QUESTIONS TO ASK WHEN REPLACING YOUR HVAC

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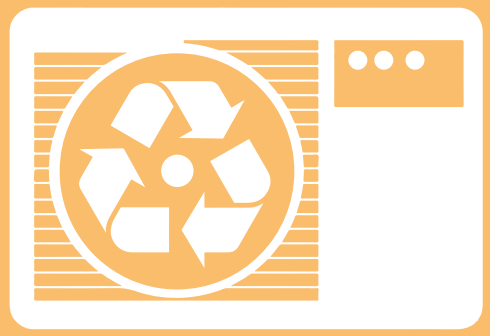
IS IT TIME TO REPLACE YOUR HVAC SYSTEM?

Is your air conditioning unit 15 to 20 years old? Have you had multiple service issues? It may be time to consider installing a new, efficient Energy Star® system.

Considering replacing the heating, ventilation, and cooling (HVAC) system in your home. Make the right decision with tools from your trusted LCEC energy advisor at your local Touchstone Energy Cooperative.

We have a list of questions to consider before purchasing your new home HVAC system. By asking the right questions, you will be able to select the HVAC system that best fits your needs.



SHOULD I REPLACE ALL OF MY HVAC EQUIPMENT AT THE SAME TIME?

Yes. You want to be sure that all the parts of your HVAC system work together properly.

Replacing only an indoor or an outdoor unit of an HVAC system may appear to save money, but it could contribute to service problems and higher energy costs down the road.

A mismatched system can lead to poor performance and not deliver the expected comfort and efficiency. If an older part of the system—such as an outdoor unit of a heat pump, ductwork, or piping—is replaced, it's important to match the new part as closely as possible to the existing system.

Seal the duct work or replace, if needed. Ask your contractor to thoroughly inspect and pressure test your system for leaks to repair or replace, as needed.

WHAT'S MY HOUSE GOT TO DO WITH IT?

Before you decide on an HVAC unit, look at making energy improvements to your home. Tuning up the home not only reduces operating costs but can mean a smaller, less expensive HVAC system can do the job. For more information on ways to improve your home's energy efficiency, visit Touchstoneenergy.com.

Your HVAC system MUST be designed to fit your home. The size, construction, orientation and location of your home affects the size of your HVAC system. But first, make sure your home is properly insulated and air tight with caulking, sealing, and weather stripping. Use local building codes as your guide.

For more tips: https://www.touchstoneenergy.com/together-we-save/energy-efficiency-articles/#articles-tip

WHAT SIZE SYSTEM DO I NEED?

To ensure that your new HVAC system operates efficiently, ask your contractor to properly size your new system using industry sizing methods.

- An HVAC system that is too small can not deliver adequate heating or cooling in extreme weather.
- A system that is too large costs more and provides poor temperature and humidity control.
- Consider using variable speed units to deliver great comfort year-round and to greatly lower your heating and cooling bill!

WHAT TYPE OF SYSTEM SHOULD I BUY?

You have many choices when it comes to selecting an HVAC system.
Here are some things to consider:

- An electric split-system heat pump is a common choice for year-round heating and cooling.
- The efficiency of a cooling system is expressed as a Seasonal Energy Efficiency Ratio (SEER)number. The higher the SEER (Cooling) rating and HSPF (Heating) rating the lower the operating cost. Use the Energy Star® efficiency as your guide. http://www.energystar.gov
- Ductless or mini split heat pumps are a great choice, where possible.
- Systems with higher SEERs and HSPFs cost more initially, but have lower operating costs. Split-system heat pumps with an ENERGY STAR® label have SEERs of 14.5 or higher and HSPFs of 8.2 or higher.

HOW DO I SELECT A CONTRACTOR TO DO THE WORK?

Selecting the right contractor is critical to the performance of your new HVAC system. The contractor is responsible for determining the type and size of the system and explaining your options as well as installing the system. A good contractor also should provide a warranty and after-sale service.

