The Homesense 10 & 10

Top 10 terms and top 10 tips to make you an HVAC pro





The foundation of every great relationship is trust.

Our mission is to create a refreshingly different customer experience that creates lifelong clients. The owners, technicians, and staff at Homesense all believe that in order to achieve this, it requires a shared commitment to a shared set of values. We call these values the Heart of Homesense.

Within these values we commit to **Communicate** and **Reduce Confusion**. This content is one way we're able to do so. Our desire is for you to be a knowledgeable customer so that you can make the best decisions for your home.

With that said, take a look over our top terms and tips so you can become an HVAC pro!

Terms

Have you ever talked to an HVAC technician and felt like they were speaking a different language? We get it. Heating and cooling is full of technical (and sometimes insider) terms that can be confusing to the average homeowner. But it is actually easier to understand than it might seem at first!

We've compiled our top 10 most important HVAC terms below. Taking a little time to understand these will give you the knowledge you need to make important decisions for your home and feel comfortable with your system.

1. FURNACE

This one might seem obvious, but it's important to understand everything the furnace does. During the colder months, your furnace will heat your home either through gas or electricity. It's important to note, however, that the main fan (blower) of your system is also located in the furnace. This part of the furnace works year-round to move air (whether hot or cold) through your home.



2. EVAPORATOR COIL

This segment, adjacent to your furnace, is the indoor part of your cooling system. These coils are designed to get very cold and help regulate your home's temperature.

The Evaporator Coil is most likely on top of your furnace, though it can be in other positions based on the type of furnace you have (see next term).

3. UPFLOW / DOWNFLOW / HORIZONTAL

These terms simply refer to the direction in which your system moves the air into your home. You may hear these terms from a technician or read them in a product summary.

- In an **Upflow** system, the air coming into your furnace (called return air) starts at the bottom and is pushed upward into your ductwork. If your indoor unit is in a basement, you likely have an Upflow.
- In a **Downflow** system, the return air comes into your furnace at the top and is pushed downward into your ductwork. If you have registers in the floor, you most likely have a Downflow.
- In a **Horizontal** system, the return air comes into your furnace on one side and flows out the other side. Horizontal systems are more common in attics and crawl spaces, where vertical space is limited.



4. CONDENSER

This is the technical name for your outdoor unit. Most people simply call it the "air conditioner." It focuses on removing hot air from the home and works with the evaporator coil to cool the home.

5. HEAT PUMP

A heat pump is a type of condenser that works in both heating and cooling. This means a heat pump will always be working. In the summer, it pulls warm air out of the home and sends cold refrigerant back in order to cool it. Conversely, in the winter it pulls ambient heat from the air (this is possible even if it feels cold outside) and sends that warmth into the home.

Heat Pumps are able to heat your home to a certain temperature, but will need help heating your home when temperatures get into the 30s. This is called auxiliary (or emergency) heat and will come from the heating components in your furnace.

6. AFUE/HSPF/SEER

These are all energy ratings for the various types of units. The higher the rating with each of these, the better the system will run. In other words, a higher number means a system will use less energy to heat and cool your home.

- AFUE- this stands for Annual Fuel Utilization Efficiency and is relevant to gas furnaces. AFUE is a
 percentage that shows how much the furnace's energy source is converted to heating, with the rest being
 lost to exhaust. So then, a higher percentage means less energy lost. Energy efficient units will have AFUE
 in the 90s, while standard units will be in the 80s.
- SEER this stands for Seasonal Energy Efficiency Ratio and is for air conditioners. Again, the higher the SEER number, the more efficient the unit. The current highest SEER in the Daikin line is 23, with other units coming in at 12 or above.
- HSPF- this stands for Heating Seasonal Performance Factor and is used with heat pumps. This is, in essence, the SEER rating for a heat pump's heating mode. Most heat pumps will come with both a SEER (cooling) and HSPF (heating) rating. You should look for an HSPF between 8-10, though some can reach above 12.

7. MINI-SPLIT

This is another name for the increasingly popular ductless air conditioning systems. A normal central air system is known as a "split system" since it has both an indoor and outdoor component, and these are just smaller versions of those that don't use ducts, hence the "mini."



8. MULTI-STAGE / SINGLE-STAGE

"Stage" is a reference to the level of power that is used to heat or cool your home. A **single-stage** unit only has one setting. It uses full power all the time, no matter the temperature, to regulate your home. Sometimes this is the right amount of power needed, but many times it is an unnecessary amount. Conversely, a **multi-stage** unit can alternate its level of power to the necessary amount in the moment. This reduces unnecessary energy use in less extreme temperature conditions. For this reason, multi-stage units are more energy efficient.

9. VARIABLE SPEED / SINGLE SPEED

This refers to the way the blower motor within the unit works. Like the stages above, a **single speed** motor always blows air at the same setting. **Variable speed** motors are able to switch their power setting to save energy when it's not needed. As you can imagine, variable speed units are more efficient.

10. BTU

This stands for British Thermal Unit and is a form of measurement for energy. One BTU is the amount of energy needed to increase the temperature of a pound of water by 1 degree. In central air units, BTUs show how powerful the unit is, whether in heating or in removing heat. The primary factor in determining the amount of BTUs you need is the square footage of your home.



Need help with your heating and cooling?

We're here to provide you with a refreshingly different experience. Let us know how we can help through one of the methods below:

(317) 670-0171 Trusthomesense.com

Tips

Now that you understand more about your system, it's time to treat it right! Following these tips will ensure that your indoor air quality is good and your system is running as smooth as possible. That will mean a healthy environment inside your home and energy cost savings in the long run.

Follow us on Instagram @trusthomesense for weekly #tuesdaytips and other helpful content.



