



# BEST IN SHOW RESIDENTIAL REMODEL

## FLORIDA HIGH-PERFORMANCE GREEN HOUSE

“The Florida High-Performance Green House,” consultant and homeowner Paul Shahriari says, “is a unique learning opportunity for all involved. We are excited to share our project with the public so that other folks interested in greening their homes can evaluate what strategies might work for them.”

The focus for this project is on the cost/benefit of green building. First, the costs and lifecycle benefits of every major element of this home were analyzed. That analysis is available on the project Web site ([www.flgreenhouse.com](http://www.flgreenhouse.com)). Manufacturers and suppliers of products tied to lifecycle savings will be featured in both the individual case study elements as well as a part of the overall green financial strategy of this project.

In addition, all the lifecycle costs/benefit analysis that were done during design and construction phases of this project, the Shahriari family will track operating costs for period of three years and post them to this Web site for visitors to see. “We really wanted to show the true operational benefits of building green to the residents of Southwest Florida,” said Shahriari.

The major elements of this home were broken up into easy-to-follow green elements. The five elements are:

- Energy
- Water
- Healthy Home
- Green Products/Materials
- Smart Simple Sustainable

Shahriari’s wife played the role of interior designer for this project. The team at Coem SpA did an amazing job providing a wide variety of flooring solutions that exceeded both the design requirements as well as the green product drivers on this project. The Shahriari family believes that the longevity of the design of these products paired with their long-term performance in the home will be a major portion of the sustainability story of this project. They wanted this project to be a good example of Smart Simple Sustainable decision making.

Shahriari has chosen to evaluate certification with five of the major green building certifications systems for this home:

- USGBC LEED for Homes
- NAHB Green Homes
- FGBC Green Homes
- Energy Star
- REGREEN

**COMPANY:** Coem SpA (Ceramiche Coem and Ceramica Fioranese)

**PROJECT LOCATION:** Cape Coral, FL

### PROJECT TEAM MEMBERS:

**Green Consultant:** Paul Shahriari

**Architect:** Rob Andrys

**Builder:** Shawn Harvey

### CERTIFICATIONS:

Nu\_Travertine and Quartz products are third-party certified by Certiquality.

### USE OF TILE/STONE:

As a green product, the Nu\_Travertine line is chosen for all the main floor (about 3,300 sq. ft.). This fruit of Ceramica Fioranese constant design evolution process developing superior know-how in terms of digital technology – immediately proves to be a truly beautiful stone, as authentic as if it had just been extracted from the quarry. The aim of the patent was to register the 21 faces of Nu\_Travertine in both one and three dimensions in order to afford true exclusivity to this design that has been studied and produced using digital pigment technology (recycled pre-consumer content >42.5%).

On the pool deck and outdoor lanai (about 750 sq. ft.), the Quartz line from Ceramiche COEM was chosen. The design and style of the tile complemented the ceiling details and provided a warmth to the space. Since this area was going to be wet regularly, the slip resistance provided by the texture will make for a very functional floor. Quartz was a perfect solution for external use. Its resistance to abrupt temperature changes, hardness, resistance to frost and to friction gives it durability in residential buildings for the outdoor and special environments like pool decks and other humid situations (recycled pre-consumer content >40%).

Both products contribute to LEED requirements.



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THE ULTIMATE TILE + STONE EXPERIENCE<sup>SM</sup>  
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The family tracked every major decision in this project and have all the documentation prepared for review. They moved into this home in November 2010 and are happy to see the actual performance data now coming in. They will track the actual performance data and general livability of this home for a year before submitting all the documentation for certification. The family strongly believes in the need to have real data on how the house is doing with energy, water, indoor environmental quality and maintenance before submitting to the various organizations for project certification.

Green building certification is an important step for owners looking to ensure that their project team delivers what they have promised. Third-party certification of a project provides the structure and rigor that is needed for the highly complex world of real estate, design and construction. Green washing has become very prevalent throughout the marketplace as more and more companies and organizations race to differentiate themselves from the competition.

Shahriari would like to show the public what each one of the rating systems evaluates and how the same project scores within them. During this project, he will provide information on what he targeted, how much time he spent documenting his project, how he thought he scored and how the project actually got certified. A PDF of the project's entire documentation package is available to review. The project team assembled for this project comprises some of the best leaders in their field.

As a green product, Nu\_Travertine line was chosen for all the main floor (see details under Use of Tile/Stone).

On the outdoor lanai, the Quartz line from Ceramiche COEM was chosen (see details under Use of Tile/Stone). The surface is realized by a special Coem HD (High Definition) technology, the result of a sequence of processes and knowledge that involves the entire production cycle: the use of pure raw materials, carefully selected with high aesthetic and technical performance; and the application of digital high-definition graphics with the depth of support built in that can generate a particular three-dimensional effect.

Both products contain recycled content that has been third-party certified. Nu\_Travertine is certified to contain over 42.5% recycled material and is compliant with the strictest of ecompatibility requirements. Once again, beauty and ecology move ahead hand-in-hand and in harmony in a creation by Ceramica Fioranese; the Nu\_Travertine design patent is the official seal of recognition of the efforts made by our research team.

## Judges' Comments:

- "Many aspects of sustainability were considered for this project, including energy, water and green stone materials with high recycled content. This also pursued many different green certification programs."
- "Tile and stone were creatively incorporated into this project, which targeted almost all of the major residential green building standards and rating systems. Its prioritized focus on the LCA benefits of the chosen building materials was also impressive."



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