

the Green Cost *Myth*

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Green doesn't have to be exotic; it just has to be smart. The idea that building green is only for the wealthy and too costly for the average homeowner is a myth that must be dispelled. Building and remodeling green doesn't have to break the bank. Green opportunities are as diverse as the housing industry itself.



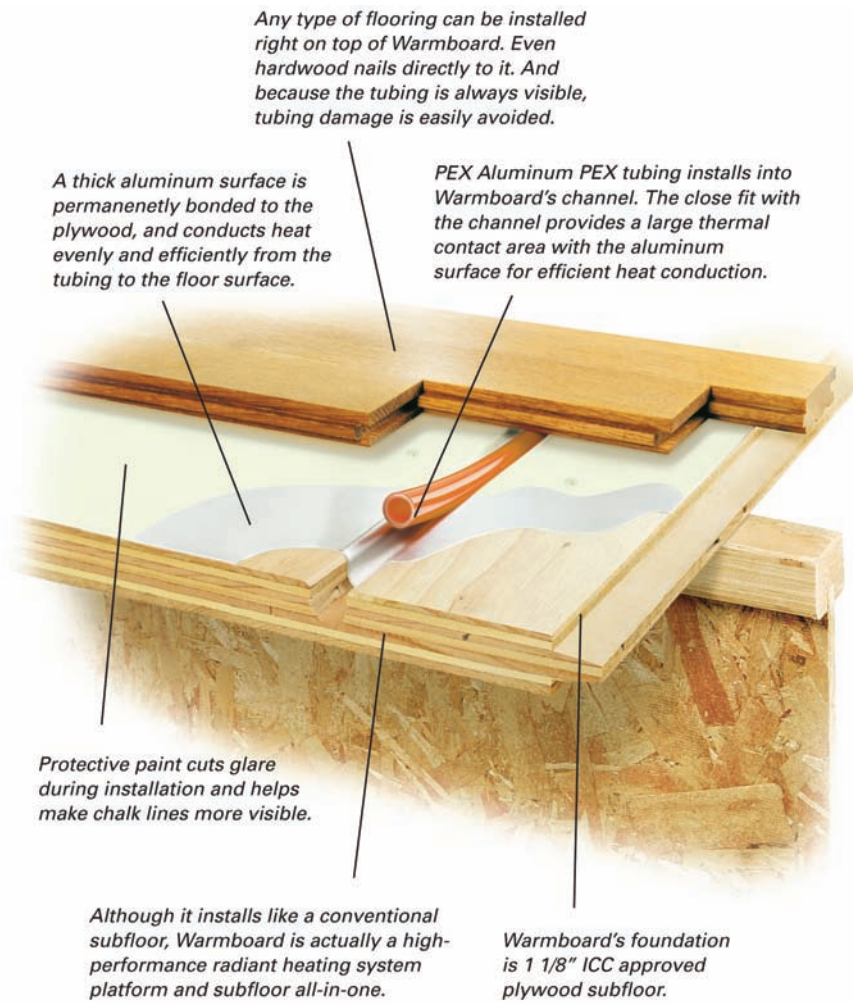
The proven way to budget for sustainable features is to identify sustainability goals at the start of the planning and design process. Green isn't going to be cost effective or work to the highest levels of efficiency if it is an afterthought. Every price point has a green opportunity.

Even the LEED (Leadership in Energy and Environmental Design) program, the nationally accepted

sustainable in varying degrees without a heavy price tag. In fact, one home averaged \$175 per square foot in construction costs.

More than seventy people toured homes from straw bale construction to those constructed with SIPs (Structural Insulated Panels). Each had a unique way of implementing energy efficient design and incorporating sustainable building practices. All of the homes have efficient radiant floor heating, proper insulation

INSTALLING WARMBOARDS (BELOW). AND WARMBOARD BREAKDOWN (RIGHT).



benchmark for the design, construction, and operation of green buildings, has graduated levels of standards. According to a report by Davis Langdon, a San Francisco-based consulting business that helps architects and building owners manage construction costs, good quality building with basic LEED certification shouldn't increase costs if planned well from inception.

