



Home comfort news  
for the customers of  
Atlas Air & W. Skerratt

# An Engineer's Opinion

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## Editorial

By Roger Grochmal, P. Eng.,  
President

**"When you improve your home comfort systems, it's wise to remember that superior equipment will only perform like superior equipment if it has a superior installation and superior maintenance to go with it."**

### About An Engineer's Opinion

*An Engineer's Opinion* is published to assist homeowners in creating the healthiest, most comfortable environment in their homes at the most reasonable cost. If you have questions, criticism, or input, we want to hear them. Please call me personally at (905) 279-3440 or e-mail me at [rgrochmal@atlasair.ca](mailto:rgrochmal@atlasair.ca).

## The dollars and sense of comfort

**T**he little extras in life—like cable TV or a new stereo—aren't necessary, but they do make day-to-day living a lot more enjoyable.

If you're like most people, you have less money than you'd like for the fun things, which is why the idea of putting money towards a new furnace or air conditioner is so unappealing. But believe it or not, an investment in your heating, cooling, and air quality equipment not only makes living in your home more comfortable, it helps save money for the things you *really* want.

It's hard to enjoy a new stereo when you're freezing and you can't afford to turn up the heat. To make things even less pleasant, **the cost of natural gas has more than tripled over the past two years and the cost of electricity is likely to follow suit.**

Fortunately, there are many things you can do to save money.

First, you can save on gas and electricity by regularly maintaining your furnace and air conditioner. Regular tune-ups ensure that your equipment uses fuel as efficiently as possible. They also help to both prevent costly repairs and protect your family from possible carbon monoxide leaks from the furnace. Second, you can add indoor air quality accessories, such as air cleaners, humidifiers, ventilators, and carbon monoxide detectors. You'll make your home much healthier and more pleasant

to live in, and many of these products also enhance the performance of your furnace and air conditioner. Third, you can upgrade to a high-efficiency furnace, which costs much less to operate than its standard-efficiency counterpart. As an added bonus, these improvements significantly improve the resale value of your home.

If you do decide to improve your home comfort systems, it's wise to remember that superior equipment will only perform like superior equipment if it has a superior installation and superior maintenance to go with it. Furnaces and air conditioners don't come out of the box ready to plug in. Each piece of equipment requires some complicated tailoring to ensure top performance in its new home.



In this issue of *An Engineer's Opinion* you'll find out how furnace filters can help save money and how we've updated our maintenance plans to make servicing your equipment easier than ever for you. Those of you who are Atlas customers may have noticed that our newsletter looks a little different. That's because we've added a new company to the Atlas family: the W. Skerratt Heating Company. You can read more about this in the newsletter, and to our new Skerratt customers reading this newsletter for the first time, we welcome you.

*Roger Grochmal*

# Furnace filters clean air and save energy

**A** furnace filter is a humble but essential part of any forced-air heating system. In the old days there was only one type of filter, and its job was simply to protect the mechanical works in the furnace from dust and debris in the air. Today there are many varieties of furnace filters for two good reasons.

First, furnaces are much more technically complicated than they used to be. Because of this, they need a lot more protection from dust and dirt. Second, the incidence of allergies and asthma is on the rise, so many filters are designed to improve indoor air quality.

## Why is it important to keep the furnace parts clean?

Like people, furnaces and air conditioners need adequate air to function. When dirt builds up inside a furnace it restricts airflow. A decrease in airflow means the furnace (or air conditioner) has to work harder and expend much more energy than it should to maintain the house at the desired temperature. The result is increased utility bills and possibly, costly service calls.

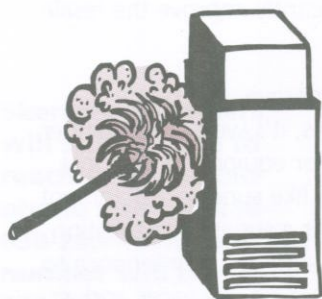
**Remember:** Furnace filters get dirty and restrict airflow too. To avoid costly problems, it's very important to regularly change or clean a filter (depending on the type; see the Filter Guide on the next page).

## What kind of filter should I get?

Some filters can protect the furnace and offer some air cleaning as well, but most people who need air cleaning have two different filters. That's because some of the most effective air-cleaning filters are connected in a bypass arrangement with the furnace, so they aren't able to protect the furnace as well as clean the air. These filters can trap not only particles but also chemicals, gases, and biological contaminants such as bacteria.

You absolutely need a filter to protect your furnace and air conditioner, but not everyone needs a filter that does serious air cleaning as well. The best filter for your home depends on both the environment in your home and whether any family members suffer from respiratory health problems.

If anyone in your family does have a health problem, e.g., allergies, it's important to understand what aggravates the problem before you shop for a filter or other air-cleaning product. For example, if you suffer from allergies, are they triggered by molds, dust, tobacco smoke, or all three? The answer to this question will make a big difference when it comes time to choose a filter. If you need more detailed information or help solving a specific air quality problem in your home, please call.



