

February 12, 2016

PROJECT SPOTLIGHT: Bay House High-Rise Earns FGBC Certification

Bay House, a luxury condo project in Miami developed by the Melo Group, has achieved the certified Florida Green High-Rise Residential Building designation by the Florida Green Building Coalition (FGBC), after it successfully met the sustainability standards established in the FGBC Florida Green High-Rise Residential Building certification program.



Bay House is located in the East Edgewater area, surrounded by cultural, historic, entertainment, and business districts. It features 165 two- and three-bedroom units ranging from 1,581 to 1,720 square feet. Rich with amenities that include a pool, spa, meditation garden, summer kitchen, fire pit, and cabanas, the project has a 20,000 sq. ft. resort deck and common areas that allow residents to enjoy the elements of nature and outdoor activities.

Energy efficient, tinted, impact resistant, floor-to-ceiling sliding glass doors and windows limit radiant heat gain and enable residences to enjoy the panoramic views. The "Smart Building" advanced technology wiring addresses the needs of a demanding generation requiring high-speed communication, entertainment options, and security.

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The design team used building information modeling (BIM) to optimize the efficiencies related to design, estimating, materials ordering, and construction.

To address energy efficiency EnergyStar appliances were used in both the individual units and common areas, lighting power density within individual units was designed not to exceed 0.8 watts per square foot, and lighting was equipped with automatic timers or occupancy sensors. In addition, light colored paint with a light reflective value (LRV) greater than 50 was used on bedroom and major living area walls to help reduce the need for artificial lighting.

Water conservation approaches included installing drought tolerant plants for 80 percent of the landscape, proper installation and testing of the irrigation system, use of low-flow interior water faucets and showerheads, and use of high-efficiency clothes washers in residential units and common areas. [\[More\]](#)

FHA Cuts Insurance Rates On Multi-Family Mortgages

In an effort to help preserve and increase the amount of affordable, quality rental housing across the country, the Federal Housing Administration (FHA) has announced a multifamily insurance rate reduction designed to encourage capital financing of affordable and energy-efficient apartments. The rate reductions will take effect on April 1, 2016, and will directly impact FHA's Multifamily Housing Programs and properties housing low- and moderate-income families and/or developments installing energy-efficient systems or building within federal energy guidelines. [Read FHA's new Multifamily Insurance Rates.](#)

FHA is also reducing upfront premiums to support the affordable housing and energy efficiency goals stated above and to streamline the premium structure. Upfront insurance rates will be set at 25 basis points for Broadly Affordable and Energy-Efficient properties and 35 basis points for Mixed-Income properties. Upfront premiums for market rate properties that are not energy-efficient will remain unchanged. [\[More\]](#)

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Jessica Knutson
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FHFC Considers Incentives for "Areas of Opportunity"

Florida Housing Finance Corporation (FHFC) held a rule development workshop on Friday, January 29, 2016. As part of that workshop, Florida Housing staff presented information related to identifying "areas of opportunity" where it might incentivize development of affordable housing. The Shimberg Center for Housing Studies at the University of Florida has prepared maps and preliminary analysis of several variables which may help identify areas of opportunity. For now, the analysis is limited to the seven large counties of Duval, Orange, Hillsborough, Pinellas, Palm Beach, Broward, and Miami-Dade. The presentation, maps, and preliminary analysis of the data are now available on the Florida Housing website.

At this time, Florida Housing is not proposing a specific definition of an "area of opportunity" or any particular method of incentivizing development in such areas. The Corporation invites the public to review the materials available on the website and to provide comments and suggestions to help identify areas of opportunity.

[Access the presentation, maps, preliminary analysis, and other materials.](#)

Please direct technical questions about maps and data to [Kevin McCarthy](#)

Please submit comments and suggestions to the individuals listed on the "areas of opportunity" [comment page](#).

Study Shows LEED-ND Fails To Provide Affordable Housing

A study recently published in the Journal of the American Planning Association (JAPA) by Nicola Szibbo, PhD, a planner with the City and County of Honolulu, found that only 40 percent of LEED-ND certified projects included affordable housing. With very little incentive in the credit structure, many developers choose not to include affordable housing, and there are no consequences for doing so.

