

# 10 HVAC Maintenance Tips

By

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Many of us look for ways to get control of our household expenses. One area to inspect more closely is your Heating Ventilation and Air Conditioning (HVAC) system. Home HVAC systems consume over half of a household's total energy usage, and cost thousands of dollars to replace. Keeping your HVAC system maintained and in top operating condition is a great way to save money on your monthly energy bills, and to avoid the high costs of prematurely repairing or replacing the system or reduce the risks of having to call your HVAC company in an emergency.

## 1. Call a professional HVAC company to schedule preventative maintenance visits

Most HVAC companies offer maintenance programs to keep your system in top condition. I recommend scheduling two seasonal HVAC maintenance visits each year, one in the spring for the air conditioning and one in the fall for the furnace. The technician will thoroughly service, inspect and diagnose potential problems to keep the system working efficiently and prevent breakdowns. The HVAC tech will:

- Check the thermostat calibration and settings
- Tighten electrical connections as needed
- Lubricate all moving parts
- Inspect the condensate drain and clean as needed
- Check the system controls
- Clean and adjust the blower components
- Clean the evaporator and condenser coils
- Check the refrigerant charge
- Check fuel line connections
- Inspect the gas pressure, burner combustion and heat exchanger

## 2. Replace the filters

Clean filters allow freer movement of air allowing the system to operate more efficiently. Filters remove dust, hair, and other particles from your home's air so that these pollutants are not in the air that you breathe. A best practice for home HVAC systems is to change the filter every 30 days. Doing this will help improve indoor air quality, consume less energy, and keep your system running at peak efficiency. Filters are rated based upon a MERV (Minimum Efficiency Reporting Values). For most systems, filters with a MERV rating between seven and 13 provide an ideal balance between filtration ability and maximum airflow. You can find the MERV rating printed on the filter's packaging. **Special note:** *Be careful not to exceed your system manufacturer's recommended MERV value for filters. If the MERV rating on your furnace is too high, it may force your furnace to work too hard and leave it vulnerable to*

damage. In addition, you may not get the air velocity required to reach all parts of your home leaving inconsistencies in temperature. Here is more information from the EPA on filter MERV ratings:

<https://www.epa.gov/indoor-air-quality-iaq/what-merv-rating>

### **3. Visually inspect your HVAC system**

Take a close look at your system each month when changing the filter to discover potential problems. Check the thermostat, look inside and outside the unit, and inspect registers and returns. Also, be sure to check the following:

- Check the battery status on the thermostat (check each thermostat if there are two systems)
- Inspect the condensate system to ensure that it is draining properly
- Ensure that the filter access and cabinet door are securely closed
- Make sure the flue system is securely attached and fully intact
- Ensure that all registers and returns are unblocked and open
- Check all registers for signs of mold
- Make sure the outdoor unit is level. Use rot proof shims to level it if necessary

### **4. Clean up around the indoor HVAC unit**

Keep the area around your indoor HVAC unit clear of household goods, paint cans, buckets, boxes, debris, etc. Doing this improves air flow and safety. The more clutter surrounding the unit, the more surface area there is to collect dust that will make its way into the vent system. Clutter reduces free air circulation in the immediate area, which makes the system work harder than necessary which has a cumulative effect on the system's useful life. Plus, excess clutter can be both a fire hazard and a trip hazard and make it more difficult for HVAC professionals to perform repairs and maintenance.

### **5. Keep the unit on the exterior of the home free from debris and vegetation**

The AC compressor/condenser located outside the home, is a natural catch-all for leaves, weeds/ivy, grass clippings and other organic debris. Remove all debris that collects on and around the unit each time you do yard maintenance, and gently hose down the thin metal condenser fins if dirt is accumulating. Keep nearby plants trimmed back at least two feet from all sides of the unit to help maintain efficient airflow.

### **6. Actively manage your home's temperature**

Be thoughtful about the seasons, the weather patterns, and how your and your family inhabit your home. For example, you may prefer to keep a cooler home while you sleep, and let it gradually get warmer during the waking hours as you get on with your day. Bottom line is, consider changing operating temps that are comfortable and align with how you use your home and the hourly climate changes common to the area in which you live. You may even consider installing a programmable thermostat to automatically adjust the temperature at different times of the day. Also, if you allow the house to stay cooler in winter and warmer in summer while you are not home, the system will run less frequently, use less power and last longer.

## 7. Give yourself a reminder to replace the batteries in your thermostat

Many thermostats are hardwired into the home's electrical system. Others are battery-powered. Replace these batteries at least once a year to prevent problems.

## 8. Install and maintain a CO (Carbon Monoxide) detector

The CDC reports that each year, at least 420 people die in the U.S. from accidental CO poisoning. More than 100,000 people in the U.S. visit the emergency department each year due to accidental CO poisoning. Carbon Monoxide is an odorless, colorless, and tasteless gas that is slightly less dense than air. In the event of an exhaust leak, impaired ventilation, excess gas flow or other malfunction, a CO alarm could most likely save your life, and the lives of your family members and guests.

These devices have an average life expectancy of about five years. Be sure to test every carbon monoxide detector each month to ensure it is in proper working order and replace it if necessary. Plan on changing the batteries every six months.

## 9. Monitor your monthly energy bills

Sudden increases in energy consumption can indicate a problem with your HVAC system, especially when your usage and the cost of your fuel/electricity has not changed. Schedule a service visit with your trusted HVAC maintenance provider and ask them to check the system for any reasons why this could be happening. Dirty filters, duct leaks, low refrigerant, failing parts or other issues could be the cause.

## 10. Consider replacement

The average lifespan of an HVAC system is between 15 and 25 years. Several variables can increase or decrease that timeline, including the type of system, brand, and consistency of maintenance. By diligently caring for your heating and cooling system you will maximize its working life and maintain higher efficiency for a longer period of time.

Eventually, energy efficiency will dwindle, and repairs will occur more frequently. When you notice that the old system isn't as reliable as it used to be, don't wait for it to crash on the hottest day, coldest night, or while you're away on vacation. Plan ahead and replace your HVAC system on your own terms.

**If you have any questions, please contact us:**

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