

IS IT TIME TO REPLACE YOUR HVAC SYSTEM?

If your unit is 15 to 20 years old or has continued service issues, it may be time to consider installing a new, efficient ENERGY STAR® system.

Make the right decision with resources from your trusted source of energy advice, your local electric cooperative. Consider replacing the heating, ventilation and cooling (HVAC) system in your home.

Here is a list of questions to consider before purchasing a 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 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, piping or a furnace—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.

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 air tight with caulking, sealing/weather stripping and is properly insulated. Use local building codes as your guide.

WHAT TYPE OF SYSTEM DO I NEED?

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. Other options include a heat pump with a backup boiler or furnace in colder climates.
- ✎ The efficiency of a cooling system is expressed as a SEER (Seasonal Energy Efficiency Ratio) 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.
- ✎ Consider using variable speed units to deliver great comfort year-round and to greatly lower your heating and cooling bill.
- ✎ For even higher efficiency and comfort than a standard heat pump, look at the many benefits of installing a geothermal system.



WHAT SIZE SYSTEM DO I NEED?

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

- An HVAC system that is too small cannot deliver adequate heating or cooling in extreme weather.
- A system that is too large costs more and provides poor temperature and humidity control.

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 system's controls for wear or damage.
- Check system's refrigerant charge.
- Inspect ductwork for leaks.
- Adjust blower to provide proper airflow.

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 NATE (North American Technician Excellence) 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.

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