

Questions and Considerations for Energy Saving Projects

All homes have a basic operating cost that can be reduced by improving the home's energy efficiency. Here are some questions and considerations to keep in mind when beginning this type of project.

Questions to ask before starting a project:

- Can I perform the work myself or will I need to hire a professional? Does it require two or more people?
- How will the work increase the comfort level in the home?
- When will the changes pay for themselves? Is it worth it?
- How long will the project take to complete?
- Is there a preferred time of the year to start a project or make changes?
- When starting energy efficiency projects in a rarely accessed area (crawlspaces, attics, or roofs), what additional items besides the efficiency project may need addressing? For example:
 - Do I want to replace the bath fan and increase the duct size?
 - Do I want to add a solar tube, remove an obsolete chimney, or add various wires and cables?
 - Is there any needed maintenance?
 - Is there water, rodent, or insect damage? What is the status of a particular area?
 - When adding insulation the attic will become much less accessible. Have I done all I wanted to do?
- Will the project improve resale value of the home and the neighborhood?

Other considerations and resources:

- Homes with complex floorplans, two or more levels, vaulted ceilings, etc. typically present more efficiency challenges compared to the basic rectangle foundation, one story home with a flat ceiling.
- Older homes were built with less focus on energy efficiency, so the age of construction will assist in determining the materials used, the methods of assembly, and the common/acceptable building science and practices of that time.
- Exterior buffers, such as trees or garages on the north and west sides, help block prevailing winds.
- Wrapping the water heater with insulation, energy efficient blinds, energy efficient appliances, and programmable thermostats are some of the many smaller project options to save energy and lower home operating costs.
- In order to achieve the most thorough understanding of where and how to budget your energy improvement dollars, a home should receive an energy star type inspection using both a blower door and infrared (IR) camera. To understand and get the most from an energy star type inspection, please review PHI newsletter: [Infiltration Losses and the Stack Effect](#)
- Many PHI newsletters cover areas to improve energy efficiency and can be found on our website, under the "Newsletters" tab.

Some newsletters that would be particularly helpful for this type of project include:

- [Choosing Insulation & Weatherstripping](#)
 - [Energy Saving Facts, Options & Resources](#)
 - [Insulation and Infiltration](#)
 - [Attic Ventilation](#)
 - [Hydronic Hot Water Heat Components & Variables](#)
 - [Air Conditioner Efficiency, Operation & Maintenance](#)
 - [Geothermal Facts & Considerations](#)
 - [Modern Window – Facts & Considerations](#)
- Before starting any type of project, review our newsletter: [Five Considerations for Home Projects & Maintenance](#)

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