical disconnect switch is in the OFF position. Electric shock could result. Tag disconnect switch with suitable warning labels.

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 the basic maintenance functions of replacing 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, and other safety precautions that may apply.

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

GENERAL

The media air cleaner is designed to remove atmospheric and household dust, pollen, mold spores, insecticide dust, animal dander, coal dust, mites, cooking smoke and grease, and other particles down to 1 micron.

Airborne pollutants are carried through the return air ducts of the heating/cooling system to the media air cleaner. The particles are captured by the media filter.

Regular maintenance (replacement of filters) is required by the home owner.

COMPONENTS

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

Cabinet — The cabinet is constructed of heavy gage galvanized steel. Holes are provided in the cabinet for easy mounting in the ductwork or air-handling equipment. See Fig. 2 for cabinet dimensions.

Filter — The filter is constructed of polyolefin fibers that will not shred or absorb moisture. The unique non-woven, pleated design ensures that the filter traps particles inside, not on the outside of the media (which restricts airflow). The filter media is supported by an open steel mesh and enclosed by a high strength, beverage board.

The filter's efficiency is based on ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) Standard 52.2P, and it has a MERV (Minimum Efficiency Reporting Value) 8 rating. The maximum velocity is 500 ft/min. An arrow indicates direction of airflow.

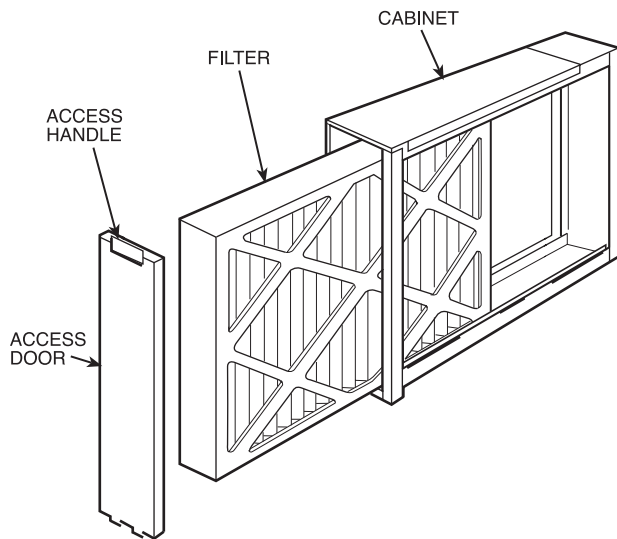


Fig. 1 — Media Air Cleaner

Table 1 — Specifications

PART NUMBER	P101-MF12	P101-MF20
Unit Weight	15 lb	20 lb
Airflow	up to 1200 CFM	up to 2000 CFM
Duct Size	3 x 16 x 25 in.	5 x 20 x 25 in.

INSTALLATION

Location — The media air cleaner must be installed in the return air duct, as close to the blower compartment as possible. This location provides the most even airflow across the filter and allows the media air cleaner to keep the system motor and blower clean. See Fig. 3. When choosing location, there must be adequate room to remove filters.

NOTE: Be sure to notify home owner not to install any device within 3 ft from the side of the air cleaner after installation is complete. The media air cleaner requires regular servicing; removing the media filter for maintenance or replacement requires a 3-ft clearance.

IMPORTANT: The media air cleaner will cause more of a restriction on your heating or cooling system than a regular furnace filter due to its increased efficiency. As the filter collects contaminants, the pressure drop increases. The media air cleaner is not recommended in systems where pressure drop is critical. See Table 2 for pressure drop information.

INSTALLATION LOCATION WITH HUMIDIFIER — If a separate humidifier is purchased, it should be installed in the furnace warm air duct. However, a humidifier may be installed in the return air duct without causing problems to the media air cleaner. Take care to ensure that the humidifier does not leak,

as this may cause damage to the media air cleaner and mineral deposits on the filter.

An atomizing-type humidifier should only be installed downstream of the media air cleaner. If the atomizing-type humidifier is installed upstream, high humidity, salts, and minerals may damage the filter and cause service problems.

If the atomizing-type humidifier must be installed upstream, the atomizing-type humidifier must be installed as far from the air cleaner as possible.