LEED-ND focuses on three major development

Quick Links

[Join FGBC](#)

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Education Opportunities

**March 22-23, 2016
Florida Water StarSM
Accredited
Professional Training
and Exam**
Winter Haven, FL
[\[More\]](#)

**April 13-14, 2016
FGBC Certifying Agent
Designation Class**
FSEC
[\[Register\]](#)

[Energy Star Webinars](#)

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Calendar of Events

**February 27, 2016
Green Planet Festival**
Ft Lauderdale, FL
[\[More\]](#)

**March 22-23, 2016
Sustainable You
Conference**
Tallahassee, FL
[\[More\]](#)

**April 28, 2016
SWFL Sustainability
Summit**
Bonita Spring, FL
[\[More\]](#)

Certification News

Homes
Registered: 11,869
Certified: 11,793

Commercial
Registered: 40
Certified: 13

High Rise
Registered: 45
Certified: 12

Land Developments
Registered: 62
Certified: 13

categories: smart location and linkage, neighborhood pattern and design, and green infrastructure and buildings. Two optional categories are innovation and regional priority.

Affordable housing is offered as an optional credit, worth 3 points, and is paired with another option to provide multiple housing types, which is also worth 3 points. Overall, affordable housing provides 3 out of a potential 110 points in the system, and it is not required for a project to be certified.

Szibbo's research included statistical evidence, survey research, and structured interviews. She surveyed 114 LEED-ND Accredited Professionals (APs) and conducted 20 personal interviews with developers and other LEED-ND APs. Among the 2009 - 2014 LEED-ND projects reviewed, 60 percent chose to ignore the specific affordable housing credit. [\[More\]](#)

Few Neighborhoods Affordable, Walkable with Good Schools

Across the country, just 14 percent of neighborhoods manage to be at once affordably priced, walkable and near decent schools. And many of those neighborhoods exist in only two cities: Washington and Seattle, according to a new analysis released in January by the real estate brokerage Redfin.

Walk Score®	Description
90–100	Walker's Paradise Daily errands do not require a car.
70–89	Very Walkable Most errands can be accomplished on foot.
50–69	Somewhat Walkable Some errands can be accomplished on foot.
25–49	Car-Dependent Most errands require a car.
0–24	Car-Dependent Almost all errands require a car.

The findings suggest a substantial mismatch between the neighborhoods where people say they want to live and the homes actually available to them.

The analysis examined 170 neighborhoods in 20 cities, comparing home sales and income data with rankings from the organizations Walk Score and

Local Government

Registered: 81
Certified: 59

Recent Certifications

City of Bonita Springs

Location: Bonita Springs
Type: Local Government
Certified: 2/9/16
Score: 53
Level: Gold

City of Delray Beach

Location: Delray Beach
Type: Local Government
Certified: 2/3/16
Score: 39
Level: Silver

Recent Registrations:

Blue Origin

Manufacturing Technology Annex

Location: Merritt Island
Type: Commercial
Size: 26,000 S.F.

FGBC Committee Meetings

Board of Directors

2nd Wednesday
Monthly
3 p.m.

Commercial

1st Tuesday
Monthly
2 p.m.

Education

1st Thursday
Monthly
3 p.m.

High-Rise

3rd Tuesday
Monthly
11 a.m.

Homes

2nd Tuesday
Monthly
2 p.m.

Land Development

4th Wednesday
Bi-monthly
2 p.m.

Local Government

3rd Thursday
Monthly

GreatSchools. Some cities, such as Baltimore, Boston and Philadelphia, contained balanced neighborhoods - where people of different income classes could afford to live - but their schools performed poorly.

Jacksonville was the only Florida city in the rankings and it didn't pass the "walkable" metric for any of its neighborhoods. [[See table](#)]

Homebuyers have long sought high-quality schools. But a rising emphasis on walkability reflects a generational shift. Compared with older generations, millennials, ages 18 to 34, disproportionately prefer walking, according to a survey released in July by the National Association of Realtors and the Transportation Research and Education Center at Portland State University.

