

Alaska HomeWise: Ask a Builder
By Cold Climate Housing Research Center Staff

The "Ask a Builder" series is dedicated to answering some of the many questions Fairbanks residents have about building, energy and the many other parts of home life.

Is it really necessary to insulate my hot water tank?

I really think it is. The newer tanks have a high-density polyurethane foam insulation around them. But a lot of the older ones have a thin layer of fiberglass around the tank, and that results in lost heat called standby loss. The idea behind standby loss is that it takes energy to keep water warm. Even if you aren't using the water at the time, you are still using energy to keep it heated. If your tank is not insulated, you are losing heat and using more energy to keep it at temperature. Insulating the tank helps keep it warm and you end up using less energy and therefore pay less as well.

You can also look up specific information about your tank online by going to the manufacturer's website. There you can find out how it was made, and how it might already be insulated.

What are the advantages and disadvantages of a pellet stove?

There are a couple of big advantages. The pellet stove provides a very regulated and controlled burning environment with a high quality, uniform, combustible material. The pellet stove can regulate the rate at which the pellets are fed into the firebox, and it controls how much oxygen goes into the firebox. It creates an optimum burning environment for the pellets. The pellets themselves are an evenly-sized product that looks a little like goose food except that it's made from compressed wood rather than grain. They get fed in by an auger, and are sized to run through the system for optimum burn efficiency. Pellet stoves are generally very easy to install. Often they can be direct vented through a wall, which is a lot easier than trying to place a chimney from a typical wood stove. In an older wood stove, you lose heat from the chimney, but you lose a lot less with a pellet stove.

In terms of disadvantages, you have to buy the pellets. That makes you dependent on the market and who is importing the pellets. You also need electricity to run the auger that feeds the pellets and the fan. If you don't have power, or suffer from an outage, your stove won't function.

I am interested in building a 'green' home. Are there any 'green' contractors out there?

Yes there are. When we say 'green,' we are talking about building a home that uses sustainable materials, is very energy efficient and uses local materials. There are contractors in town who build to green standards. The Interior Alaska Building Association would be a good place to start. If you're looking at building using green concepts, a couple places you could go to learn, before you even get started, are the National Association of Homebuilders (NAHB) and the U.S. Green Building Council (USGBC). Both have websites that clearly break down the process into different categories.

Alaska HomeWise articles promote home awareness for the Cold Climate Housing Research Center (CCHRC). If you have a question, e-mail us at akhomewise@cchrc.org. You can also call the CCHRC at (907) 457-3454