PROJECT SPOTLIGHTS:

Beachwalk Resort Earns 'Florida Green' Certification
Beachwalk Hotel & Condominiums, a 300-unit upscale high-rise resort, is the first building in Hallandale Beach certified as a "Florida Green" High-Rise Residential Building 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.

Biophilic design and architecture aims at creating strong connections between nature and man-made environments, and has proven benefits, including helping office workers be more productive, encouraging children to learn, and helping hospital patients get better. Beachwalk provided 75 percent of the building's interior spaces with natural daylighting and views to the outside. To provide quiet enjoyment within the hotel rooms and condo units, acoustical wall systems with sound reduction attributes were used. [More]

Cutler Bay Celebrates Recertification

FGBC President Nate Ritter (center) and incoming President Jeremy Nelson (2nd from left) present the certified FGBC Green Local Government plaque and flag to Cutler Bay Mayor Peggy Bell and the Town Council. [More]
Lstiburek: Open Cell Spray Foam Requires Conditioned Attics. Period!

Lots of attics insulated with open cell low density spray foam are having problems - in hot humid climates, mixed humid climates, and cold climates. The problems are moisture related. The attics are "unvented" - open cell low density spray foam is installed directly on the underside of roof sheathing. The attics are humid. Very humid. Unacceptably humid. And the humidity collects at the upper portion of the attics.

For the record I do not have a problem with open cell low density spray foam. We have an engineering solution to the observed phenomenon that has been demonstrated to work. From my perspective the explanation is less important than solving the problem. You can use open cell low density foam in attics both north and south. But they have to be conditioned. Period. And in the north the open cell low density spray foam needs a vapor retarder. Note that we were here already: "Cool Hand Luke Meets Attics" ASHRAE Journal, April 2014. And I have a code change in the works. But the explanation is neat - and might even be true. So what is the problem? And what is the solution? [More]

UL Introduces 'SPOT' Database For Finding Sustainable Products

UL has introduced SPOT™, a web-based product sustainability information tool that will facilitate the selection of credible green products and enable the design community to apply that information into the Building Information Modeling (BIM) workflow.

Currently featuring more than 40,000 products, SPOT database will be a first of its kind tool for architects, designers and specifiers to identify products by sustainable attributes, MasterFormat product codes, and building rating system credits.

To enhance the mobile experience, UL's SPOT app is available from the Apple App Store and Google Play. Additionally, UL is developing an add-in that will enable AutoDesk® Revit® users to access product data from SPOT and assign it directly to their project. [More] [SPOT]

HUD Proposes Expanded Floodplain Rules For FHA-Financed Loans

HUD has proposed new floodplain development rules that threaten access to FHA financing for single- and multifamily builders and rely on floodplain maps that haven't been drawn yet.
Specifically, HUD seeks to expand its oversight using the freeboard value approach corresponding both vertically and horizontally with an additional two feet of elevation above the 100-year base flood elevation for new and "substantially improved" single-family homes and multifamily properties financed using FHA-insured mortgages.

Single-family homes using FHA financing would trigger the elevation requirements only when they are built within the 100-year floodplain. Multifamily builders would face the added burden of HUD’s elevation requirements in the case of "substantially improved" structures both within the 100-year floodplain and in the expanded horizontal floodplain.

HUD’s new flood risk measures would also apply to projects that use federal grants, such as the HOME and Community Development Block Grant programs.

FDOT Awards $44.4 Million for Bicycle & Pedestrian Trail Expansion in Florida

Under the Shared Use Non-motorized (SUN) Trail program, a total of $44,434,543 million was awarded to 45 separate projects located across 21 counties throughout Florida. All of the selected projects are in the identified SUN Trail network, which consists of the developing statewide system of paved multi-use trails for bicyclists and pedestrians, physically separated from vehicular traffic.

Is Bad City Planning Making Us Lonely

Humans are social, yet this primary fact of life is oddly absent as a core consideration in modern urban development regulations. To ignore the social needs of our species is to lose sight of one of the most positive drivers for shaping sustainable urban form. Providing for the satisfactions of community counters sprawl. Yet conventional land-use zoning disperses people and strips social life from the landscape. This is where form-based codes come in. They are the tool par excellence for guiding development in a socially sensitive way, configuring buildings and streets to enliven social life.

Orlando to Host Sustainability Symposium 2017

Every once in a while, an occasion arises that allows us to meaningfully shape the course of the future. A watershed moment that sets a new direction for an industry, a society, a nation.

Green Builder Media, in collaboration with Mayor Dyer and the City of Orlando, is offering such an opportunity at the Sustainability Symposium 2017:
**Ready for Anything**, taking place on January 9, 2017 in Orlando at the Dr. Phillips Center for Performing Arts.

Bringing together a diverse group of stakeholders in the building, business, policy, and media sectors to explore intelligent solutions for a resilient future, the Sustainability Symposium holds the promise of influencing the actions and policies needed to transition to sustainable economy. [More]

**Gainesville’s 'Dept of Doing' Offers New Approach to City Planning**

At the core of modern companies is a customer-centric approach that considers every detail of the customer's experience, from usability to branding. Websites in particular have ushered in the trend with the user experience design concept, making sites intuitive and easy to use.

Gainesville is trying to marry this approach with urban design. Anthony Lyons, city manager for Gainesville, is trying to make his home the best place to live and work by understanding how people live and work, and then making it better - essentially bringing in the city's residents as co-designers to make it a better space for themselves. The solution that arose: The Department of Doing.