Here are some tips on identifying the right contractor for the job:

- Ask about the licensing and qualifications of prospective contractors. Is the contractor state-licensed? Is the contractor a member of state and national contractor associations, such as Air Conditioning Contractors of America (ACCA)? Is the contractor adequately insured?
- Make sure that the contractor inspects your home and your existing system, and explains your options.
- Ask the contractor for the estimated annual operating cost of HVAC systems with different efficiencies (SEERs and HSPFs). This information will help you determine the total cost of each system over the lifetime of the unit.
- Make sure the contractor has adequate staff to install the system and respond promptly to service calls. What guarantees, warranties and follow-up service are offered? Warranties vary, so it's important to know what is included in the warranty and what is not. Ask about a maintenance service agreement—what does it cost and what does it cover?
- Are the technicians North American Technician Excellence (NATE) certified? Are they familiar with the brand of equipment that you want to buy? Will they perform load calculations, duct design and installation using industry-standard methods?
- Get three written estimates for the work: what is being done, what equipment is being provided and when installation will begin and be completed. Understand what is included in each price. Remember that the best value may not necessarily come from the contractor that offers the lowest price. Consider the cost of operating the system as well as the initial cost.

MAINTENANCE

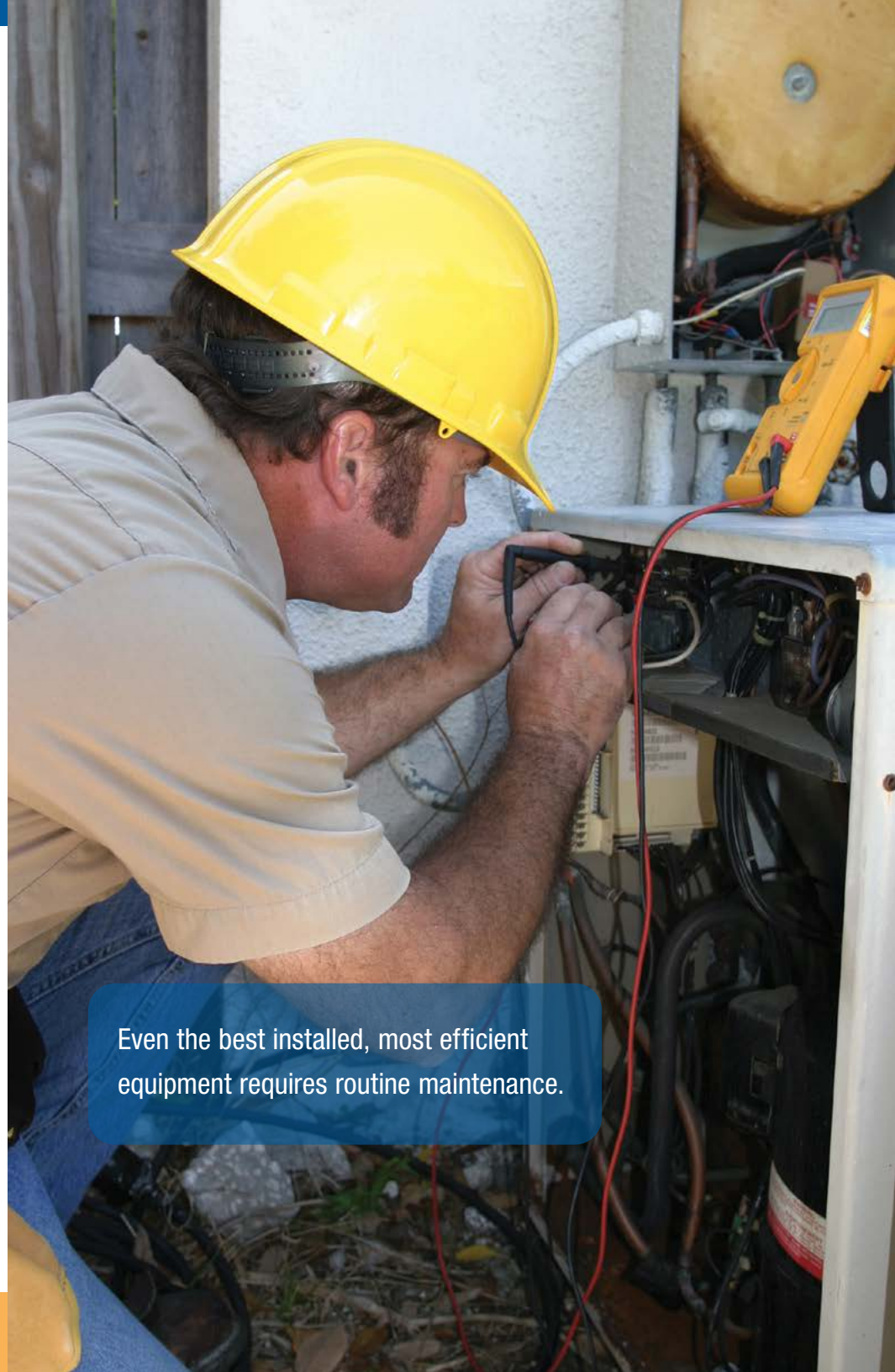
Even the best installed, most efficient equipment requires routine maintenance.

