

YOUR GREEN HOME

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Until recently, "Green Building" (building for sustainability, energy conservation and environmental quality) was a subject which appealed only to an esoteric few, who sought "alternative" ways of life. Now it has become a world-wide issue, and many new homeowners are putting "green" at the top of their list of requirements, for a number of reasons, having to do with performance, maintenance, energy savings, air and water quality and ecological concerns.

Starting with some site planning and the design of the home costs very little and saves you the most money over time. Here are some simplified, cost-effective guidelines to help you get started

Be sure your house relates well to your site. A south-facing orientation is ideal, but don't forget overhangs (or eaves), which provide some shade and also protect windows and doors from water intrusion. If the house must face west, use fewer windows and create covered decks to provide shade, and of course, use only Low-E glass. A north-facing view should have more windows and, if possible, provide some high windows for indirect sunlight, to cut down on the use of day lighting and if they are operable, they will siphon heat out of the space below. Tall ceilings can use up to 1/3 more energy to heat and cool.

Heating and air conditioning equipment performs best when it is placed in a conditioned space and, where possible, should be located so that duct runs are minimized. The same goes for your water heater. ("HVAC" - Heat, Ventilation and Air Conditioning-- equipment is a vast subject unto its own, and is a key element in the comfort and energy savings over the life of your home).

Sealed crawlspaces are the preferred method of most forward-thinking builders. We live in a moist environment, and open vents in the walls simply invite that moisture to live in your crawl space resulting in that four-letter word of building: mold. Additionally, a poorly-sealed home will draw that moldy air into the living space.

The attic is another source of energy loss, if the proper type of lighting is not used or installed correctly, and if the roof is not insulated properly. Not everyone can afford to use sprayed urethane insulation, or even blown cellulose, but a responsible builder will seal all penetrations in the framing (at exterior windows and doors, outlets, lights, hose bibs, small gaps in the sheathing) prior to insulating the house.

Drainage is another essential element to be considered: in your foundations as well as your downspout drains, be sure your water is being shed thoroughly and responsibly.

Regarding the interior of the house, let's consider some simple basics. Fluorescent lamps and compact fluorescent bulbs save energy, provide superior lighting and last longer. Durability is a key issue: anything that lasts longer saves us money, provides us with a more secure, comfortable living space and keeps materials out of our landfills.

Properly sealed ductwork not only saves energy costs, but helps to keep the pressure balanced in a house, which reduces outside air and humidity intrusion the number one sources of poor indoor air quality. The new guideline for peak performance is: build tight, and ventilate right.

Ventilate with fresh air from the outside not by pulling stale air out of your crawlspace or attic. Some say that designing your HVAC system correctly will give you a 5 year return on your investment. But actually, the savings you will pocket on your energy bills will make it less expensive to live in your home from the first day you move into it.

There are many low-VOC (volatile organic compound) materials available. The worst culprits carpet, paints and stains, and certain adhesives used in sub-flooring and cabinets are now being made without formaldehyde by a number of companies, and there are local vendors who offer them.