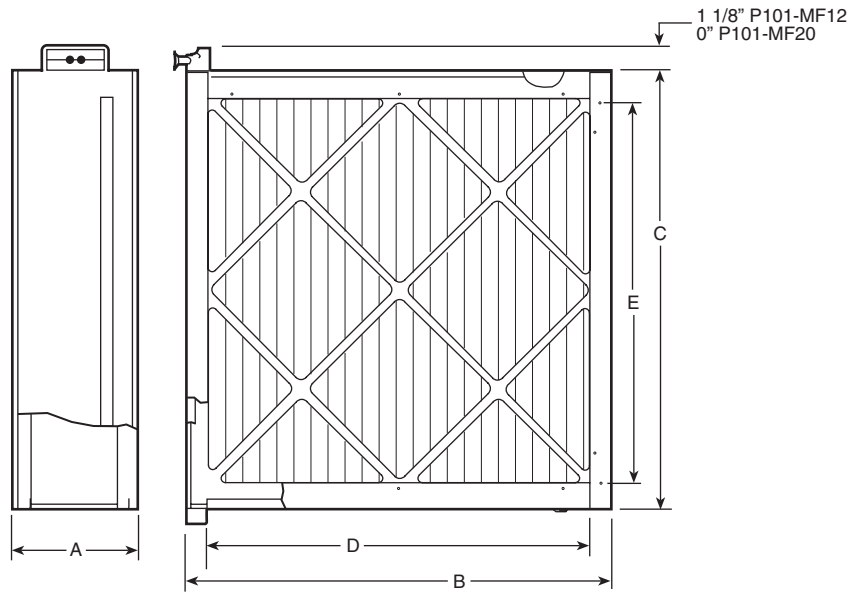
Table 2 — Air Cleaner Pressure Drop (in. wg)

PART NUMBER	CFM	PRESSURE DROP (in. wg)
P101-MF12	600	.06
	800	.10
	1000	.14
	1200	.20
P101-MF20	600	.04
	800	.05
	1000	.06
	1200	.08
	1400	.10
	1600	.14
	1800	.18
	2000	.22

INSTALLATION LOCATION WITH AIR CONDITIONER — Whenever possible, the media air cleaner should be installed upstream of the cooling coil. This location allows the filter to clean the air before it reaches the evaporator coil.

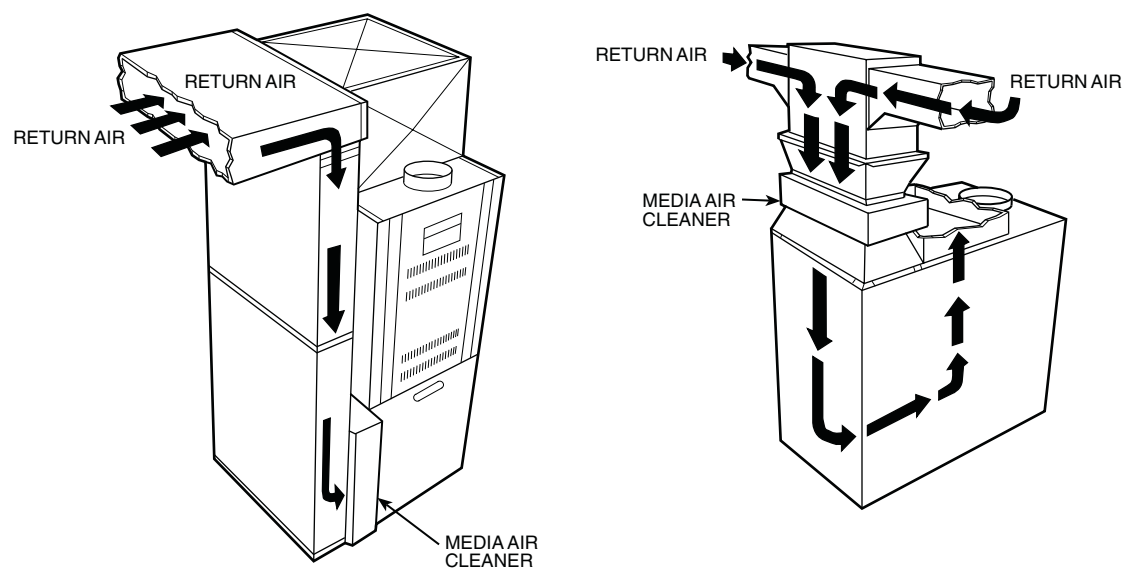
Media Air Cleaner Installation — Perform the following to install the media air cleaner:

