Located in Melbourne, Florida, this revised St. Croix model is LifeStyle Homes' first zero energy home.

**Builders Challenge**
Recognizing Energy Leadership in Homebuilding

**High Performance Builder Spotlight**
LifeStyle Homes
Zero Energy Home (ZEH) – St. Croix, Tralee Bay

ZEH St. Croix – Tralee Bay Statistics
2,390 square feet, 4 bedroom, 3 bath, pool

**Performance Features**
- Home Energy Index (HERS)/EnergySmart Home Scale\(^{\text{\texttrademark}}\) (E-Scale) = -6
- Annual Energy Use ‘without pool’ = -$146

**Thermal Shell**
- Flat slate tile roof (medium color, 0.75 solar absorptance, custom attic venting ratio 0.01)
- R-38 attic insulation
- Fi-Foil® R-7 interior wall insulation w/light color exterior walls
- Low-E double pane ENERGY STAR® windows (U-value 0.60, SHGC-0.35)
- 50% tile, 50% carpet flooring

**Airtightness & Indoor Environment Quality**
- Tight ducts Qn out= 0.025 (total 4.74% loss)
- Infiltration rate (ACH50 = 4.36, CFM(50) of 1738)

**HVAC**
- SEER 14, 3.5 ton heat pump
- Programmable thermostat

**Renewable Energy**
- 8.0 kW PV system
  - 60 panels at 202 degrees w/2500 PV power inverter
  - 100 panels at 112 degrees w/4800 PV power inverter
- Solar hot water system w/PV powered circulating pump

**Efficient Appliances**
- 100% compact fluorescent lighting
- All ENERGY STAR® appliances
 Builders Challenge

LifeStyle Homes completed its first zero energy home in August 2010. Final inspection and testing of the home resulted in a HERS Index of -6, exceeding the Builders Challenge level of performance.

“This is a bold step for our company continuing the commitment made by Larry Hufford, one of our founding partners, to press forward as fast as possible toward his personal dream of building homes that power themselves.”

- JAKE LUHN, Manager of Marketing and Sales for LifeStyle Homes

US Department of Energy Builders Challenge

DOE has posed a challenge to the homebuilding industry—to build 220,000 high performance homes by 2012. Homes that actually qualify for this Builders Challenge must meet 70 or better on the EnergySmart Home Scale (E-Scale). The E-Scale allows homebuyers to understand—at a glance—how the energy performance of a particular home compares with others. Through the Builders Challenge, participating homebuilders will have an easy way to differentiate their best energy-performing home from other products in the marketplace and to make the benefits clear to buyers. The figure below shows a sample E-Scale for LifeStyle Homes’ zero energy house. Note that the HERS Index and annual projected energy cost for this home do not include a pool. If a pool were to be added, it would lead to positive energy cost. The E-Scale is based on the well-established Home Energy Rating System (HERS) Index, developed by the Residential Energy Services Network. To learn more about the Index and HERS Raters visit www.natresnet.org.

Contact Information

For more information on this project contact:

Building America Industrialized Housing Partnership
www.baihp.org/


Florida Solar Energy Center
Janet McIlvaine
1679 Clearlake Road
Cocoa, FL 32922
direct: (321) 638-1434
fax: (321) 638-1439
e-mail: janet@fsec.ucf.edu
www.baihp.org

LifeStyle Homes
Jake Luhn
Sales and Marketing Manager
4195 W. New Haven Ave., Suite 15
Melbourne, FL 32904
direct: (321) 727-8188 ext. 303
fax: (321) 727-2408
e-mail: jakeluhn@buildingalifestyle.com
www.buildingalifestyle.com

To learn more about the Builders Challenge and find tools to help market your homes visit www.buildingamerica.gov/challenge.