

Ask a Builder



Should I consider replacing my heating system?

If you're thinking about replacing your heating system, here are some questions to ask yourself. A "yes" to any of them may warrant a call to an energy rater or heating contractor.

Have you recently upgraded the thermal envelope of your house?

The thermal envelope of your house is everything that separates the living space from the outside, including walls, doors, windows, insulation and the roof. If you've been sealing leaks, eliminating drafts, replacing old windows with double-pane or triple-pane models, or adding insulation, you've been making your home more energy efficient.

With thermal envelope upgrades, the home will lose less heat in the winter and therefore the heating appliance won't need to provide as much. This means your heating appliance is probably oversized and it may be time to replace it with a properly sized one that will operate more efficiently.

Is your current heating appliance more than 20 years old?

Technology marches on. Appliances made today are far more efficient than older models. Not only do they use less fuel, they are also safer and come with more advanced controls to improve efficiency. Also, the methods to size a heating system are better and can be tailored to individual homes.

Is your house uncomfortable?

Do you have rooms that are always too hot or too cold? This can be the result of air leaks, inadequate insulation, an improperly sized heating appliance, or lack of zoning in your heating system. Start with a call to an energy rater to find out which improvements you can make to solve this problem. If you need to add insulation or seal leaks, take care of that before upgrading your heating system so that the heating system will be sized properly for your home.

Who do you call?

Energy raters will look at your entire house, measuring doors and windows, checking insulation levels, assessing your heating system and checking for drafts and leaks. The rater will input the data into AKWarm, software maintained by the Alaska Housing Finance Corporation that calculates energy ratings. The rating describes how efficient your house is and suggests ways to improve the rating, which may or may not include the heating system.

The rating will help prioritize upgrades, show the energy benefits of each one, and may qualify you for the Alaska Home Energy Rebates Program.

Heating contractors will focus specifically on your heating system, evaluating its current efficiency and whether it is sized properly. A contractor can sometimes test for the efficiency of the distribution system (depending on the type). The contractor will provide you with information on improving your current system and purchasing new appliances.

Ask a Builder articles promote awareness of cold climate home-related issues. If you have a question, contact the Cold Climate Housing Research Center at info@cchrc.org or 907.457.3454.