# The new Atlas air cleaner is an air cleaner you can depend on

**A**t Atlas, we probably spend more time researching and updating our line of air cleaners than we do on any other of our products. And while we've found many good products, we prefer to offer our customers only those products that have reliable support and service from the manufacturer. That's why we decided to develop our own line of air cleaners. We approached the supplier of our immensely popular and reliable Atlas humidifier to create

a companion air cleaning product that would provide optimum balance between filter efficiency and air system performance. We are pleased to announce the introduction of the Atlas air cleaner, a pleated media filter. (For more information about this kind of filter, see the Filter Guide on the next page.) We think you'll find that the Atlas air cleaner is both reliable and effective, and you can expect our full support of this product for years to come.

✂  
**Save \$69**

**Get a FREE  
replacement  
filter cartridge  
for the**

**Atlas air cleaner**

Offer expires June 30, 2001.  
May not be combined with  
any other offer.

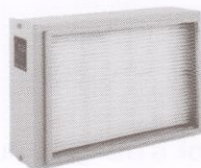
# Filters 101: A general guide

**T**he standard filter that comes with every new furnace provides only basic protection for the furnace, no protection for an air conditioner coil, and no air quality improvement at all. To help you sort through the array of different filter upgrades available, we present the following guide. If you need more detailed information or help solving a specific air quality problem in your home, please call.



## Electrostatic filter

- How it works:** Air passing over the filter creates a static charge which attracts particles
- What it can do:** Protects both the furnace and air conditioner coil; Can also trap some biological contaminants, e.g., pet dander and pollen
- Maintenance:** Wash monthly
- Example:** Dusteater



## Pleated media filter

- How it works:** Pleats in fabric provide a large surface area for trapping particles
- What it can do:** Protects both the furnace and air conditioner coil; Can trap all that the electrostatic filter can and is somewhat more efficient (~80% efficient)
- Maintenance:** One or two filter changes per year
- Example:** Atlas air cleaner (see note on the Atlas air cleaner, bottom opposite page)



## Turbulent Flow Precipitator (TFP)

- How it works:** Contains six 1-inch pleated media filters
- What it can do:** This is a bypass filter and does not protect the furnace or air conditioner; This is an excellent air cleaner that traps 90% of all airborne particles down to 0.3 microns. This product is also available as a portable unit for individual use.
- Maintenance:** The filters must be changed annually
- Example:** Lifebreath



## HEPA filter

- How it works:** Uses a hospital-grade filter with a prefilter
- What it can do:** This is a bypass filter and does not protect the furnace or air conditioner; HEPA filters are the best air-cleaning filters available on the market. They trap 99.9% of particles down to 0.3 microns. With a HEPA filter you have the option of adding carbon cartridges that can absorb tobacco smoke and volatile organic compounds (VOCs; e.g., paint thinners).
- Maintenance:** The prefilter should be changed every 3 months and the HEPA filter changed every 2–5 years.
- Example:** Amaircare

## What the heck is HEPA?

HEPA is an abbreviation of **High Efficiency Particle Arrester** and it is the highest standard of air-cleaning filters. HEPA filters are used wherever very clean air is critical, such as in operating rooms. To be designated HEPA, a filter must remove at least 99.97% of particles down to 0.3 microns in size. This is approximately 1/83,000 of an inch. Examples of particles this small include bacteria and mold spores.

## atlas notes

## A painless service plan

**Attention all customers: From time to time we've had disturbing reports of unscrupulous people trying to pass themselves off as Atlas service people and demanding cash for services. If you're unsure about a service person at your door, please phone our office.**

**A**tlas has always prided itself as a premier service company. At the heart of our service is the GC Plan, a program of planned maintenance that results in fewer equipment breakdowns, lower energy consumption, and longer equipment life.

We've always customized each service contract for each customer, but as more options became available over the years, the contracts became complicated and confusing for both our customers and our staff. Recently we restructured the GC Plan to make it simpler for

everyone to understand and use. We turned two full pages with over 80 different price and coverage options into a single page with only 34 options. And with the implementation of our new computerized service system, we've even developed a simpler, easier-to-understand renewal form and invoice.

We're still working to improve our service contract. Our goal is to make it the fairest and simplest service program around. We'll keep you posted.

## Atlas & Skerratt: Serving you better together

**T**hose of you who are Atlas customers may remember that in last fall's issue of *An Engineer's Opinion*, we introduced you to the W. Skerratt heating company, which Atlas purchased last spring. We told you about how Skerratt has been serving the Toronto area since 1929, and how the people at Skerratt would benefit Atlas through their knowledge and experience. Although *An Engineer's Opinion* is now in its 14<sup>th</sup> year, for those of you who are Skerratt customers this is your first issue, and we welcome you. It takes a little time for two companies to reorganize themselves so that they can work together effectively for their customers. Here are a few of the changes that all of our customers should know about.

First, the way we look is changing. Our Skerratt customers will notice a big difference in the trucks and uniforms, which now look like those of Atlas. Our Atlas customers will see only a slight change in these things. Second, the Skerratt customer information database will be set up in the new Atlas computerized service system. The equipment and service history for each of our Skerratt customers will be available to all of our service staff. This means that a variety of people will be able to help you when you need service. The best change of all is our new joint "on-call" service. Between Skerratt and Atlas, we now have even more service people available to quickly respond to your service calls.

**Skerratt customers will still be able to reach us at the old phone number 416-638-2654. The new fax number will be 905-279-4696. Please feel free to call us with your comments or concerns, or you can e-mail us at [skerratt@atlasair.ca](mailto:skerratt@atlasair.ca) or at [info@atlasair.ca](mailto:info@atlasair.ca).**



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