

## Shades of Green

Green Building is an ever growing topic with literally millions of pieces of information to be discovered. Consumers logically may ask, "Why should I consider remodeling green?" Some people believe that green is only for those extreme environmentalists, which is really very far from the truth. Utilizing green remodeling techniques and materials is really mostly about creating a comfortable and healthy environment for our families as well as helping the environment. Science has discovered that many conditions and diseases are caused or at least aggravated by chemicals, many of which are found in building materials. Therefore, it pays for everyone to consider remodeling green when undertaking a project. So how do you start?

The obvious starting point when considering a Green project is in the planning and design phase of a job. Select a designer, architect or design/build construction firm that is certified in green building and qualified to help you design a successful Green project. Ask them questions about making the indoor air quality of the home healthy. Find out which Green materials and/or techniques will provide you with the optimal comfort, health, energy use, savings, or all of the above.

For most people this will trigger more questions and give the remodeling professional a great opportunity to distinguish themselves as knowledgeable and capable leaders in the movement towards more environmentally conscious building practices. Simple questions you might be prepared to answer include: are there temperature differences between rooms? Do you feel drafts from under cabinets, at windows, standing near the tub in a bathroom? How many people live in the house? How many pets do you have and what kind? Is moisture an issue? Do the windows have condensation? Are there water stains in the house?

Next, be sure to select a design/build firm or general contractor that is certified in green remodeling to actually complete your project. Using a NARI green remodeler will insure that techniques and materials are used that will keep your family's health and comfort at the forefront. Here are some ways to incorporate "green" choices into your project:

- Exterior finishes can be "greener" using FSC certified wood, or by using fiber-cement siding materials.
- Green plumbing applications include: water heater insulation jackets or tankless heaters, pipe insulation, re-circulation pumps with timers or aqua stats, and replacing toilets with ultra low flow units.
- Electrical applications might include: installing compact fluorescent bulbs, air sealed recessed cans, lighting control systems, and using whole house fans to replace air conditioning.
- Install only Energy Star appliances.
- Insulation: try upgrading to exceed energy code requirements and using alternate insulation products like cotton or spray foam as opposed to the traditional pink fiberglass insulation which contains formaldehyde.

☑ Windows: Use double pane installation as well as low-E coatings. You might also want to include specific window coatings based on the orientation of the home.

☑ Heating and air-conditioning is a much abused area that has many opportunities for improvement. You should consider sealing your existing ducts; most systems leak 25-30%. You can use duct work within the conditioned space, use sealed combustion furnaces and water heaters, vent fans and hoods to the outside, and use a separate garage exhaust fan, as well as heat recovery ventilation units.

☑ Improve renewable energy sources: these might include pre-plumbing for and installing solar thermal, pre-wiring for a photovoltaic (PV) system, installing a radiant barrier in the roof, using a cool roof, incorporating passive solar heating, installing overhangs or awnings on south facing windows, and planting deciduous trees on the west and south sides of the property.

☑ Indoor air quality is a huge issue; with some carefully thought out finishing selections, you can positively impact the health of your family in the long run. You can utilize low or no VOC (Volatile Organic Compounds) paints, no or low VOC adhesives, engineered sheet goods with no added Urea-formaldehyde, seal all exposed particle board or MDF, install a whole house vacuum system, use FSC certified wood flooring, use "recycled content" tile, and install natural linoleum in place of vinyl. You can also choose "recycled content" carpet with low VOCs.

In the NARI green education program, a Green Remodeling professional is described as: "A remodeling professional who considers sustainability and maximizing nature's resources and energy in an efficient and responsible manner in the conduct of their business." We can all agree that this is a responsible way to do business anyway, so selecting a remodeling professional with these qualities just makes sense.

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