



GREEN
BUILDING
America's
Latest Luxury

By Chad Engelhardt



More and more people are trying to reduce their impact on the environment while simultaneously making health wise decisions within the home.



As we move forward into the twenty-first century we are very much on the brink of a green revolution in the building community and beyond. We have seen the onset of this paradigm shift. Photovoltaic (PV) panels are finding their long awaited niche, sunning themselves under Colorado's cloudless skies, wind power is available for purchase, and hybrid full-size SUV's have found their place on showroom floors. Not only has green building become chic but the integrity of the environment depends on it.



Green building practices are being implemented to meet the increasing demands of a growing group of nouveau trend-setting homeowners with progressive values and lifestyles. More and more people are trying to reduce their impact on the environment while simultaneously making health wise decisions within the home. New homes are being built smarter; employing ecological thinking and the best available technologies, some even achieving Leadership in Energy and Environmental Design (LEED) Certification. Whatever the motives are, the end result is immeasurable be it diminished environmental degradation or simply a better quality of life.



The primary deterrent thwarting most would-be green homeowners is the price tag. When it comes to resale, however, the extra expense of building green can pay big dividends when compared to a similar home built conventionally. In the long term, building green not only has the potential to save money and natural resources, but also has the potential to pay for itself. For example, a home with a grid-tie PV system produces more power than is used and in return, the surplus electricity is then bought back by the local power company. This is called net metering.



In terms of place, consider for a moment Colorado's approximate 300 sunny days per year. This readily available renewable resource can easily be converted to heat energy via passive solar heating or electricity by way of PV systems. It just makes sense to take advantage of the abundant sunlight where we live and people are increasingly doing so. In the local building community, passive solar design is becoming the cornerstone of many new green built homes. Recent advancements in technology are making PV systems more efficient, versatile, and low profile than ever. Furthermore, zero emissions are an added benefit when utilizing the sun's energy in passive solar design or with PV.

Every watt produced from renewable energy has the potential to offset the equivalent amount of energy that may have otherwise been generated from

Not all aspects of green building include cutting edge technology.



fossil-fuels. The decreased demand yields reduced levels of greenhouse gasses being emitted into the atmosphere and local airshed. This then translates into improved air quality, a reduced carbon footprint and has the capacity to curb global warming. As environmental stewards in the green building community, people are placing an increased value on green power and are willing to pay for it.

Often times a green built home will emerge as a result of the homeowners desire to live in an isolated location where utilities are not available and the home needs to be completely self sufficient. These homes may utilize passive solar design, passive cooling, thermal water heating, PV, geothermal, wind power, and grey water system/drip irrigation to name a few. Regardless if a home is located miles from civilization or is within the city limits, a green built home can be built to meet all of the demands and include all of the amenities a homeowner might expect of any luxury home.

Not all aspects of green building include cutting edge technology. Other green building options you may want to consider implementing may be as simple as increasing the efficiency of a home in terms of R-factor (how well the house is insulated) and selecting energy efficient appliances, heating/cooling systems. Or, it may mean selecting environmentally friendly building supplies such as reclaimed lumber, recycled material for insulation (such as cotton or cellulose), and locally produced building materials. Buyers are increasingly asking for green features like these and environmentally conscious motives aside, know that they add value to their homes.

Not only is green building politically correct, it is becoming law. Washington State is the first to actualize green building laws termed high performance building laws for the masses. The New York City Council has enacted the Green City Buildings Act as an attempt to reduce the city's electricity and water consumption. Recently, the City Of Albuquerque has followed suit, adopting their own green building standards requiring builders to meet a minimum green building requirement. The Town of Telluride has adopted a Green Building Code utilizing a point based system. Categorically, this includes energy

efficiency, sustainable materials & resource conservation and indoor air quality. The City of Durango is in the process of convening a steering committee that aims to increase and localize incentives for the green builder. According to the Colorado Governor's Energy Office, 2007 is the greenest legislative session to date.

Green building is worth the investment, not only to the homeowner, but also to future generations. It provides for a healthier and more comfortable environment, brings higher resale value to your home, includes renewable energy technologies, incorporates energy and water efficient technologies, reduces the amount of construction waste, improves indoor air quality, and has the potential to improve long-term economic performance. All said, there are a multitude of ways in which to incorporate the leave no trace ethic into your own home.

The first Green Builders in a community are leaders whose example will perpetuate awareness to other residents in the area as to how environmental strategies innovate, create and add value to their homes. When one person employs ecological thinking on how to live a sustainable life, others are apt to daydream about building their own green dream home and before you know it, entire cities are making green building laws. Transforming your community by saluting and emulating these innovators for doing things right will help save the world starting with your home.

For more information on sustainable building design, construction and the LEED building rating system contact: the US Green Business Council; www.USGBC.org.

For more information locally, contact: the Southwest Colorado Renewable Energy Society: www.cres-energy.org/swcres.

In the Durango area, contact the San Juan Citizens Alliance for information regarding the next Green Business Roundtable: www.sanjuancitizens.org.

Chad Engelhardt is an Environmental Protection Specialist who works for the San Juan Basin Health Department. You can contact him at chad@sjbhd.org.