1. Remove the existing furnace filter. Thoroughly clean the blower compartment and ductwork where the media air cleaner will be installed.
2. Remove the access door. Slide the filter out of the cabinet.
3. Place the cabinet into ductwork. Holes are provided to attach cabinet to ductwork or equipment. If the adjoining ductwork is flanged, install the screws so that the screw heads are inside the cabinet. This will help prevent damage to filters during removal for cleaning. If the air duct does not fit the media air cleaner opening, a gradual transition is recommended to reduce air turbulence through the air cleaner and to increase its efficiency. There should not be more than 20 degrees of expansion used on each side of the transition fitting. Do not reduce ductwork to a smaller air cleaner or it will increase the velocity of airflow.
4. If the media air cleaner is installed adjacent to an elbow or angle fitting, turning vanes are recommended to improve air distribution across the filter.
5. After the air cleaner has been secured, seal seams airtight with duct tape or caulking to prevent dust from entering the system.
6. Replace the media filter. Make sure arrow on filter is pointing towards the fan. Replace the access door.



UNIT	DIMENSIONS			DUCT OPENING	
	A	B	C	D	E
P101-MF12	5.25 in.	25 in.	16.25 in.	22.5 in.	13.87 in.
P101-MF20	7.12 in.	25 in.	20.25 in.	22.5 in.	17.87 in.

Fig. 2 — Dimensions



NOTE: Provide a 3 ft (.914 m) clearance for filter removal.

Fig. 3 — Media Air Cleaner Installation Location

OPERATION

For maximum performance of the media air cleaner, these steps should be followed:

- run your heating/cooling system fan continuously
- remove furniture or carpets which block return air grilles throughout your house, so that air moves freely to the furnace
- check for proper operation of the blower fan on the furnace
- ensure that the filters are not clogged.

After installing the media air cleaner, you may notice some white dust on table tops and shelves. Most heavy particles (such as lint) settle quickly and do not get filtered through the media air cleaner. To reduce lint and dust, use continuous fan operation and keep return vents unrestricted to create an efficient airflow.

MAINTENANCE

It is very important that the homeowner perform scheduled maintenance. If the filter is not changed on a regular basis, the media air cleaner will not operate effectively.

⚠ CAUTION

Make sure to turn furnace off before performing any maintenance or removing any components.

Filter Replacement — The filter will need replacing every 9 to 12 months, depending on the amount of contaminants in the air. If the filter becomes clogged, airflow through the system may be restricted. This may cause service problems with the furnace or air conditioner.

To replace the filter:

1. Turn off furnace fan.
2. Open media air cleaner access door.
3. Remove filter from cabinet and discard.
4. Install new filter. Make sure arrow points toward the furnace fan.
5. Close access door.
6. Turn on furnace fan.

**MEDIA AIR CLEANER
LIMITED TEN-YEAR WARRANTY**

TEN-YEAR LIMITED WARRANTY — This CARRIER CORPORATION product is warranted to be free from defects in material and workmanship under normal use and maintenance for a period of ten years from the date of original installation. The warranty does not apply to replacement of the disposable media filter which will need to be replaced once or twice a year depending on use. A new or remanufactured part to replace the defective part will be provided without charge for the part itself, through a qualified servicing CARRIER CORPORATION dealer or service PROVIDED the defective part is returned to our distributor.

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 WARRANTIES — 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 WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance as outlined in the installation instructions including replacement of media 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. Damage as a result of floods, winds, fires, lightning, accidents, corrosive atmosphere, or other conditions beyond the control of CARRIER CORPORATION.
5. Parts not supplied or designated by 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.	Unit Serial No.
Date of Installation	Installed by
Name of Owner	Address of Installation



Replacement Components Division • Carrier Corporation
Syracuse, New York

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Signature

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