What is more valuable is the tangible proof living right here in the Yampa Valley. This year's Green Home Tour displayed four solid-built homes, all under 3,000 square feet, all energy efficient and

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from the ground to the roof, and some incorporated passive solar design utilizing our 300 days of free sunshine.

Of course, attaining a higher level of green, such as the use of photovoltaic solar panels, evacuated solar tubes or geothermal technology, can increase costs. But even these higher upfront costs can produce a return in a few years while increasing your home's value today. A study in the 1999 Appraisal Journal, titled "More Evidence of Rational Market Values for Home Energy Efficiency" indicated that home value increases by about \$20.00 for every \$1.00 reduction in annual utility bills.

In the beginning, there was collaboration...

Well before design and construction everyone involved in the planning process should be thinking green. Each of the homes on the Green Home Tour share a commonality: sustainable building products, efficient systems, and salvaged materials were integrated in the initial plan by homeowners. This holistic approach

Tile and sustainable flooring options (i.e. bamboo, cork) provide a better conduit for heat, rather than thick carpets. Energy Star labeled appliances, lighting and home products use 10–15% less water and energy than standard models.

Ah, but what if you've chosen to remodel as opposed to building new? The same principle applies. Get everyone on board from the beginning to explore more efficient systems. Many local architects,



allows for a complete analysis of site, design, water and energy efficiency, resource efficient construction, lighting, mechanical design and building ecology to optimize all of these aspects into a cohesive design.

Once the project takes shape it becomes evident that each part influences the others. Site selection and orientation determines window selection and heating and cooling designs. Taking full advantage of sunshine can afford other sustainable features because your main source of heating is free. If radiant floor heating is the choice, making the right decision as to what goes on top of it can make a difference in how efficiently it operates.

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builders, contractors, heating and systems experts are well-educated in designing and building greener homes. Determine both your goals and your budget. Consider hiring an energy rater to inspect your home for energy loss.

Green building shouldn't be about how to squeeze sustainable features into a tight budget. The goal is to analyze the entire project into a cohesive design, optimizing every sustainable aspect. Whatever your budget, a level of green is achievable.

What shade of green do you want to be?

Whether building your dream home or updating your current one, whether your goal is energy or cost savings, the basics are the same. These are a few examples of how you can reduce operating costs and incorporate sustainable features:



Water Savings

Dual flush toilets have been in place in Europe for years and are increasingly available due to increased demand. The No.1 flush uses only 0.8 gallons of water, while the No.2 flush uses 1.6 gallons allowing a saving of up to 68% of your toilet's previous usage.

Lighting

CFLs (Compact Fluorescent Bulbs) are in the spotlight for good reason. Traditional light bulbs actually produce more heat than light and can account for approximately 25% of a home's electric bill. Replace burnt out incandescents with CFLs and impact the heat in your home as well as your electricity usage.

Water Heater

On-demand or "tankless" water heaters only heat what is needed; they do not heat and store water. Traditional water heaters lose heat and energy when the water is stored in the tank.

Heating

Take ten minutes and program your digital thermostat to automatically lower settings while everyone is at work or school and during sleep time.

Natural Materials

Beetle Kill timber is becoming a prolific local resource. It is being used for tongue and groove ceilings, trim, accents and furniture.

Exterior

TREX recycled decking is everywhere. It is maintenance free and made from reclaimed wood and plastic.

Indoor Air Quality

When painting interiors, choose paints with low or no VOCs (Volatile Organic Compounds). Also, use wood products that do not contain toxic glues or use reclaimed cabinetry. Choose carpet that is made of natural fiber or recycled content, with reduced or no out-gassing. Some synthetic carpets, padding and sub floors can emit benzene and formaldehyde.

Sources

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Energy Star