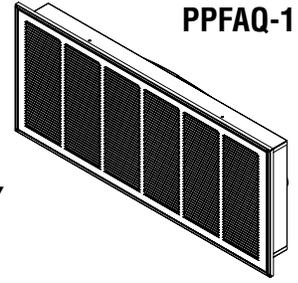


# PUREPAK RECESSED AIR CLEANER

Clean Air — Anywhere

PPFAQ-1



## THE SPACEPAK ANSWER TO INDOOR AIR QUALITY

### WHY BUY A PUREPAK AIR CLEANER FROM SPACEPAK?

The PurePak Air Cleaner has been engineered to effectively clean the air as it is circulated through the SpacePak high-velocity air conditioning system. Designed to be low profile, the air cleaner is concealed within our return air box, which can be installed inconspicuously in a ceiling or wall. The SpacePak system combined with the PurePak Air Cleaner cools, dehumidifies and quietly cleans the air in your home. SpacePak systems can also supply warm air using a hydronic coil (hot water), electric coil or a heat pump during winter months.

### IF I DON'T HAVE ALLERGIES, WHY DO I NEED AN AIR CLEANER?

The EPA says that indoor air is on average 7-10 times more polluted than outdoor air, even if you live in a city. Air has a direct pathway into our bodies and has a direct effect on our health and well being. Besides allergies, poor air quality is linked to a number of problems: fatigue, asthma, respiratory ailments, the spread of flu and other diseases, and even cancer.

### WHAT ABOUT A ROOM AIR CLEANER?

Most supplemental room air cleaners can help clean the air in a room or two. However, by installing an air cleaner in your home's central forced air system, you will clean the entire house. Further, many room air cleaners use high-efficiency passive filters, which require powerful -and therefore loud- fans to move the air. This can be an annoyance.

### WHY NOT BUY ONE OF THOSE AIR FILTERS ADVERTISED BY FAMOUS RADIO PERSONALITIES?

These are called passive electrostatic filters. Their fibers have a slight static charge. As airborne particles move through them, they can be attracted to the fibers, the way rubbing a balloon in a sweater will make it stick. They are a lot better than the \$2 throwaway 1" filters, but they can cause some problems in residential systems. As a passive electrostatic filter loads up with contaminants, its fibers become coated with particles and the "balloon effect" stops. This can happen quickly and then the filter is only effective against the larger particles in the air - particles over 5.0 microns. Further, in order for a passive electrostatic filter to work, it must be dense and is therefore restrictive to airflow. In many homes this can cause poor heating and cooling in the upper level of the home or in the rooms furthest from the air handling equipment. As the filter loads up, it becomes even more restrictive. This not only makes the air conditioning equipment work inefficiently, but can actually damage it. *In fact, some electric utilities tell their customers not to use passive electrostatic filters.* Because PurePak Air Cleaners use a safe 24-volt current to create an active electrostatic field inside the core, they are able to use a very sparse media that is not restrictive to airflow. PurePak Air Cleaners improve in efficiency as they operate, while capturing the very smallest particles in the air such as bacteria, smoke, mold spores, and pollen. In a recirculating air system, like the one in your house, a PurePak Air Cleaner collects over 97% of the particles that are 0.3 microns or larger.

### WHAT IS A MICRON AND WHY SHOULD I CARE ABOUT SMALL PARTICLES?

A micron is 1/25,000th of an inch. A human hair is about 150 microns; the smallest thing that can be seen with the naked eye is about 10 microns. It is the largest particles, above 5.0 microns, that cause the equipment problems and are what most filters are able to catch. However, 98% of the particles in the air are smaller than 1.0 micron. These "sub-micron" particles are not caught by most filters and get through our bodies' natural defense when inhaled. Further, they can stay suspended in the air for days until they are inhaled. An increasing number of studies have found these sub-microns particles to be a significant health hazard. As an allergy sufferer can tell you, what you can't see can hurt you. To effectively clean the air, the sub-micron particles must be removed. PurePak Air Cleaners will remove up to 98% of these particles on a multiple pass basis. In a controlled study, the PurePak Air Cleaner was able to remove 97% of the particles in the 0.3-0.5 micron range and 99% of the particles larger than 0.5 microns in just 10 hours.

