



How to Select the Best Equipment and Services

Buying a central air conditioner (CAC's) or heat pump is a big decision, and there are several things you should know before you buy. Energy efficient central air conditioners have a higher seasonal efficiency rating (SEER) than standard models, which makes them more efficient. To make your smartest purchase, you should:

- Understand energy efficiency ratings.

All CACs and heat pumps have a SEER rating - i.e. a measure of the system's average efficiency over the entire summer. The SEER rating measures the system's efficiency on the hottest summer days.

HSPF measures your heat pump's efficiency when it is cold outside. In all cases, the higher the number, the better the efficiency of your unit.

- Make sure you have matching indoor and outdoor components.

Most central air conditioners and heat pumps have an outdoor component (the compressor) and indoor components evaporator coil and blower). When replacing an existing system, some contractors may suggest that you only purchase a new outdoor - and retain the old indoor components - to save money. However, the indoor and outdoor components of central air conditioners and heat pumps are designed to work together, and your old indoor evaporator coil probably won't match the new outdoor unit. Replacing both at the same time will help assure the highest level of energy efficiency and comfort for your home.

- Check that your contractor takes the time to properly size the equipment and use ACCA approved software to calculate the proper size.

If you simply select the same size system you have now - or base the size of your new CAC on your home's square footage - you could be in for big problems. This is exactly why the Air Conditioning Contractors of America (ACCA) developed a guideline, known as "Manual J," to help contractor determine the correctly sized CAC or heat pump for any given home. Manual J is the best way to determine your particular home's need - and to make sure you end up with the right system to keep your home cool and comfortable as efficiently as possible.

Make sure your contractor follows this important standard. Otherwise, you might be stuck with an oversized unit that could: cycle on and off excessively and noisily; cause humidity problems; increase maintenance costs; and, shorten the life of your equipment. Perhaps most importantly, an oversized unit can lower the efficiency of your system and increase your electric bills.

- Ask your contractor if your existing heating/cooling ductwork is adequate for your new system.

Your ducts are a critical part of your heating and cooling system, so it's important that they be in good condition. Have your contractor look for:

Leaks: Recent studies suggest that home ductwork typically leak 20 percent of the air that flows through them. Duct leaks are hard to see, but a well-trained contractor with the right equipment can locate and seal them for you.

Insulating your ductwork: Even well-sealed H&C ductwork can lose a lot of energy if they run through areas like attics or crawlspaces that are not normally heated or cooled. Consider having your contractor insulate your ductwork.

Properly sizing your ductwork: Some ductwork systems are too small to allow proper airflow through the CAC. While replacing ductwork can be expensive, it can pay for itself over time thanks to the annual energy savings.

- Remember, you usually get what you pay for.

Don't just look for the lowest price. Be open to paying more for energy-efficient equipment and properly trained installers. Any savings you reap from an inexpensive installation can easily be lost - many times over - in the form of higher energy bills, higher maintenance costs and lower comfort levels.