The Department of Doing will be a physical office, a one-stop shop for obtaining all the permits needed to open a business or develop real estate, as well as a web platform (both of which are still under development).

The office will be staffed with a new kind of employee, Sherpa-like "action officers" which the city is now in the process of hiring. In September, Gainesville appointed the Department of Doing's first director, Wendy Thomas, a former Gainesville resident and urban planner by training who was previously director of community development in Bozeman, Montana. [More]

**Tesla Unveils A New Line of Solar Panels**

Certified: 13,714

Commercial
Registered: 45
Certified: 15

High Rise
Registered: 54
Certified: 18

Land Developments
Registered: 62
Certified: 13

Local Government
Registered: 86
Certified: 62

**Recent Certifications**

**Beachwalk Resort**
Location: Hallandale Beach
Type: High-Rise
Certified: 10/7/16
Score: 51
Level: N/A

**Recent Registrations:**

**Miami Center 747**
Location: Miami
Type: High-Rise
Size: 329,000 s.f.

**Wynwood 25**
Location: Miami
Type: High-Rise
Size: 456,316 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
Monthly
2 p.m.

**Local Government**
3rd Thursday
Monthly
10:30 a.m.
Tesla has unveiled a range of textured glass tiles with integrated solar cells that are nearly indistinguishable from conventional tiling, along with a sleek update to the company's energy-storing Powerwall.

CEO Elon Musk said the secret to the tiles' appearance is a special coating that becomes more or less see-through depending on your viewing angle. He described it as a series of micro louvers that work like a privacy screen on a laptop, and said the company is working with 3M on the tech. From shallow angles, the tiles appear nontransparent. But as your viewing angle approaches 90 degrees, the underlying solar cell becomes more and more visible. The result is a tile that permits the passage of sunlight from overhead, but still looks opaque to anyone at ground level.

For those concerned about the strength of a roof made of glass tiles, its tougher than materials like clay and slate. "It's never going to wear out, it's made of quartz, it has a quasi-infinite lifetime," Musk said.

Net Zero Can Equal Net Gains

There are two possible routes home builders are apt to take as they try to engineer their new houses to produce as much or more energy as they consume: One is through the envelope, and the other is through the systems.

And there's just one way to make them behave sustainably when you blend building materials that perform the best at dealing with air flow, moisture and heat with systems that capture, store, and generate energy - to build better.

Building a home better, one can argue, stands on four pillars, each of must be true. First, it must have strength, durability, the ability to weather time and the elements. Next, usefulness - it must perform well in its workings, its function as a complex of inter-operand systems aimed at comfort, safety, air quality, security, and enjoyment. Thirdly, a better home is more aesthetically pleasing, in its orientation on its land, in its elevation, and in its interior design for natural light and felicitous spatial flow, indoor and out. And last, it must feel more valuable than it costs to buy and maintain, by a long-shot.
In the smart cities of the not-too-distant future, sidewalks might be able to generate power from the footsteps of pedestrians thanks to companies like Pavegen, but while costs have largely restricted this technology to public spaces like shopping centers - and soccer pitches - a new technique developed at the University of Wisconsin-Madison (UW-Madison) could see homes powered by the same source for around the same price as conventional flooring.

Whereas Pavegen's tiles use electro-magnetic induction to generate electricity, the material developed by the UW-Madison team relies on the triboelectric effect, which creates a charge, most commonly seen as static electricity, through the friction of two materials rubbing against one another. The principle is already being explored for use in clothing and touchscreens that harvest electricity, and the team calls this approach "roadside energy harvesting."

"Roadside energy harvesting requires thinking about the places where there is abundant energy we could be harvesting," says Xudong Wang, lead researcher on the study. [More]

**Automatic Balancing Dampers Mitigate Ventilation Issues**

Ruskin, an air management solutions provider, has released its new pressure-independent automatic balancing dampers (ABDs). Ruskin® models ABD and ABD-SEA (with grille) dampers automatically regulate damper positioning for precise and automatic airflow in both supply and exhaust applications. The result is energy-saving performance that mitigates stack effect in high-rise buildings and improves comfort for building occupants. [More]

**Scalable, Plug & Play Solar Energy Storage**

The new POWERSTATION 247 PLUS is a complete and
fully integrated, "plug and play" solar energy usage and storage system with built-in battery storage. It includes a modular AC to DC power converter, to feed energy from external AC-sources (external generators or a 2nd grid connection) directly into the battery circuit.

It is a scalable system - 5 kW, 10kW or 15 kW - with a battery storage capacity of 17.28 kWh. It's free standing cabinet is easy to install and easy to use. The system integrates up to 3 hybrid inverters, solar MPP-trackers, charge controller and lithium - iron batteries, also all necessary field wiring terminals and disconnect switches. It is truly and uniquely 'plug and play'.

[More]

Skywater® 300 - Water Making Machines

The Skywater® 300 uses patented air-to-water technology to produce up to 300 gallons (1100 liters) per day of fresh drinking water from humidity in the air. A single Skywater® 300 unit can easily supply all the water needs of a single-family residence or bundle a few machines together and have the capacity of providing over 900 gallons. Skywater® 300 generates ozone to purify the water. Ozone (O3), a natural occurring gas that is produced in nature when it rains, binds with water to eliminate bacteria and other impurities. Skywater® 300 does this by pumping ozone through the water as it is collected. Unlike other water treatment methods such as chlorine, ozone leaves no taste. [More]