

April 29, 2015

PROJECT SPOTLIGHT: Turning Leaf Construction



Project: **2615 Oglesby - Winter Park**
 Certified 3/3/15 #9591
 Score: 141
 Level: Silver
 HERS: 53
 SF: 3,774

This impressive two-story lakefront home built by Turning Leaf Construction and designed by Dirk Arace of Arace Designs, both located in Longwood, features a spacious and easy-living design constructed with advanced building materials that set this home apart from the others through its superior energy efficiency. The home received a silver level "Florida Green" certification through the Florida Green Building Coalition.

Serving as FGBC Certifying Agent, Tracy DeCarlo, owner of One Stop Green Home Certification in Apopka, guided the project through the certification process and helped its green team optimize green strategies.

Earning the maximum points in the Energy category, this home has a superior "shell" using Fox Blocks insulated concrete form (ICF) exterior walls, Energy Star windows and doors, and open-cell spray-foam insulation (5 inches) under the roof. This fortress of

In This Issue

[PROJECT SPOTLIGHT:
Turning Leaf Construction](#)

[Georgia's LEED Ban Awaits
Governor's Signature](#)

[Enterprise Green
Communities Releases 2015
Update](#)

[Solar Ballot Petition Goes to
Supreme Court](#)

[Florida's Largest Solar
Project Approved](#)

[Climate Resilience
Recommended Actions
Released by White House
Task Force](#)

[Do Green Building
Certifications Make Financial
Sense?](#)

[Irwin to Lead Water
Conservation Initiative At
St. Johns River Water
Management District](#)

[Strong Future Forecast for
Renewable Energy](#)

[OUT OF THE BOX: Eco-
Friendly Designer Grows
Trees into Ready-Made
Furniture](#)

[Xeriscaping Cuts Properties'
Water Use, Maintenance](#)

[Mushroom Based Building
Materials Are Here](#)

[Water Treatment Chemicals
Standards Helps
Governments & Industries
Measure Environmental
Impact](#)

[Building Science - Windows
Can Be A Pain](#)

[10 Community Design
Trends](#)

[Shaheen and Portman
Renew Efforts to Create
National Energy Strategy](#)

[Shelton Group Survey
Shows IAQ Gaining as
Sustainability Priority](#)

thermal efficiency limits energy consumption and scored a 53 HERS.

Function and efficient operation were key factors in the indoor design. All paints, stains and adhesives used, as well as the hardwood and carpeted floors, met the low VOC standards. Porcelain tile in the wet areas (bathrooms, laundry room) was used for easy care and control of any overflow water.

The windows and doors allow for natural daylighting while the evening hours find the home illuminated using LED fixtures throughout.

The indoor environment is maintained with three high-efficiency HVAC systems each at 16 SEER and utilizing introduction of outside fresh air that is conditioned before it is introduced into the indoor environment.

[\[More\]](#)

Georgia's LEED Ban Awaits Governor's Signature

A Georgia bill that would effectively ban state-owned buildings from seeking LEED certification is waiting for the governor to sign it into law.

The bill requires state buildings that seek any green building certification must use a program that allows Georgia lumber. LEED uses a forestry standard that doesn't include most wood from Georgia. Bill sponsor Sen. Dean Burke, R-Bainbridge, stated LEED "discriminates against 97 percent of the wood" grown in state.

In other LEED related news, earlier this month the US Green Building Council said it will now recognize energy and water requirements from the Living Building Challenge green building system within the LEED green building program.

This means that projects achieving the energy and water requirements in Living Building Challenge will be considered as technically equivalent to LEED. [\[More\]](#)

Enterprise Green Communities Releases 2015 Update

Enterprise Community Partners has released its 2015 Enterprise Green Communities Criteria. For the first time, the Criteria include resilient design features to

[Green Homes Are So 2010: The Future Is Wellness Communities](#)

[Education Opportunities](#)

[Calendar of Events](#)

[Certification News](#)

[Recent Certifications](#)

[FGBC Committee Meetings](#)

[Funding Opportunities](#)

[Job Opportunities](#)

[FGBC Welcomes New Members](#)

Quick Links

[Join FGBC](#)

[GreenTrends](#)

[Join Our Mailing List!](#)

Articles of Interest

[10 Community Design Trends](#)

