

## From the Desk of ...

By Anthony Gemma

As the final traces of winter melt away, we all start to look forward to those lazy, hazy days of summer. Picnics, vacations and trips to the beach, family reunions and simply being outside taking it easy come to mind.



Anthony Gemma  
Wizard of Comfort

Now, I hate to interrupt these pleasant thoughts, but you also need to think about keeping the weather outside – where it belongs – this summer. There are few things more uncomfortable

than an out-of-commission air conditioner during a heat wave – well, maybe a broken furnace during a cold snap beats it – but my point is, you need to be sure your HVAC systems are as ready for summer as you are.

There are things we can do to help you keep cool, like servicing your air conditioning system, upgrading your equipment, inspecting your air ducts and installing new thermostats and ventilation fans. Several of these subjects are covered in this issue of *For Your Comfort*.

The key is to take care of these annual tasks before they turn into an emergency call. If your AC unit stops working during a heat wave, you can be sure there are others just like it and we'll be swamped with service calls. Now, what is that old saying about an ounce of prevention? ■

## Indoor Air Quality Can Affect Your Family's Health

The quality of the air we breathe indoors is every bit as important as it is outside. Most Americans spend between 60 and 90 percent of their time indoors, yet many believe that once they're out of the elements, they're safe from health risks. This is simply not true. In fact,

your family may be more at risk. Studies show that indoor air may be up to 70 percent more hazardous. Approximately one-half of all illnesses are caused by or aggravated by polluted indoor air. Two-thirds of these involve a dirty or deficient HVAC system.



Professional air duct cleaning and hygiene services can lower the risk if the following conditions apply:

- You have family members who suffer from allergies, asthma or respiratory problems or have chronic nasal or sinus conditions.
- You have smokers in your house.
- You have dogs, cats or other pets.
- You've noticed a lack of air coming from your vents and registers.
- You've noticed a musty or stale odor when your furnace or air conditioner runs.
- Your air vents have a build-up of dirt or dust between the grates.
- Your home is more than 5 years old.

There are simple steps you can take to reduce the risk of indoor air pollution and some others that require an HVAC professional.

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# A Crash Course in Air Conditioning

It's hard to believe there was once a world without air conditioning. The desire for year-round comfort and cleaner air has made it a necessity in most areas. Nearly every new home built has a central AC system, and it's been added to most older homes.

We thought you might be interested in finding out how air conditioning works so you will better understand the need for regular maintenance and why AC units sometimes break down.

Air conditioning involves a lot more than just cooling the air in your house. It removes the heat and releases it outside, cleans the air and controls the humidity. A typical air conditioner consists of six components; a compressor, an outdoor fan, a condenser coil, an indoor fan, an evaporator coil and a chemical refrigerant. The indoor fan circulates the warm air inside your house across the evaporator coil. The refrigerant absorbs that heat and is then pumped by the compressor to the condensing coil. The outdoor fan blows outside air across the

hot condensing coil and the heat from the refrigerant is transferred to the outside. The now cool refrigerant continues its cycle as it enters the indoor coil and that air is circulated throughout your house by the indoor fan. Pretty simple, huh?

Most central air conditioners fall into one of two types – the split system or the single package. Most homes have the split system. This means the indoor fan and evaporator coil are located separately from the outdoor fan, condenser coil and compressor. The single package system combines all components into one unit and is generally found on the roof or on the ground next to the house. The single package has the advantage of being quieter, but it is sometimes more difficult to connect it to existing ductwork.

The cooling capacity of an air conditioner is measured in British Thermal Units per Hour (BTUH). Each 12,000 BTUH

equals one ton. When shopping for a new or replacement AC unit, it's critical to match its size with your home. Too small and it won't cool properly, too large and it won't be efficient. If you're in the market, give us a call and we can calculate the size that best fits your home. ■



## Choosing an HVAC Contractor

A good heating, ventilation and air conditioning contractor is not hard to find when you know what to look for and the right questions to ask.

A referral from friends and neighbors who have had a good experience with one is among the best ways to find a competent and trustworthy HVAC company. Advertisements and the Yellow Pages can tell you who's local and who isn't. But, once you find a candidate, the questions you ask are what count.

What is the warranty? Make sure it states what is covered, for how long and who will honor it. Keep a copy for your records.

What about service after the job is finished? Be sure to ask the contractor you choose their policy on service if anything breaks down or malfunctions.

