Things That Make You Go Green.

ROOF COVERINGS
More durable roof coverings such as steel and fiber cement reduce the frequency of roof replacement. Lighter colors absorb less heat, reducing cooling costs in warm climates. Now, solar roofing products integrate asphalt shingles, standing-seam metal roofing, and slate or concrete tiles.

WINDOWS
Energy-efficient windows incorporating advanced technologies like low-emittance (low-E) glass coatings, gas filler between layers, and composite framing materials keep heat inside in the winter and outside in the summer.

VINYL SIDING
Vinyl siding on exterior walls saves money on installation and maintenance; fiber-cement siding is termite- and water-resistant and warrantied to last 50 years.

INSULATION
Increasing the amount and R-value of insulation is a cost-effective way to save energy and help reduce heating and cooling bills, which account for at least half of energy use in the home. Sprayed insulation made of foam, cellulose or wool is an alternative to traditional glass fiber batting.

PASSIVE SOLAR
Incorporating passive solar design features like large, south-facing windows helps heat the home in the winter and allows for increased natural daylighting.

LANDSCAPING
Xeriscaping, or using native plants, significantly reduces the need for watering, fertilizers and herbicides.

ENGINEERED WOOD
Oriented strand board (OSB) is an engineered wood product that does not require large trees for its manufacture. It is resource efficient and enhances durability and is used to sheathe roofs and walls in 75 percent of new homes.

LANDSCAPING
Tree preservation reduces landscaping and future energy costs and helps provide winter wind breaks or summer shade. Additional landscaping improves the environment even more: One tree can filter 60 lbs. of pollutants from the air each year.

UTILITY FIXTURES
New toilets have redesigned bowls and tanks that use less water, but function more efficiently than first-generation low-flow models. Some use pumps for supplementary water pressure. Advanced shower and sink faucet aerators provide the same flow regardless of pressure to reduce water use and the energy required to heat it.

RECYCLED PLASTIC
Recycled plastic lumber and wood composite materials reduce reliance on chemically treated lumber and durable hardwood for decks, porches, trim and fencing.

APPLIANCES
The energy efficiency of refrigerators and freezers has tripled over the last three decades because they have more insulation, advanced compressors, better door seals and more accurate temperature controls. Front-loading washers use about 40% less water and half the energy of conventional models. Energy Star®-rated appliances save an average of 30 percent over standard models.

FACTORY-BUILT COMPONENTS
Factory-built components including trusses and pre-hung doors allow more efficient use of raw materials, making the most out of every piece of lumber. These products eliminate the need to cut wood at the jobsite, further reducing waste.

ENTRYWAYS
Covered entries at exterior doors help to prevent water intrusion, reducing maintenance and enhancing durability.

HVAC SYSTEMS
Selecting more efficient, correctly sized heating, cooling and water-heating equipment saves money. Tankless water heaters provide hot water on demand at a preset temperature rather than storing it, which reduces or eliminates standby losses. Geothermal heat pumps work with the Earth's renewable energy and can also heat water.

FOUNDATIONS
Foundations should be as well insulated as the living space walls for efficient home energy use and enhanced comfort, particularly if the basement is used as a family room or bedroom.

FLOORING
In addition to natural wood, flooring choices include low-VOC (volatile organic compounds) carpets for better indoor air quality, laminates that successfully mimic scarce hardwood, and linoleum, a natural product making a design comeback.

Source: National Association of Home Builders
Illustration: Rick Vitullo

Building Green Since 1984.

Ainslie Group

Green Building: What it is and Why it matters

"Green building" is the latest media buzz in the construction industry. As professional builders, we at Ainslie Group welcome the attention brought by this important topic. We take it though, with some reservation, because true green building is a far more complex issue than that portrayed in the media. News spots and magazine articles usually focus on insulated windows, roof-mounted solar panels, high-efficiency furnaces, or recycled flooring.

Certainly, those products provide measurable benefits in terms of energy savings and improved use of natural resources, but genuine green building is much more complex.

A Green Builder uses a systematic approach to design, construction, and on-going operational durability, in which the sum of the benefits are far greater than the individual components.

A Green Builder also knows how to personalize the green building approach to address each homebuyer's needs and budget. They must carefully balance the value that the client places on the benefits of green building, with other available choices that have been proven performers for new home construction.

It is true that all homes (and all buildings) leave an environmental "footprint." The materials used in new construction come from natural resources, such as trees, metal ores, even oil.

The important goals of green building are to reduce the amount of natural resources required to build a house, and then lessen the amount of energy used by both the home and its occupants. Energy efficiencies achieved over the life of the home further reduce the natural resources needed to produce electricity and natural gas as future energy sources.

To achieve those goals, we look for building materials, products, and systems that make the best use of every natural resource harvested. They must perform better than the traditional products utilized by most other builders.

For example, an engineered beam uses smaller, fast-growing trees, and twice as much of each log can be utilized compared with a comparably sized "glue-lam" beam created using traditional methods in a sawmill. An engineered beam, which resists warping better, is also designed to span longer distances, which can virtually open up interior spaces.

The structural envelope is one of the most important areas to apply “Green” expertise. Building a house that is free of even the smallest gaps provides minimal air infiltration, which prevents wasting energy and increases overall resource efficiency.
Various green building certification programs are now available to help builders create more sustainable and resource-efficient homes. As we review them, however, we often find that our advanced building practices, developed over the years, actually exceed the standards.

This is good news for Ainslie Group clients and owners because it means we're already providing a high-performance home – i.e., a home with many green features – without adding to the existing cost or price. Of course, a client may choose to add additional features as budget, needs, and passion for the environment dictate.

With a systematic approach to sustainable or green building, we can build a new home that not only leaves a small environmental footprint, but also delivers convenience, comfort, safety, and a high level of value for its owners.

At Ainslie Group, we have been learning, developing and improving on these technologies for over 25 years, and will continue to “tighten the envelope” for each and every home we build!

Jeff, John, Ken, Greg & Woody