



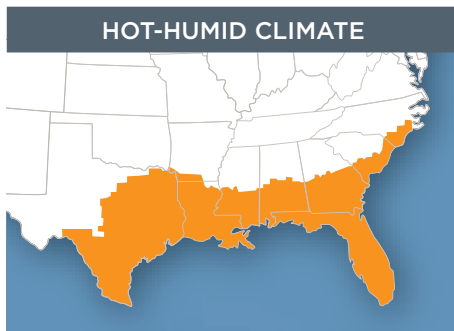
The Capri model (2,054 square feet living area, HERS 60) was the first Builder's Challenge home in Brevard County, FL

Builders Challenge

Recognizing Energy Leadership in Homebuilding

High Performance Builder Spotlight

LifeStyle Homes



BUILDER PROFILE

Builder:

LifeStyle Homes Melbourne, FL

Founded:

1984

Homes Built: 50 homes sold in 2009
25 SunSmartSM homes completed or in progress as of April 2010

Square Footage: 1650 sq ft (single story) to 3200+ sq ft (two-story)

Price Range: Low \$200,000s to Mid \$400,000s

Overview

LifeStyle Homes, a family-owned partnership, has over 20 years of experience in the building industry. Based in Central Florida, LifeStyle is a leading builder in the development of new communities and innovative housing designs. High-performance energy features offer key benefits to homeowners and distinguish LifeStyle from other builders in the area. "Increasing the energy efficiency of our homes offers solid benefits to our customers," states Larry Hufford, one of the founding partners of LifeStyle Homes. "It helps them save on their monthly and annual energy bills, and it is the right thing for us to do in moving our country toward energy independence," he explains.

Our Commitment

In 2008, LifeStyle Homes partnered with the Building America Industrialized Housing Project, BAIHP, with plans to build an energy-efficient community in Melbourne, Florida. Through BAIHP's energy recommendations and options, LifeStyle has taken great strides in accomplishing this goal. Not only has this builder constructed homes that exceed Builders Challenge expectations, but it has also committed to building most homes to a HERS Index of 60 or less. This builder began construction on their first Net Zero Energy home in the Spring of 2010 which sold before it was completed.

Exceeding Expectations

Construction on LifeStyle Home's first Building America Builders Challenge home was completed in April 2009 with a HERS Index of 60. LifeStyle achieved an EnergySmart Home Scale that was 10 points better than required by the Department of Energy's Builders Challenge score.

"Increasing the energy efficiency of our homes offers solid benefits to our customers. It helps them save on their monthly and annual energy bills, and it is the right thing for us to do in moving our country toward energy independence."

LARRY HUFFORD, *Co-founder of LifeStyle Homes*

The First

The BAIHP team participated in LifeStyle Homes' Open House, celebrating the first Builders Challenge home in Brevard County. In 2009, an impressive 50 homes were sold.

SunSmartSM Energy Initiative

The standard LifeStyle Homes’ design was a single story, slab on grade, concrete block home. This design met the Florida Energy Code and was characteristic of typical Florida homes. An initial energy analysis indicated that the homes had a HERS Index of approximately 100, consistent with the Florida Energy Code at the time. As a result, the BAIHP team submitted recommendations and options that would lower the energy use and incorporate solar technology. Additionally, the team worked with the builder on marketing and integrating the new details in their construction process smoothly.

We are extremely proud of our collaboration with LifeStyle Homes,” says Dr. Subrato Chandra, FSEC’s former Building America Program Director. “We look forward to many more of these high-performance Builders Challenge homes being built. We plan to work alongside LifeStyle Homes every step of the way as they work toward our mutual goal of building zero energy homes, which provide their total energy needs from the power of the sun. While that level of energy independence may not be cost effective for all home buyers, the Builders Challenge level is, and we hope that many other builders in Brevard, across Central Florida, and indeed across the nation, will join the ranks of the Builders Challenge.”

LifeStyle’s commitment to high-performance homes led to the development of the SunSmartSM product line. SunSmartSM is an exclusive combination of better building techniques and higher-performance components that will deliver improved indoor air quality, comfort, durability, and energy cost – a fundamental goal of the Building America systems engineering process.



The Palm Bay Capri model, shown here before its completion in 2009, is LifeStyle Homes’ SunSmartSM Energy Initiative demonstration home.

