

# HOW TO SELECT AN HVAC COMPANY

It needs to be realized that there are both professional HVAC companies and fly-by-night companies or individuals, as there are in many other professions. Since the average HVAC job will be installed and used for many, many years, it behooves the prudent shopper to acquaint himself or herself with some basic methods that can greatly reduce the potential to end up paying thousands of dollars for what could end up being at least an uncomfortable system and at worst an unsafe, even life threatening system. Below are some suggestions on how to choose a highly qualified company, as well as some editorial information about each of these suggestions.

1. Using your media of choice, go right down the list of each HVAC company listed and telephone them. Your goal is to ask just one basic question, the answer to which produces significant information about the company. The question to ask is,

## **“How would your company determine the size of the (heating or cooling) equipment for my house?”**

There is only one correct answer to this question. (ed. The DOE and every major product manufacturer all recommend the same method. How the company answers this question therefore tells you whether they follow federal government and manufacturer ‘best practices’ or not. Those that do are far more likely to deliver a properly sized system or equipment to the job. Improperly sized equipment can lead to discomfort, short cycling, higher energy costs and shorter equipment life. Therefore, there is a definite value to selecting a company that answers this one question properly.

Acceptable answers: “By Manual ‘J’ calculation”; “By an engineering analysis”, “By a room-by-room load analysis”; “By measuring and calculating the load for each room”; “By ACCA (Air Conditioning Contractors Association) software”; “By using a computer design” or similar methods that specify an actual mathematical calculation based on solid science.

These companies have spent the time to educate their sales, installation and service staffs. The mere fact that they know how to do the sizing correctly tells you that they care about their reputation and your comfort. The education and materials needed to do the job correctly represent a substantial investment in both their business and your comfort. Do not expect any company of this caliber to be cheap or the lowest price for the job. In fact, the added value they bring to the table will likely put their quote substantially above a company that guesses at sizes. But wouldn’t you rather know what you’re getting than to have someone guess at the size and gamble several thousand dollars that they guessed correctly with your money?

Unacceptable answers: “By square footage”; “By looking at the size of the existing equipment”; “I’ve got XX years in the business and know how big it needs to be”; “By years or experience”; “By the thousands of units I’ve installed over the years” or variations thereof that say “I guess at the size”.

These are the companies that know only one thing. That is, how to cut corners to the point that they are the low bidder on a job. The first corner to be cut is the time it takes to

measure the entire house, room-by-room, window-by-window, check the insulation, determine construction techniques and calculate the actual heat gain or loss of the house and each individual room. If they measure at all, they use a multiplier “rule of thumb” to determine the size of the equipment. They may be right or wrong. It’s your gamble as to which. After all it’s your money right, not theirs? Obviously if they’ll cut that very first corner that you should know they’re cutting, can you just imagine what corners will be cut in areas where you have no knowledge?

2. When you’ve found a company or two that will answer question #1 correctly, invite them into your home and enjoy the presentation. A good company will spend as much time as is needed to make you totally comfortable with the process of what’s happening, why it needs to happen and what you should expect to follow. Comfort comes in many guises and your emotional comfort with the process is paramount to a good company. Please do not be offended when they ask to have all the people involved in the decision present. There’s a huge amount of information to be digested, all of it representing added value this company will bring to the table. To expect one person to relate it all to another is just not going to happen. So please have everyone present who needs to be there. Opinions can vary, questions will arise. All of these issues need to be addressed to everyone’s satisfaction.

3. Once the size of the equipment has been determined (do not expect the sales person to share the equipment size with you until after an agreement has been signed. They’ve been burned too many times by customers who get them out to determine the size of the equipment and then use that information to get a lower price. In the end, the client gets the right size but a hundred other corners were cut, leaving the homeowner once again, cheated) you should expect the duct system to be designed according to Manual ‘D’. That is the ACCA method of designing a duct system that will deliver the proper airflow without excessive noise. It’s important to note that the ducts can’t be sized until the equipment is properly sized. That once again would lead us back to the importance of that question you’ll be asking in item #1.

4. Finally, after the equipment and ducts are properly sized (or in the case of ducts, reviewed as to current condition and sizing) it’s time to select the equipment itself. Brand is not normally very important and many companies can offer more than one brand. All manufacturers have both successes and failures of equipment most importantly based on the installing company. Once again, the installation company that follows the proper procedures will deliver the anticipated result to you. If corners are cut, you can expect discomfort and problems.