[Shaheen and Portman Renew Efforts to Create National Energy Strategy](#)

[Shelton Group Survey Shows IAQ Gaining as Sustainability Priority](#)

[Green Homes Are So 2010: The Future Is Wellness Communities](#)

Education Opportunities

October 13-14, 2015
FGBC Certifying Agent Destination Class
FESEC
[\[Register\]](#)

[Energy Star Webinars](#)

[Building America Webinars](#)

Calendar of Events

May 14-16, 2015
AIA Annual Convention
Atlanta, GA
[\[More\]](#)

May 27-30, 2015
FL City & County Mgmt Assn (FCCMA)
Loews Royal Pacific
Orlando, FL
[\[More\]](#)

maintain livable conditions during climate change, natural disasters, power loss, and other interruptions in available services. And, they now harness the power of design to improve residents' health through new mandatory "Active Design" criteria including simple, cost-effective measures like improving stairwell access and visibility. Low-income communities experience disproportionately high rates of obesity, heart disease, diabetes, and mental health issues. Merely two minutes of daily stair-climbing burns enough calories to prevent annual weight gain, while prominent stairwells encourage social interactions, which can improve mental health. [\[More\]](#)

Solar Ballot Petition Goes to Supreme Court

A ballot petition that would allow those who generate electricity from the sun to sell the power directly to other consumers moved to its final legal hurdle on April 24th with a request by Florida's attorney general for Supreme Court review.

If the court determines the petition meets legal requirements, the initiative still must win 683,149 signatures by Feb. 1 for inclusion on the 2016 ballot. Currently, there are 85,505 validated signatures.

If the proposed ballot measure passes, business or property owners could produce up to 2 megawatts of solar power and sell it directly to others, such as tenants, without having to go through a utility. [\[More\]](#)

Florida's Largest Solar Project Approved

State regulators have approved a deal that will create Florida's largest solar project. Gulf Power asked the state Public Service Commission to allow the utility to purchase power from three proposed solar plants under development by Gulf Coast Solar Center, a subsidiary of HelioSage LLC.

The project includes solar photovoltaic plants totaling 120 megawatts at military bases in the Panhandle.

- 50-megawatt facility at Pensacola's Saufley Field;
- 40-megawatt facility at Navarre's Holley Field;
- 30-megawatt plant at Fort Walton Beach's Eglin Air Force Base.

June 2-3, 2015

The Water Expo

Miami Airport Convention Center
Miami, FL

[\[More\]](#)

Certification News

Commercial

Registered: 34
Certified: 13

High Rise

Registered: 38
Certified: 8

Homes

Registered: 10,177
Certified: 9,772

Single-Family: 7,506

Multi-Family: 2,266

Land Developments

Registered: 61
Certified: 13

Local Government

Registered: 76
Certified: 56

Recent Certifications

Gables Ponce Phase II

Location: Coral Gables

Type: High Rise

Certified: 4/8/15

Score: 67

Level: N/A

Recent Registrations:

Palmetto Promenade

Location: Boca Raton

Type: High Rise

Size: 453,240 s.f.

Lexington Court

Location: Orlando

Type: High Rise

Size: 249,858 s.f.

Palm Coast Landing

Location: Palm Coast

Type: High Rise

Size: 45,033 s.f.

St. Lucie County

Location: Fort Pierce

Type: Local Government

Size: 275,000

With the combined 120 megawatts of output - enough power for 18,000 homes - the solar facilities are expected to be operational in late 2016. [\[More\]](#)

Climate Resilience Recommended Actions Released by White House Task Force

The State, Local and Tribal Leaders Task Force on Climate Preparedness and Resilience established in 2013 by Obama Executive Order 13653 has released its recommendations to the President.

The Task Force organized its recommendations into seven cross-cutting themes: resilient communities; infrastructure resilience; natural resources resilience; human health and population resilience; climate-smart hazard mitigation, disaster preparedness and recovery; the economics of resilience; and building capacity for resilience. [\[More\]](#)

Do Green Building Certifications Make Financial Sense?

As Georgia moves closer to enacting a law that would effectively ban state-owned buildings from seeking LEED certification, Valerie Molinski, sustainability director at Vocon, a Cleveland architecture and interior design firm, makes the business case for green building certification.