LifeStyle Homes’ SunSmart SM Energy Package	
<ul style="list-style-type: none"> High-efficiency SEER 14 – HSPF 8.2 heat pump AC system 	<ul style="list-style-type: none"> Solar powered low maintenance water heating system
<ul style="list-style-type: none"> Whole house passive outside air ventilation system with damper and filtration 	<ul style="list-style-type: none"> R-38 ceiling insulation Double-pane Low-E windows throughout
<ul style="list-style-type: none"> Heat reducing radiant barrier under roof decking 	<ul style="list-style-type: none"> ENERGY STAR[®] certified appliances
<ul style="list-style-type: none"> Slight positive interior air pressure to minimize infiltration of outside air 	<ul style="list-style-type: none"> Solar powered thermostat-controlled attic air ventilation fan coupled with extensive air sealing of ceiling drywall
<ul style="list-style-type: none"> Air handler installed in a dedicated temperature -controlled space 	<ul style="list-style-type: none"> Duct system sealed with long-life mastic and fiberglass mesh
<ul style="list-style-type: none"> Independently tested and certified. All homes exceed qualifications for U.S. Department of Energy’s Builders Challenge program 	<ul style="list-style-type: none"> High-capacity kitchen and bath exhaust fans ducted to outside
<ul style="list-style-type: none"> Use of compact fluorescent lighting throughout 	<ul style="list-style-type: none"> High performance exterior wall insulation with double-furring strips
<ul style="list-style-type: none"> Concrete block construction with no penetrations for electrical boxes 	<ul style="list-style-type: none"> Wind and rain resistant window and door installation details

SunSmartSM Energy Features

Through BAIHP's valuable systems research, LifeStyle developed the SunSmartSM energy package. This product line features key energy improvements to ensure better air quality, home durability, comfort, and equipment reliability in homes.

SunSmartSM homes include solar equipment for attic ventilation and water heating. Solar powered attic ventilation fans provide increased air movement through the attic space when attic temperatures would be at their highest.



Conditioned handler unit closet access from garage

This feature improves AC performance and efficiency while maintaining overall comfort in the home. Solar powered water heaters reduce energy costs, providing a cost-effective alternative to other heating systems.

Another SunSmartSM energy feature is the placement of the air handler

The air handler is installed in an air sealed and insulated closet accessible from the garage, providing a temperature-controlled environment to maintain indoor air quality standards.



Solar powered attic fans

unit (inside component heating/air system). Located in the garage, the unit is air sealed and insulated to the conditioned temperature of the home. With this placement, the unit can function in a temperature-controlled environment and maintain indoor air quality standards. To further ensure a healthy interior environment through whole house ventilation, outside air is pulled into the base of the air handler unit. This air is pulled through a filter grill assembly located in the ceiling or



Double battens on block wall allows electric installation without creating penetrations in block



Active solar water heater with (PV) pump

rear the porch of the homes for easy maintenance.

Additional features in LifeStyle's SunSmartSM homes are extensive air sealing with long life caulk and foam, comprehensive placement of drainage planes, joints and connections and attention to window and door openings. All of these features, including properly installed insulation (no gaps, voids or compression - grade I) in the walls and attic, promote home durability and energy efficiency.



RESNET Grade 1 insulation on frame walls as required by the ENERGY STAR[®] Thermal Bypass Checklist



LifeStyle Homes launched a new product line to promote their new high performance specifications



Larry Hufford and Jake Luhn (on right) with Builders Challenge certificate at community open house in April 2009



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www1.eere.energy.gov/buildings/building_america/publications.html

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LifeStyle Homes’ solid marketing approach and superior home construction establishes it as one of the leading builders in the area. While sales in the construction industry declined, LifeStyle increased its sales from 2008 to 2009 by 92%! This builder began construction on their first Net Zero Energy home in the Spring of 2010 which sold before it was completed.

BAIHP

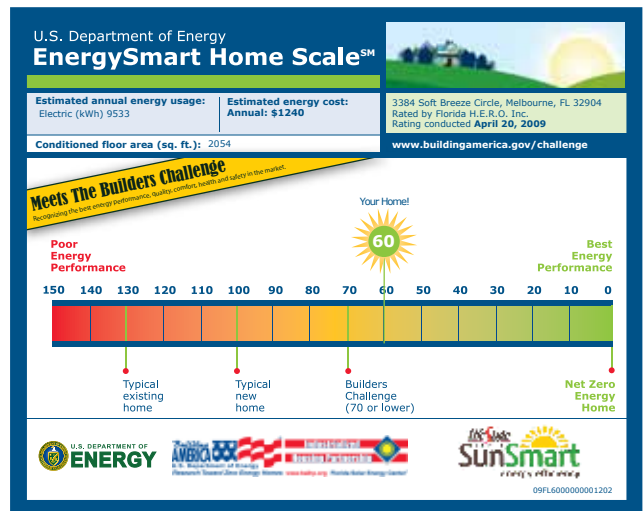
In 2009, BAIHP assisted six of its Florida industry partners in building homes to an E-Scale score of 60 or less. These builders, including LifeStyle Homes, achieved a standard met by fewer than one in every 1,000 new homes built in Florida since 2007. The BAIHP team continues to offer its assistance to current and future partners who plan to achieve this high-performance home energy goal.

U.S. 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 homes from other products in the marketplace and to make the benefits clear to buyers.

The figure at right shows a sample E-Scale for LifeStyle Homes’ SunSmartSM house. 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.

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



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