Nearly a third of millennials commute to work or school by foot, compared with 13 percent for the post-World War II baby boom generation. [[More](#)] [[Methodology](#)]

TECHNOLOGY UPDATE: Clemson Installs Innovative Lighting Using New LED and PoE Technologies

Using Philips' LED and Power over Ethernet (PoE) technologies, the new intelligent lighting system at the recently opened Watt Family Innovation Center at Clemson University in South Carolina is set to deliver energy savings of around 70 percent.

PoE lighting uses Ethernet cables to power individual light points, meaning that data can be sent to and from the lights. Light point usage and conditions can therefore be monitored, as well as information provided by additional sensors that can be installed in the light fitting. Furthermore, the data capability can provide a greater level of control over LED lighting.

One means of saving energy employed by the system, states Philips, is known as "daylight harvesting." The light points are able to detect how well lit a room is as a result of natural light from outside and to automatically raise or lower their own brightness as required.

The Clemson system tracks data from each light fixture to determine whether or not a room is

10:30 a.m.

Programs & Promotions
3rd Tuesday
Monthly
3 p.m.

Funding Opportunities

[St. Johns River WMD Water Programs](#)

[South Florida WMD Water Programs](#)

[Southwest Florida WMD Water Programs](#)

[FHFC Multifamily Energy Retrofit Program \(MERP\)](#)

Job Opportunities

[APA Florida Job Board](#)

[Green Dream Jobs](#)

[Florida Facility Managers Assn Job Board](#)

[Red Hills Awareness Program Manager](#)
(Tallahassee)

occupied and detect movement using passive infrared sensors, sometimes in combination with ultrasonic sensors. [\[More\]](#)

Nano Membrane Waterless Toilet Turns Waste Into Clean Water, Power

A cheap, easy to maintain, "green" toilet that uses no water and turns human waste into electricity and clean water will be trialed in 2016, possibly in Ghana. Dubbed the "Nano Membrane Toilet" by its creators from Cranfield University, UK, this new approach to managing waste could help some of the world's 2.3 billion people who have no access to safe, hygienic toilets.

The toilet's magic happens when you close the lid. The bottom of the bowl uses a rotation mechanism to sweep the waste into a sedimentation chamber, which helps block any odors from escaping. The waste is then filtered through a special nanotech membrane, which separates vaporized water molecules from the rest of the waste, helping to prevent pathogens and solids from being carried further by the water.

The vaporized water then travels through to a chamber filled with "nano-coated hydrophilic beads", which helps the water vapor condense and fall into a collection area below. This water is pure enough to be used for household washing and farm irrigation.

The residual solid waste and pathogens are driven by an archimedean screw into a second chamber. This part of the design is still being finalized, but the current plan is for the solid waste to be incinerated to convert it into ash and energy. The energy will power the nanomembrane filtration process, with enough left over to charge mobile phones or other small devices.

[\[More\]](#)

NBI Advanced Buildings New Construction Guide Approved As Alternative Compliance for LEED

The U.S. Green Building Council (USGBC) has approved the addition of New Buildings Institute's (NBI) Advanced Buildings® New Construction Guide as a LEED Pilot Alternative Compliance Path (ACP). By following the prescriptive path in the New Construction Guide, projects can earn up to 10 energy points in LEED v4. This approval continues NBI's

presence in LEED as the second Advanced Buildings guide available to earn LEED points, the first being the Core Performance Guide, which is currently referenced in the Energy & Atmosphere sections of LEED 2009 and LEED v4 as an option to meet the Minimum Energy Performance prerequisite. [\[More\]](#) [\[The Guide\]](#)

SURE HOUSE Demonstrates Storm Resistant Construction



Stevens Institute of Technology celebrated the completion of the SURE HOUSE, an environmentally sustainable, resilient house for coastal communities - one that could better withstand a storm the size and force of Hurricane Sandy.

The SURE HOUSE is rated to withstand up to a FEMA 6/7 Zone (+/- 6 feet of water). SURE HOUSE also uses a rainscreen system on its façade. A rainscreen is where the siding stands off from the moisture-resistant surface of an air barrier applied to the sheathing to allow drainage and evaporation.

A typical floor structure of either TGI wood joists or standard dimensional lumber wood beams are solid. Therefore, when flooded, water and moisture does not air out, leading to mold, or even worse structural damage. SURE HOUSE's solution for this is to use an open web wooden truss floor system. If there is any sort of water penetration into the home, the floor system has the ability to allow for airflow which minimizes the chance of long term rotting, mold damage, and issues to the structural integrity of the home.

