

The National Association of the Remodeling Industry (NARI) estimates that the average American spends 85-90% of their time indoors. This is why, when builders and remodelers are asked by clients about Building Green, the approach is by and large from the inside out.

The idea behind Building Green is to produce a more energy, and environmentally, efficient structure. This can include the building products used, the way energy sources are harvested and utilized, and quality of life within the home.

Numerous organizations within both the private and public sector have pushed for various initiatives and incentives in order to promote and educate people on this growing trend along with increasing knowledge regarding green products and materials available to consumers.

This Green trend is not only for new construction or big remodeling jobs; it is easy for current homeowners to increase their Green levels as well. Here are some cost saving products that are currently on the market.

Sterling Low Flow toilets- these types of toilets give you the option of flushing down 1.6 or .8 gallons of water, .8 being for liquid and light waste. This toilet also contains a flapperless flush valve, which increases the force of gravity so only one flush is needed. The siphonic wash down passes through 100% of the water through the rim holes, which in turn cleans the entire bowl thoroughly.

Low Flow Aerators- These are very inexpensive and quite easy to install. They come for both faucets and showerheads and can reduce your home water consumption and energy cost of heating up to 50%. For more information check out this website: http://www.eartheasy.com/live_lowflow_aerators.htm

Energy Efficient Windows- When it comes to picking out windows look for windows with these qualities: Multiple layers of glazing- these windows help insulate almost twice as much as single glazed windows. Thickness of airspace- thinner air spaces do not insulate as well as thicker airspaces because of the conductivity between the spaces. Any size from ¼" to ½" is fine, however anything more the 1" because you would not be gaining any more energy savings. Also, look for lower conductivity gases such as argon for sealed insulated glass windows. Tinting the glass slightly also helps prevent solar heat gain in the summer. One major factor to look for is low-e coatings. These windows are becoming more and more popular because of how efficient they are. The coatings they put on there allow light to pass through but let the infrared radiation back into the room, which produces a high solar heat gain. One other thing to look for would be the edge spacers, steel, foam, fiberglass, and vinyl help reduce heat flow and also prevent condensation.

Insulation- you want to get insulation that contains a high resistance value, R-value. The higher the r-value the slower heat comes in (summer) and the slower heat leaves (winter). However, you want to install it properly or it will not function at its rated efficiency. **Energy Efficient Doors-** Look for doors with double or triple paned insulating glass which helps greatly reduce the heat flow. As for the core materials, fiberglass, wood cladding, and steel with a polyurethane foam core are great doors to use for energy efficiency. A lot of the newer doors today may include a magnetic strip for their frames to produce a tighter fit, which reduces the air leakage around the edges and corners of the door.

Solar Panels- They use the sun to collect solar radiation and then convert the energy gathered into electricity. Look for panels with high amounts high quality of solar cells because they will produce a better electrical output for that specific solar panel. There are four different ways you can install your solar panel: pole mounts, roof-ground mounts, the flush mounts, or just a simple free-standing unit. Make sure you

position the panels directly under the noontime sun for the best performance and efficiency. Make sure there are no obstructions to the sunlight, such as branches, buildings, or unnecessary items to prevent maximum efficiency out of your solar panels.

Water Heaters- Sustainable water heaters use the sun's energy to heat up the water for the home instead of using electricity. They provide 40-70 percent of a household's daily hot water needs. For more information on water heaters and how they work and how to pick one please visit this website: http://www.eere.energy.gov/consumer/your_home/electricity/index.cfm/mytopic=12850

Green Roofs- They are designed to limit if not eliminate the amount of storm water runoff from buildings and homes. The plants used on green roofs help try to eliminate airborne pollutants from entering the storm drains, and help slow down the runoff immensely when entering the storm drains. For more information on green roofs and exactly what is included in a green roof system check out this website: http://www.lid-stormwater.net/greenroofs/greenroofs_home.htm

As an added incentive to the money saving options of green products, the IRS and Treasury Dept. has issued a tax credit for homes that install insulation, windows, doors, and specific roofs that increased energy efficiency, such as the products listed above.

There are a large number of organizations that provide even more information regarding green building. One of the most notable, the U.S. Green Building Council, a nonprofit organization created to promote green building, has established the Leadership in Environmental and Energy Design (LEED). The LEED's program is a nationally recognized, green building rating system that works to promote builders to construct more energy efficiency buildings and be acknowledged for it. They also provide information on making your home "Green". Look for it at <http://www.usgbc.org/leed/homes> under the heading, "16 Ways to Green Your Home".