Basically it boils down to cost. Green buildings save money on operating costs, they sell for higher prices and they have a better return on investment than less efficient buildings. Molinski cites a McGraw Hill Construction study that found the ROI for green building owners improved by more than 19 percent on existing buildings and almost 10 percent on new construction projects.

Additionally, Energy Star and green certified buildings improve rental rates to 20 percent above average and increase selling prices up to \$20 per square foot more than buildings without certifications. And because LEED-certified buildings use 25 percent less energy, they cut operating costs by 19 percent and reduce average water usage by 15 percent.

In addition to the explicit financial benefits, Molinski says green building certifications can give your brand a boost, differentiating it in the marketplace and

Volusia County

Location: Deland
Type: Local Government
Size: 507,531

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 & Affordable Housing

(Joint Meeting)
2nd Tuesday
Monthly
2 p.m.

Land Development

4th Wednesday
Bi-monthly
2 p.m.

Local Government

3rd Wednesday
Monthly
10:30 a.m.

Membership and Programs & Promotions

(Joint Meeting)
3rd Thursday
Monthly
2 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)
[\[More \]](#)

helping to attract and retain clients and employees. Plus, benchmarking adds credibility to your claims. Third-party verification provides proof that your building has achieved a certain level of sustainability - another public relations plus. [\[More\]](#)

Irwin to Lead Water Conservation Initiative At St. Johns River Water Management District



Deirdre Irwin has been selected to lead the St. Johns River Water Management District new Water Conservation Initiative intended to develop and implement water conservation practices and projects in a cooperative manner with key stakeholders, such as local governments, utilities, agriculture, builders, developers, and

homeowners. She has experience with the District's surface water regulatory programs, water resource education programs, and certification program development and implementation.

Irwin brings extensive experience to the role, particularly from her work in the District's Florida Water Star program. She served as the Florida Water Star Program statewide coordinator since its inception in 2007 and was responsible for development of the program's framework, administration, training, public outreach, and success.

She received a Diploma in Environmental Management from Dublin Institute of Technology and a Bachelor of Environmental Science from the University of Ulster in Northern Ireland before coming to work for the St. Johns River Water Management District in 1989.

Irwin is a member of the Florida Green Building Coalition and currently serves on its Board of Directors as Vice President.

Strong Future Forecast for Renewable Energy

In its forward-looking report for the year, the U.S. Energy Information Administration forecasts renewable energy will be the fastest-growing power

Job Opportunities

[APA Florida Job Board](#)

[Green Dream Jobs](#)

[Florida Facility Managers Assn Job Board](#)

FGBC Welcomes New Members

Joseph Gianna
[Habitat for Humanity of Palm Beach County](#)
Riviera Beach

Bernie Godek
[Habitat for Humanity of Palm Beach County](#)
Melbourne

James Lewis
[Clemons, Rutherford & Associate, Inc](#)
Tallahassee

Daniel Walesky
[Royal Building Group, LLC](#)
Royal Palm Beach

Tricia Weigand
[US Chutes Corporation](#)
Bonita Springs

Sean Kennedy
A.C.T Marketing, Ltd
Fort Lauderdale

source through 2040.

New investments in renewable energy rose from \$9 billion in the first quarter of 2004 to \$50 billion for 2015's first quarter, according to Bloomberg New Energy Finance, and the volume of installed photovoltaic systems in the United States has grown every year since 2000. [[More](#)]

OUT OF THE BOX: Eco-Friendly Designer Grows Trees Into Ready-Made Furniture



An ingenious British designer has come up with the ultimate environmentally-friendly way to create stunning household furniture - by letting Mother Nature do all the hard work.



Gavin Munro grows young trees in specially-designed plastic molds, pruning and guiding the branches into shape before grafting them together to form ultra-tough joints.

Using this method he's already created several prototype pieces and has a field where he's currently tending a crop of 400 tables, chairs and lampshades which he hopes to harvest next year. [[More](#)]

Xeriscaping Cuts Water Use & Maintenance

Commercial properties can reduce water use, maintenance, and costs while also improving

stormwater management by xeriscaping - a low-water-use landscaping method that uses native plants, according to [Buildings](#) magazine.

