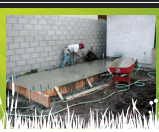
FEATURED PROJECT

HB goes Green

This is a second story addition above the garage of a single family dwelling in Huntington Beach. From start to finish, the construction of this room addition used many "green building" aspects. Here is a look into the steps taken throughout the green building construction:

Foundation

This green building project utilized a foundation composed of fly ash, a bi-product of coal-fired electric generating plants. Fly-ash foundation productively makes use of materials that would otherwise need to be hauled to a landfill. This concrete is also stronger than other types of concrete, providing performance and quality of the foundation.

Framing


Careful management of the construction process makes a big difference. The original garage was deconstructed, and the materials were separated as reusable wood, recyclable wood, and rubbish. Reuse/recycling of C&D (construction & demolition) waste reduces the amount of debris sent to landfills. The new floor framing was constructed of Parallams, which are an engineered type of lumber. This lumber uses small pieces of wood which are glued together and compressed into one piece. Using engineered lumber and wood products certified by the Forest Stewardship Council can help protect old-growth forests.

Insulation


The insulation used throughout this construction project was composed of post-recycled industrial denim. The waste materials derived from the manufacturing of blue jeans are used to create the denim type insulation. Denim is made up of cotton, which is considered a renewable resource due to its rapid growth cycle.

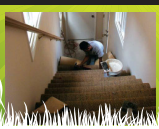
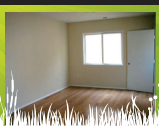
Windows and Doors


Inefficient windows can account for 9% of all residential energy consumption. Replacing old single pane windows and choosing Energy Star rated dual pane fiberglass clad windows will improve comfort and lower energy bills. In this project, energy performance was gained through the use of Energy Star rated dual pane fiberglass clad windows. Also, the original garage man-door was saved and re-installed in the construction of the new garage. Reuse of the existing door is an accepted green building practice.

Cabinets and Countertops


The cabinets installed in this construction were previously used cabinets, purchased from Habitat for Humanity. The countertops were constructed of spare pieces of granite from larger construction projects. In almost every remodeling and new construction project, a great deal of material waste can be reused, deconstructed, or recycled instead of being disposed of in landfills.

Flooring

In this construction project, two different types of flooring were utilized. Sisal, a type of carpet which is composed of woven grass, was installed on the stairs. Bamboo flooring was installed in the remaining areas of the addition. Both of these products are considered renewable resources due to their rapid growth qualities.

Roof Sheathing


The roof sheathing is composed of OSB (Oriented Strand Board) with radiant barrier underneath. A radiant barrier system (RBS) consists of a sheet of reflective foil placed next to an air space, the combination of which discourages radiant heat transfer. An RBS properly installed beneath a roof blocks up to 95% of the heat transfer from the roof to the attic insulation, resulting in a cooler living space and less cooling load.

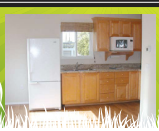
Sheathing


OSB (Oriented Strand Board) sheathing was installed on the exterior of this house. OSB is composed of wood fragments which are compressed together into one material. OSB is made from fast-growing, small-diameter trees that can be harvested from plantations, avoiding the need for cutting old-growth.

Solar


Energy efficiency is the cornerstone of every green home and has the greatest impact. An energy efficient house saves money by reducing utility bills year after year, and provides other valuable benefits. This project used two renewable energy sources: a solar water heater and a photovoltaic system. The solar water heater is a cost effective way to generate hot water for the home using sunshine - it's free. The photovoltaic system uses natural light energy to produce electricity for all uses within the home.

Finished Product




Conventional building construction consumes large quantities of wood, water, metals, fossil fuels and other natural resources. Thorough management of this construction project made a big difference in the amount of avoidable waste and use of natural resources. With careful planning you too can make a big difference by choosing green building products and practices. Stop by the counter and ask us about green building, we would love to help you.