

Choosing a HVAC Contractor (Heating/Ventilation/Air Conditioning)

As home use heating and cooling units are expected to last 15 to 20 years, choosing a good HVAC tech is vital to your home's comfort (and value!) for years to come!

What does an HVAC tech do?

HVAC techs are responsible for maintenance and installation of Heating, Ventilation and Air Conditioning units. This generally includes natural gas, propane and oil-fired furnaces, ducting and air conditioning and other cooling options.

A reputable HVAC tech can also advise in humidifier/de-humidifier options as well as air filtration systems.

HVAC work falls into two distinct categories, maintenance and replacement/installation of new units.

Consumers may be installing a new unit for any of the following reasons"

- Building a new house
- Selling an old house and the buyer is asking for an upgrade as a condition of sale
- The existing one may be damaged or broken beyond repair
- Upgrading to a more efficient solution to reduce utility bills and/or take advantage of tax credits

Making the List:

Your first goal is to gather a short list of names to call and check out. To that end, do the following research first!

- Decide what you are looking for: a new install or routine maintenance.**
 - You may find that one leads to another! (ex. A unit you thought needed a tune up actually needs replaced, or one you thought wasn't salvageable can actually be fixed. Luckily, HVAC techs usually can tell you which is which!)
- Ask around!** Friends and family may have some firsthand recommendations.
- Check out BBB recommendations for techs in your area.**

Making the phone calls

Your next job is to narrow down the pool of contractors to the 3-5 you are going to have come out to your home for the free estimate. Start by calling and asking the following:

- How long have they been in business in your area?**
- Which manufacturers do they do installs for?** They should work with at least two different companies.
- Verification of trade licenses.**
- Verification of insurance:** Make sure the contractor carries general liability insurance and workers' compensation. If the contractor is not insured, the homeowner may be liable for accidents that occur on the property.
- Verification that they are properly registered with the State and Local authorities**
- References of former customers you could actually talk to**
 - Can they confirm they actually worked with the contractor?
 - Where they happy with the work that was done?
 - Did the contractor finish as planned?
 - Did they leave the work space clean after they were done?
 - Would they recommend the contractor or use them again?

Estimate time!

Once you have narrowed it down to your top 3-5 choices, set up times for an in home estimate.

The first thing the contractor should do is gather information for the Load Calculation. This is the estimate of the cooling/heating needs of your house.

A Load Calculation should include:

- Inspection of the existing furnace**
- Layout of the house**
 - Including how many windows the house has and which directions they face
 - How much sunlight the interior receives
 - Insulation status (not enough, outdated or settled and compacted are all issues that can cause you to need a bigger furnace.)
- Beware of any HVAC tech that only looks at your old furnace and nothing else.** There are likely to have been changes in your house since the old unit was installed (outdated insulation, loss or gain of a shade tree), or, the original unit may not have been the right one for your house to begin with!
- Also beware a tech that just advises to install a bigger unit to be “on the safe side.”** An unnecessarily large unit will cost more to install and will cost more to run every single month of the unit’s 20 year life span.
- Minimum efficiencies.** The most efficient systems may also be the priciest, but here are the minimums you should look for:
 - An air-conditioning unit (if below five tons) with a SEER(Seasonal Energy Efficiency Rating) of 10, preferably 12
 - A high-efficiency natural-gas heater with an AFUE (Annual Fuel Utilization Efficiency)of around 90 percent
 - A fuel-oil burner with an AFUE of around 85 percent
 - A heat pump with an EER (Energy Efficiency Rating) of 12
- Ask about Payback Calculations**

These calculations should give you a good estimate of seasonal operating cost which will allow you to compare them to your existing electric, gas/oil bills!
- Ask about the extras.** Like a programmable thermostat, air cleaner and/or humidifier. You can often get good deals by including these during installation.
- The written estimate for the job should include:**
 - Price of the replacement unit
 - Labor costs
 - Listing of additional work (ducting work, humidifier, air cleaner, etc)
 - Timetables for projects
 - Payment schedules (if applicable)
 - Who is in charge of obtaining all applicable permits
- While they are at your house, get a “read” on the person. Ask yourself :**
 - Is this somebody I trust?
 - Is this somebody I want to work with for an extended period of time?
 - Is this somebody I am willing to let into my home?

Getting a Handle on the Estimates:

The standard rule of thumb is to pick the middle priced estimate. While this may be true, there are some other considerations.

- If a bid is high, ask why!** It may be that the contractor noticed something the other companies didn’t.
- Have a lawyer or knowledgeable friend look over the bid.** They may notice something you missed.
- Make sure you are comparing apples to apples.** Some HVAC techs represent a single brand of furnaces/air conditioners. If this is the case, you will have to do some comparison shopping yourself. Make sure the units are comparable.
- If you haven’t already, check out the contractors record on the BBB.**

The Final Pick:

After all your hard work, you have finally found your contractor! The contractor may use their written estimate as a final contract or may present the same information in a different document.

Before you sign on the dotted line:

- Look over it carefully before you sign.**
 - A complete contract should state clearly all tasks to be performed, all associated costs and the payment schedule.
 - Never sign a blank contract or one with blank spaces.
 - Make sure the contract clearly states who will apply for the necessary permits or licenses.
 - Have a lawyer review the contract if substantial costs are involved, and keep a copy for your records.
- Get any guarantees in writing.**
 - Any guarantees made by the contractor should be written into the contract. The guarantee should state clearly what is guaranteed, who is responsible for the guarantee and how long the guarantee is valid.

At the end of the project:

- Make final payments only when all work is completed to your satisfaction**
 - A reputable contractor will not threaten you or pressure you to sign if the job is not finished properly.
- Pay by check, not cash.**

What to watch out for:

- Avoid anybody who says they can speed up the insurance payments or building permits.** They can't or if they are, they are doing so illegally.
- Avoid anybody who wants a cash deposit or cash advance for payments in full.**
- Any legitimate contractor will work with you and will accept a check or cashier's check.** Don't get pushed into anything else.
- Don't get rushed into a decision because you are responding to a disaster.**
 - Scam artists love to prey on natural disaster victims or others in high stress situations. Even though you may just want things fixed and back to normal NOW, do not rush into making decisions! Ask the same questions and go through the same process that you would at any other time. You do not want to make a bad situation worse.

Glossary of Terms:

There is a whole set of lingo that was intended to make buying heating and cooling equipment a lot easier. For most people, however, it is all new to them. Check out a great list of Heating and Cooling terms and definitions at www.thisoldhouse.com.