The finished interior of a typical coastal home would consist of carpet/wood flooring, and sheetrock walls. If these become wet, they have the potential to hold moisture and create mold. Two unique floor finishes

are incorporated into SURE HOUSE to allow for water contact. The primary flooring in the living room is a panelized cork board, which is extremely durable and water resistant, and the second is a vinyl tile system, which is also extremely water resistant, as well as made from recycled materials.

In addition to the storm resistant construction, SURE HOUSE uses 90 percent less energy than a typical home, is fully solar powered, and can act as a resilient energy hub after a natural disaster. [\[More\]](#)

Sustainable YOU Conference - March 22-23

Sustainable YOU 2016, hosted by the city of Tallahassee, will feature renowned keynote speakers Storm Cunningham, Julian McQueen and David Eichenthal, along with 18 sessions in three tracks: Reviving Natural Systems, Reestablishing Social and Human Capital, and Building a Resilient Economy.

- **Storm Cunningham**, Publisher, Revitalization News. Storm Cunningham is a community turnaround specialist, and the world's thought leader on community revitalization and natural resource restoration.
- **David Eichenthal**, Managing Director, Public Financial Management, Inc. David Eichenthal will provide conference-goers with an overview of the ongoing transformation of Chattanooga, TN, to a resilient community.
- **Julian McQueen** serves as Director of Education and Outreach for Green For All. His career is fueled by a strong belief in authentic movements that are powered by people.

The conference will address major policy issues as well as sustainability best practices that individuals can implement in their businesses, homes and communities. A broad range of topics will cover edevelopment best practices, the tiny house movement, creative reuse, and habitat restoration in your own yard. The conference will also feature a special Tactical Urbanism presentation and an evening reception at "Lake Anita at Under the Over." [\[More\]](#)

The Many Challenges of Healthcare Construction

One of the challenges within healthcare construction is the rapid advancement of technology. From the

ground up, most hospital projects take several years. The conceptual planning of these projects—from jurisdictional approval processes needed for the healthcare environment to the actual construction—is probably one of the slower, albeit extremely necessary parts of the construction process. Between the time of the project's inception and actual construction, you have this rapidly changing technology, so you'll start to see that equipment you had planned for at the beginning of the process is now outdated. In order to remain on the cutting edge, you have to be flexible and adjust to new products on the market, as they can provide even better healthcare for patients. [\[More\]](#)

Kissimmee Prairie Preserve State Park Named Florida's First Dark Sky Place

Dark skies have rapidly vanished in the eastern United States, leaving very few locations relatively untouched by the effects of artificial light at night. The need to identify and preserve these places is increasingly important for everyone dependent on the natural nighttime environment, from wildlife to stargazers.

The International Dark-Sky Association (IDA) has recognized the first such protected dark location in the U.S. state of Florida. Today, we announce the designation of Kissimmee Prairie Preserve State Park as an International Dark Sky Park. [\[More\]](#)

Detect Drips Inside and Out for Fix a Leak Week

Communities across the country will join WaterSense to crack the case of household leaks for the eighth annual Fix a Leak Week **March 14 through 20, 2016**. WaterSense partners are encouraging Americans to become leak detectives to reduce the more than 1 trillion gallons of water lost each year by homes across the country due to leaks indoors and out. You can be a leak detective and save more than 10,000 gallons of water per home on average by taking three simple steps: check, twist, and replace:

Check your water meter before and after a two-hour period when no water is being used. If the meter changes at all, you probably have a leak. Check your sprinkler system for winter damage. You can also put a few drops of food coloring in the toilet tank; wait 10 minutes before flushing, and if color appears in the

bowl, you have a leak.

Twist faucet valves, tighten pipe connections, and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow.

Replace old and leaky plumbing fixtures with WaterSense labeled models, which are independently certified to use 20 percent less water and perform as well or better than standard models. You can also replace irrigation clock timers with WaterSense labeled controllers that tell your sprinkler when and how much to water based on local weather conditions.
[\[More\]](#)