



AURORA CUSTOM HOMES LAUNCHES GREEN BUILDING DIVISION WITH ULTIMATE GREEN HOME IN PONTE VEDRA

PONTE VEDRA BEACH, Florida – On the heels of receiving Certified Green Professional designations from the National Association of Homebuilders, the team at Aurora Custom Homes has launched its new green building division. The first project on the custom builder's list is a home currently under construction in Ponte Vedra, Fla., which is being built to receive LEED®, Green Built Home of Florida and Energy Star certifications.

“We began construction on this home in March and, together with the owner, will implement the most effective green building practices and products to ensure it is energy efficient and sustainable,” said Michael Lenahen, president of Aurora Custom Homes. “It is our goal to build a home that reflects the owner's eco-sensitive lifestyle and desire to live with minimal impact to the surrounding environment.”

One of the first material selections chosen toward reaching green certifications was the use of insulated concrete forms (ICF) for the exterior walls of the home. The nine-inch wide polystyrene building blocks are filled with concrete and reinforcing steel rods to provide superior strength and insulation value to the home while reducing the demand for forested wood products. On the construction site, Aurora Custom Homes has initiated a full-scale recycling system, which includes multiple dumpsters compartmentalized to recycle drywall, cardboard, plastic, metal, wood and concrete. According to Lenahen, the recycling program will reduce up to 80 percent of the cost of waste removal from the jobsite while lessening the impact on the county landfill.

The concept for the eco-friendly home began two years ago when owner Robert Hart contacted Aurora Custom Homes to build a sustainable, environmentally friendly home that would be energy efficient while limiting the use of natural resources. Hart is the founder and former CEO of Globeleq, an operating power company solely focused on providing clean, reliable and affordable electricity to the emerging markets of Africa, the Americas and Asia. Hart and his wife currently reside in Houston, Texas, but will relocate to Ponte Vedra when their new home is complete in 2010.

“I have been in the energy business for more than 30 years and my philosophy has always been to put ‘making a difference’ ahead of ‘making a profit,’” Hart said. “That notion included making a positive difference in the lives of the people who live in the communities we served, as well as leaving the planet a little better as a result of our

investment and operation. Now that I am retired, a cutting-edge sustainable home seems a good way to continue that philosophy.”

To be certified as a green built home from LEED®, Green Built Home of Florida and Energy Star, the Hart’s residence must contain critical components that make it energy efficient and sustainable. As construction of the home progresses, the team at Aurora Custom Homes will include many of these green building products and techniques, including:

- Photovoltaic solar cells integrated into the roof tile design to generate electricity for the home.
- Spray foam insulation on the underside of the roof sheathing to reduce heat in the attic while minimizing the energy demand of the heating and cooling system.
- Insulated, impact-resistant, low “E” windows to provide the necessary air barrier insulation and window tinting to reduce heat transfer through the exterior walls.
- Geo-thermal water-to-air heat pumps to make use of cool well water for the air conditioning system.
- Dual-speed air handlers to provide energy to power up the heating and cooling units for circulating conditioned air.
- Energy recovery ventilators (ERV) to provide fresh air exchange within the home.
- Heat recovery units to recapture heat generated by the A/C condensers to supply hot water to the water heater tanks, reducing the energy required to make cold water hot.
- Insulation around hot water pipes to minimize the heat loss of exposed pipes.
- Use of a closed loop plumbing system with a re-circulating pump to deliver hot water more quickly to remote areas of the home while reducing the typical waiting time for hot water.
- Dual-flush toilets that use only the necessary amount of water to flush.
- Energy Star appliances that are rated for efficient use of electricity while in operation.
- Power distribution system in the garage capable of charging electric powered cars.
- Motion sensors and timers to operate exhaust fans in all bathrooms, reducing humidity.
- Home automation control system to program certain essential energy-generating devices to operate only when the home is occupied during peak hours.
- Rain water collection into an underground cistern for use in irrigating the heat tolerant native plantings and ground cover.
- Concrete paver driveways and patios in lieu of poured concrete to allow percolation of water into the ground, reducing the water run-off into the storm drainage system.

“Every product and technique used in this residence will allow us to build a truly green, sustainable home that will increase the air and water quality within the home while also improving the quality of life for its occupants,” Lenahen said. “I encourage others to likewise consider taking steps toward using resource-efficient or recycled building materials and devices that will lead to lower maintenance costs and less dependency on the home’s electrical usage.”