Who is responsible for maintenance? If your project involves new equipment, read the owner's manual and the contractor's recommendations regarding routine maintenance.

Above all, know your contract. Read it thoroughly and understand it before you sign. If you're unclear about any part of it, ask more

questions and, if necessary, request it be amended and initialed by the contractor.

An honest, reputable contractor will happily answer your questions and comply with your requests. If he or she hesitates or asks you to "trust us," keep looking. ■

## Get Ready for the Dog Days

Now is the best time to prepare for hot weather. Give us a call and schedule an inspection of your air conditioning system. We'll give it a thorough going-over and tune it up before the dog days of summer have a chance to overtax it and cause a breakdown. ■

# Ventilate for Health and Efficiency

By Anthony Gemma



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Wizard of Comfort

Most home heating and cooling systems, including forced-air furnaces, have no way of bringing outside air into your house.

Without a steady supply of fresh air, you could be asking for both health and comfort problems. Pollutants can build up, mold and mildew can gain a foothold and your HVAC system can be forced to work too hard, costing you extra energy dollars.

Opening windows in nice weather and operating window and attic fans help your house breathe easier, but there are several other things to consider if you want a truly efficient ventilation system.

- Kitchen and bathroom fans exhaust contaminants, odors and humidity.
- Soffit vents along the edge of your roof allow air to circulate between the rafters of your house.

- Box vents or ridge vents allow air in your attic to escape through the roof.
- Gable wall vents at the gabled end of your roof allow air to flow in and out of your attic, depending on the season.

If your home has all these features, someone took the time to consider the elements of a well-ventilated house when it was built. If it doesn't, it's not too late to improve your home's breathing capacity. All these items can be installed and the money you spend can be recouped in just a few years of energy savings.

If you're interested in learning how to help your home breathe better, give us a call. We'll audit your ventilation system and tell you how it can be improved. ■

## Get the Most From Your AC

Air conditioners and heat pumps are just like your car when it comes to maintenance. Both operate more efficiently and last longer if they receive scheduled care and attention. If you have a club membership, you've already taken a step in the right direction, but there are a few other things you can do between service calls to help your AC unit do its best.

Clean or replace the filter once a month. As your air conditioner circulates the air in your home, dust and dirt particles collect on the filter located in the indoor unit or in the ducts. Excessive build-up forces the system to run longer and work harder to cool your home.

Keep the outdoor unit free from debris. Air conditioners and heat pumps need a free flow of air over the coils. Leaves, dirt, newspapers and anything else that might block the airflow should be removed. Never stack anything against the side of your unit or drape anything over it. If you are disguising

it with landscaping or shrubs, keep them trimmed back so they won't block the air.

Leave your thermostat at one setting. Constant up and down adjustments make your system work harder and cost you energy dollars. The optimum setting between comfort and cost is 78 degrees. If you're going away for a few days, raise the thermostat to 85 degrees and reset it when you return. If you have a programmable thermostat, you'll find you save more by keeping it at a constant setting than making it catch up at the end of the day when your house is its hottest.

Operate household appliances during the cooler parts of the day. Schedule washing, drying and baking for mornings and evenings when it's cooler. These activities generate a tremendous amount of heat and humidity and can overburden your AC unit on hot days.

Follow these common sense tips and you'll stay cool and reduce your energy bill. ■



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## Indoor Air Quality

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### What you can do yourself

- Keep air supply and return outlets free from obstructions and dust. Vacuum them at least once a month, more often if you have allergy, asthma or respiratory sufferers in the house.
- Check your air filter every month and replace it when necessary. If it's washable, give it a good cleaning every other month.
- Keep leaves, dirt and debris from accumulating around your outdoor unit.

### Ask your HVAC contractor to ...

- Check your system for the proper amount of refrigerant. Too much or too little can have a big effect on how efficiently it operates.
- Inspect your air ducts for dust and grime build-up.
- Clean and flush the coils, drain pan and drainage system.
- Vacuum dust and dirt from inside the blower housing.
- Check all electrical connections and controls and inspect the wiring for damage.
- Check the belt drives and lubricate the motor.

Once everything is clean and in proper operating condition, it's a good idea to purchase a club membership that includes maintenance of heating and cooling systems. Regular checks allow your HVAC technician to identify problems before they lead to failures. ■

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