

## **Good planning makes for a successful project**

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Our difficult economy has many homeowners staying in their existing homes rather than upgrading into new housing. This trend influences many into considering remodeling options to meet their changed needs and desires.

Often, after construction is well under way I am asked for recommendations to make a project “green” or sustainable. This can be a challenging question to answer after the “ship has set sail.” Like so many things in life, remodeling projects benefit greatly from thoughtful planning as one considers the desired outcome. Successful construction projects bring together seemingly competing objectives into a unified outcome. Practicality, aesthetics, new technologies and of course one’s budget tend to push and pull as a cohesive project develops. A green construction approach adds a new layer to this process that can tie many rivaling aspects of a project together with a focus toward comfort, health and resource efficiency. The first step in starting a construction project is to choose your experts wisely. Architects and general contractors with green building experience and certifications will be most helpful in counseling you through the design phase of your project. Their knowledge and know-how will be essential as you plan for success in integrating new construction with your existing home.

The single greatest oversight in planning these jobs is failing to view them within the context of the entire home. Just as the human body is made up of many parts that rely on each other for optimal health, a house is much more than its individual rooms and mechanical parts. Spaces and systems within the dwelling affect each other as rooms are added or use of existing areas change. Building an energy-efficient addition to an energy-inefficient home may seem like a positive step, but could reap very little improvement in energy usage.

Start with an energy assessment: Before making significant changes to your home, it is important that you have an accurate snapshot of how it is operating. Where are your greatest needs and opportunities? How can you improve your existing structure so that the new work can be most effective in meeting those needs? A certified building performance analyst can provide you with the detailed energy assessment you need so that your project can be designed to achieve maximum success. The written assessment should include specific recommendations for improvements to the home’s thermal barrier (the living space), and the heating, ventilating and air conditioning system (HVAC). Special attention should be given to the duct work, the transfer system of the conditioned air.

While I always stress energy reduction as the primary focus in a green construction project, there are other significant considerations as well. Water conservation is very important and can be easily achieved within a home by choosing low-flow faucets, showerheads and toilets. These better choices can often be identified by the Environmental Protection Agency WaterSense logo, which assures you that the gallons per minute (gpm) usage meets a high standard for water conservation. Considering the amount of time spent indoors, it is important to look at the choices of materials we use in our homes and how they impact our health.

Off-gassing of volatile organic compounds (VOCs) happens in all homes. Off-gassing occurs when a trapped, dissolved or absorbed gas in a material is released. This can affect air quality when it collects in a closed, stagnant environment. New materials introduced to the home will off-gas at a high rate and most significantly in the first few weeks after installation.

When choosing products such as paints that cover vast surfaces in a home, consider selecting low- or no-VOC content options. These alternatives can greatly improve the indoor air quality of your home, creating a healthy environment for you and your family.

Whether embarking on building a new home or a remodeling project, keep “green” practices as a central point in the development of a cohesive plan. With this focus, your home can be a beautiful, comfortable and healthy dwelling that will reflect the value you place upon our shared environment.