Xeriscaping selects plants that are drought tolerant and hardy against climate change. This can help buildings conserve water and it requires fewer resources to grow.

According to the EPA, landscape water use for commercial properties can be as high as 22 percent for office buildings and up to 28 percent for schools, *Buildings* reports.

Far more than rocky landscapes filled with cacti, xeriscaping can be ripe with lush and colorful plant life. Rather than ornamental plants that aren't suited to your climate, xeriscaping focuses on native or naturalized vegetation with low water needs.

"Don't evaluate xeriscaping from a gardening perspective," cautions Michelle Slovensky, energy program manager with the National Renewable Energy Laboratory (NREL). "Rather than selecting species for their aesthetics, you are developing a vegetation community. Xeriscaping supports stormwater management and conserves resources."

Xeriscaping has three main objectives.

1. Water Conservation
2. Stormwater Management
3. Low Maintenance

[\[More\]](#)

Mushroom Based Building Materials Are Here

Mushrooms are good to eat, but their roots may be far more important to mankind. They can be used to make mushroom based building materials that are stronger than concrete, have more insulating power than fiberglass, and are completely compostable.

Mushroom roots are made of mycelium, a fungus that converts hydrocarbons into



Mushroom insulation from Ecovative

carbohydrate chains. Those chains wrap themselves around anything that gets in the way as tightly as a web from Spiderman's wrist squirts. Inject it into a mixture of rice husks, corn stalks or any other crop waste and it quickly digests any available lignin and encapsulates everything left over.

Two mechanical engineers founded a company called [Ecovative](#) to produce building products from mycelium. One of their products is an environmentally friendly insulation material that outperforms traditional fiberglass. It can even be injected between an interior and an exterior wall, where it will grow silently in the dark and become so strong the wall will need no internal metal or wooded studs to support it.

Another Ecovative product is called simply Mushroom Material, a range of structural items that look like particle board but which actually contain no wood. They are cheaper, lighter and stronger than particle board and are 100% compostable when they reach the end of their useful life. They can even be engineered to repel or destroy invasive pests like carpenter ants, fire ants and termites.

But best of all, the Ecovative panels contain no formaldehyde or other petro-chemical based resins that make up as much as 15% of ordinary particle board.

The Cradle to Cradle Products Innovation Institute, founded by renowned architect William McDonough, has awarded Ecovative's Mushroom Material their prestigious Certified Gold rating. [[More](#)]

Water Treatment Chemicals Standards Helps Governments & Industries Measure Environmental Impact

NSF International and the American Water Works Association have published the first American national standard for assessing the sustainability of water treatment chemical products: NSF/AWWA/ANSI 416: Sustainability Assessment Standard for Water Treatment Chemical Products.

Manufacturers and distributors (including repackagers and relabelers) of water treatment chemicals now have a framework for measuring and reducing the environmental impacts of their products, providing more sustainable purchase options to municipal water treatment facilities and industrial and consumer users

of treatment chemicals, the organizations say.

To obtain certification to this standard, companies must have implemented environmental and social management policies, and measure and document their water and energy use. They must also meet all prerequisite requirements pertaining to product design, manufacturing processes, efficacy and corporate social responsibility, as well as optional criteria in these categories. [[More](#)]

Building Science - Windows Can Be A Pain

In a recent post, Joe Lstiburek explains, in only the way he can, how to make continuous insulation and punched openings into the "perfect wall: "

Sometimes we make easy things hard. And sometimes we make hard things easy. With continuous insulation and punched openings both things are true.

The physics is easy. A wall has to control water, air, vapor and heat. A window has to control water, air, vapor and heat. Both have a water control layer, an air control layer, a vapor control layer and a thermal control layer. All you have to do is connect the water control layers to each other, the air control layers to each other, the vapor control layers to each other and the thermal control layers to each other. Oh, yeah, one other point, you don't want the windows to be sucked out of the wall when it is really blowing.

Now it gets interesting. Where is the wall water control layer? With continuous insulation it can be the continuous insulation layer itself - or it can be behind it. It is pretty dumb to put a separate water control layer-specifically a film or thin membrane - over the exterior of the continuous insulation layer because it is impossible to install the additional layer in a practical manner - one that prevents it from getting sucked off and one that has constructible details. [[More](#)]