### DOES THE PURE PAK AIR CLEANER CREATE A SNAPPING SOUND OR PRODUCE OZONE?

No, PurePak is a non-ionizing air cleaner that does not create irritating noise or ozone. Rather than ionizing, the PurePak Air Cleaner works by assigning polarity to both the particles in the air and the fibers of the media pad. This gives each a negative pole and a positive pole, essentially turning them into magnets. The particles are then attracted to other particles (making them easier to catch) and to the media fibers. Just as the paper clips on a magnet attract other paper clips, the dirt captured becomes part of the collecting surface, giving the air cleaner increased efficiency as it loads.

**I HAVE HAD AN ELECTRONIC AIR CLEANER BEFORE AND NOTICED A THIN COAT OF DUST ON A LOT OF SURFACES, ESPECIALLY ON MY TV SCREEN. WILL THIS AIR CLEANER DO THE SAME THING?**

No, PurePak will not create charged particles that will cling to grounded surfaces in the home. Electronic air cleaners to date have worked by ionizing (positively charging) the particles in the air. Then they try to capture them on negatively charged or grounded collection plates. This works fairly well at first, but as the plates load up with positive particles, they lose their attraction and the air cleaner loses efficiency. The positively charged particles then will stick to any grounded (walls and ductwork) or charged (a TV screen) surface.

**IS THE PURE PAK AIR CLEANER HARD TO INSTALL?**

No. For new SpacePak installations, it's as easy as installing our standard return air box, and then connecting two 24 VAC wires to the control box.

**WHAT IS INVOLVED IN THE MAINTENANCE OF THE PURE PAK, AND HOW OFTEN MUST IT BE DONE?**

This will vary a little from house to house. Generally, we recommend that the media be changed 3 times a year. The media pad is disposable and changing it takes only a couple of minutes. When changing the media, you should also check for face-loaded dust on the panel's outer screens. If the surface has build up, it can be brushed or vacuumed off.

**CAN I USE ANY MEDIA?**

No, a PurePak will not work with standard filter media. While our pad may look like a plain piece of filter media, if you look closely you will see that there is an activated carbon center screen bonded into it. This patented configuration not only absorbs odors, but also conducts the electrical charge that creates the polarizing field. Standard filter media cannot do this.

**HOW DO I RE-ORDER MY MEDIA RELACEMENTS?**

The installing contractor can supply them, or the "800" number shown on the product label directs your call to a representative who can provide you with a local supplier. A SpacePak product label is located on the inside of the grill frame, and states the Air Cleaner model # and the media replacement order # for easy identification and ordering.

**HOW LONG HAS THIS TECHNOLOGY BEEN AROUND?**

The combined characteristics of passive filters and electrostatic precipitators have been manufactured for over twelve years and have been used extensively in Canada, Japan, and commercial applications around the world. They are used in "clean" manufacturing facilities, casinos, hospitals, and food processing plants and are now available to clean the air that is most important to you - the air that you and your family breathe.

**HOW SHOULD WE OPERATE THE PURE PAK AIR CLEANER?**

Any air cleaner can only be effective if air is moving through it. A thermostat set on the "auto" position will move air only while heating or cooling. Therefore, for maximum effectiveness, we recommend that your thermostat be turned to the fan "on" position. Continuous circulation of the air in your home will provide clean air year-round. This takes only a small amount of electricity, but makes a significant difference in the air quality in your home. Also, it significantly reduces the amount of dust that accumulates on your furnishings.

**PURE PAK®**

***Clean Air — Anywhere***

260 North Elm Street

Westfield, MA 01085

Tel. 800-465-8558 Fax: 413-564-5815

Canada:

7555 Tramere Drive

Mississauga, Ontario L5S1L4, Canada

Tel. 905-672-2991 Fax: 905-672-2883

www.spacepak.com

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