Here are a few things YOU can do to maintain your HVAC system:

- Change HVAC air filter monthly. We recommend low air flow resistive filters.
- A one degree increase in heating setpoint or reduction in cooling setpoint can increase energy use by 3 – 5%
- Check the thermostat setting. A good starting point is 78°F in the summer and 68°F in the winter. A programmable thermostat can save more by letting the home's temperature rise in the summer or fall in the winter by a few degrees when the house is unoccupied.
- Make sure the supply and return vents are open and not blocked by furniture.
- Keep your outdoor unit clean and make sure nothing blocks air flow to it.

Here are maintenance points a LICENSED TECHNICIAN can do:

- Tighten all electrical connections.
- Lubricate all moving parts.
- Inspect the air conditioner's condensate drain.
- Check the system's controls for wear or damage.
- Check the system's refrigerant charge.
- Inspect ductwork for leaks.
- Adjust the blower to provide proper airflow.



GLOSSARY

ACCA: Air Conditioning Contractors of America—the nationwide association representing the HVAC contracting industry.

AHRI: Air-conditioning, Heating Refrigeration, and Refrigeration Institute, which publishes a directory of unitary equipment at https://www.ahridirectory.org

HVAC: Heating, Ventilating, and Air Conditioning system.

HSPF: Heating Season Performance Factor is a measure of heat pump's energy efficiency over one heating season. It represents the total heating output of a heat pump (including supplementary electric heat) during the normal heating season (in Btu) as compared to the total electricity consumed (in watt-hours) during the same period.

NATE: North American Technician Excellence, Inc. (NATE) is the leading certification program for technicians in the heating, ventilation, air-conditioning, and refrigeration (HVAC/R) industry. It conducts the only test supported by the entire industry. HVAC technicians certified by NATE pass stringent exams covering their certification specialty.

SEER: Seasonal Energy Efficiency Ratio is a measure of equipment energy efficiency over the cooling season. It represents the total cooling of a central air conditioner or heat pump (in Btu) during the normal cooling season as compared to the total electric energy input (in watt-hours) consumed during the same period.

SPLIT SYSTEM: A typical residential HVAC system consisting of an indoor blower and coil connected by refrigerant lines to an outdoor unit housing a compressor, fan, and coil.

MINI SPLIT SYSTEM: This HVAC has little to no duct system. These systems greatly reduce losses from ducts and use less energy to move air in the home.

VARIABLE SPEED HEAT PUMP: A heat pump with multiple speeds to provide reduced cooling and heating capacity or output. This creates great comfort and very low operating cost during milder weather.

NOTES:

Your local Touchstone Energy cooperative can help answer your questions about HVAC systems and may offer incentives or financing for replacement HVAC systems.

For more information, please contact

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