



**BuildSmart**  
Helping Florida Builders Build  
Energy-Efficient Homes



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[Terry Yeager](#)

## Fact or Fable

Is a higher (EF) or Energy Factor for a GAMA Rated Water Heater More Efficient?

[True](#) or [False](#)

Contact Your BuildSmart Representative

## Florida's Showcase Green Envirohome™ (FSGE) and Solar Water Heating

In a period of 11 months, Mark Baker and his wife Nonnie Chrystal, suffered the aftermaths of Hurricanes Frances, Jeanne and Katrina. The storms devastated both sides of their families with complete and total loss of three homes, including Mark's mother's home in Indialantic, Fla., and Nonnie's parents' home and sister's home in New Orleans. After suffering through this trauma, Mark, a former member of Greenpeace with 35 years of construction experience, and Nonnie, a 21-year marketing veteran (mostly with Fortune 50 companies), decided to create Florida's Showcase Green Envirohome™ (FSGE).

FSGE, a rebuild of Mark's mother's home, is following 12 major sets of green building guidelines, making it the greenest, most hurricane-hardy home imaginable. The goal: Never file another insurance claim again!

### FSGE has been widely recognized as unique in the home building industry

- Featured in USA TODAY on the two-year anniversary of Hurricane Katrina in an article entitled "Home of the Future is Green from Top to Bottom"
- Promoted on FOX News as the "Greenest House in the World"
- Recently chosen as the exclusive site-built green home to be highlighted in Orlando May 15-18 at Green Earth Expo 2008 – anticipated to be the world's largest sustainable commerce and lifestyles trade show expecting 50,000+ attendees and 600+ exhibitors



FSGE is being rebuilt with leading-edge solar, wind, stormwater management, "green roof," indoor air quality and other materials technologies as a 3,292 square foot "Near Zero-Energy Home" and "Near Zero-Runoff Home™". The installations are designed to be hurricane, flood, fire, mold, termite, impact and even earthquake resistant. FSGE, upon expected completion in early May, will be open to the public at no charge via scheduled walkthroughs for one year. The idea is for the home to serve as a public educational awareness project demonstrating the best building choices and practices available today to help homeowners lessen damage from disasters, lower insurance, energy and water costs, and sustain the environment. For more information, [please visit the web site.](#)

### FPL BuildSmart® Program Partners With FSGE

FSGE has partnered with more than four dozen, public, quasi-public and private sector entities, including Florida Power & Light Co. (FPL's) BuildSmart® program, which is helping builders and homeowners alike construct energy-efficient homes for the future and certifying the energy efficiency of those homes.

### Water Heating Technologies in the Envirohome

FSGE plans to showcase many innovative green technologies. As it pertains to water heating efficiencies, FSGE will be showcasing [AET/Thermafin's solar collectors](#), [Honeywell anti-scalding point-of-use devices](#) at the sinks coupled with American Standard 1.5gpm aerators, and [American Standard's FloWise](#) 1.5gpm showerheads, each with a built-in anti-scalding mechanism.

### AET Solar Collectors Excel

Among all of the safer medium-heat solar water heaters, AET excels for many reasons, as discovered after much research by Florida's Showcase Green Envirohome.

AET solar collectors and mounting hardware were successfully loaded to 102 psf by Miami Test Laboratory and the wind speed that corresponds to 102 psf is 195 mph. Given that FSGE's heavy aluminum, standing seam roof from Englert, Inc. is the first residential home in the United States to be engineered at 175 mph, the uplift resistance of the AET solar collector was of paramount importance due to FSGE's close proximity to the Atlantic Ocean. Although other mounting options prevent roof penetrations for standing seam roofs, they do not have the uplift resistance of AET's mounting hardware. We chose to mount AET's solar collectors onto the garage roof to avoid penetrations into the second story roof over living space, and they were mounted into the trusses with threaded rods instead of lag bolts to further increase uplift resistance.

### For more information

Solar water heating is just a small piece of this dynamic home that FSGE is building here in Florida. For information about FSGE and the AET Solar water heating system, installation and more [please visit their link.](#) and the other web pages listed above in this article.

### Disclaimer

*While Florida Power & Light Company and FPL's BuildSmart program encourages energy efficiency and energy conservation measures in all of their various forms for residential new home construction, we cannot endorse any of the specific claims, companies or web links mentioned in the article written above.*

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