1. CHANGE YOUR AIR FILTER REGULARLY

Here's the first tip and it's our most common: don't neglect to change your air filter.

Dirty filters block airflow and significantly lower the quality of your indoor air. We strongly recommend changing your air filters on a monthly basis — creating a new habit that is inexpensive and easy to do.

2. HOW TO DETERMINE IF YOUR FAN SHOULD BE SET TO AUTO OR ON

This is one of the most common questions we receive and the answer depends on your priorities. Here's how to determine what's best for you:

- **AUTO** If you are more concerned with utility cost, or are not home all day, this might be the better option for you. AUTO means that your fan only turns on when it's needed.
- ON— If you are more concerned with cleaner air (ex: you have allergies), or are home most of the day, this might be the better option for you. ON means that your fan is always circulating air.



3. KEEP YOUR OUTDOOR UNIT CLEAN (AND AROUND YOUR INDOOR UNIT TOO)

Ventilation is what ties all of HVAC together, so it's important that your systems have room to breathe. For your outdoor unit, this means having about three feet of clear space around it, and room above it to release air well. Don't let weeds and other plants crowd it out! For your indoor unit this means keeping clutter (especially if it's in a basement or garage) from piling up near it.



4. CONSIDER A DUCT CLEANING AFTER MOVING OR BEING IN A HOUSE FOR FIVE YEARS

Duct cleaning is an often overlooked but important service needed on your system. The EPA says indoor air is 2-5 times more polluted than outdoor air. While your filter catches many of these contaminants, debris does build up in your ductwork over time (especially if you forget to change your air filter, no judgment here!).

That's why it's a good idea to get a duct cleaning every five years to reduce the pollutants in your system. And it can also provide a fresh start when you move into a new home.

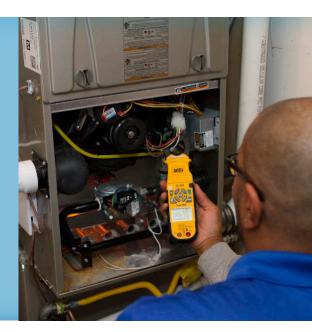
5. SETTING YOUR THERMOSTAT LOWER WON'T MAKE YOUR HOME COOL FASTER

When you're really hot in your house it's tempting to keep pushing your thermostat lower and lower until it's in the 60s. However, doing so will actually not cool your home any faster and could result in excessive strain on your system and unnecessary expense. Our recommendation is to keep your thermostat above 70 degrees and let the system adjust naturally. Setting it below 70 degrees can start to put your evaporator coil at risk of freezing.

6. HAVE REGULAR MAINTENANCE DONE ON YOUR SYSTEM

We always say, "an ounce of prevention is worth a pound of cure." Having maintenance on your system twice a year - in the spring and in the fall - may prevent serious (and expensive) issues with your heating and cooling system. It's also a great way to save money during peak seasons.

Think of it like an oil change for your car- it will help your system be more efficient, run smoothly, and last longer.





7. DON'T CLOSE YOUR VENTS OR REGISTERS (EX: IN A ROOM YOU AREN'T USING)

It might seem helpful to do this, but your HVAC system is designed to heat or cool a certain space in your home. If you close your vents or registers, you change the amount of space that needs to be heated or cooled, therefore making your system work differently than it's supposed to. This may lead to your system running longer than it needs to, resulting in damaged components or a shorter system life.

8. AVOID TURNING YOUR THERMOSTAT ON AND OFF CONSTANTLY

It's important to fully understand how your thermostat works. Turning your air conditioner or furnace on and off adds a lot of wear and tear to your unit. If you're going to adjust your thermostat, consider setting it back during certain times of the day, especially when you aren't home.

Reducing your temperature by just one degree will reduce your energy bill by 1-2%. This is a great way to save energy and money without feeling the difference.



9. HOW TO CHOOSE THE RIGHT AIR FILTER AND READ MERV RATINGS

MERV stands for **Minimum Efficiency Reporting Values** and tells you how well a filter catches various particulates moving through your system.

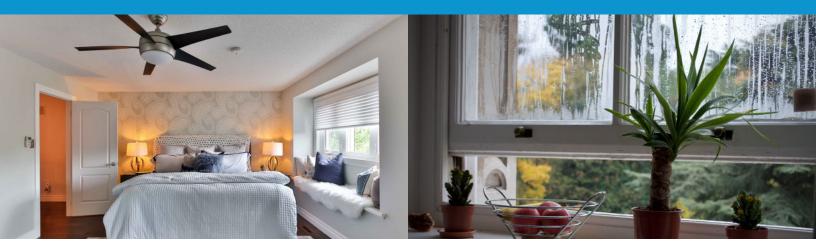
The higher the MERV rating (1-16), the better a filter is at catching particles. Your standard fiberglass filter will be around 1-4 MERV, while a HEPA filter can get to over 14. Here are some quick factors to consider as you determine the best MERV rating for your home:

Higher MERV = Higher cost Lower MERV = More frequent filter replacement Higher MERV = more restricted airflow (may cause your system to work harder)

10. USE OTHER METHODS IN YOUR HOME TO HELP YOUR CENTRAL AIR SYSTEM

There are some basic things you can do in your home to help your system heat or cool the house more efficiently. These include:

- Consistent cleaning to catch more particles before they hit your air filter
- Opening up windows to let in fresh air (most systems are not designed to bring fresh air into the home)
- Running ceiling fans to supplement the cooling in your home, allowing your system to work less
- Being careful not to add too much heat or humidity in the summer months. This means taking cooler showers and cooking on the stovetop less.
- Avoiding placing a lamp or TV near your thermostat. These appliances let off heat which can mess with your thermostat's readings, potentially leading to your system working harder.



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