Florida Building Code Update

Provided by Florida Home Builders Association

On July 1, 2016, new Florida Building code provisions went into effect and addressed a number of items, some of which are summarized below. As with all building code provisions, the devil is in the detail, so be sure to read the full text of the Code.

The mandatory blower door testing for residential buildings or dwelling units as contained in section R402.4.1.2 of the Florida Building Code, 5th Edition (2014) Energy Conservation, shall not take effect until July 1, 2017, and shall not apply to construction permitted before July 1, 2017. The allowable air leakage was increased to 7 air changes per hour in Climate Zones 1 and 2, and 3 air changes per hour in Climate Zones 3 through 8, tested at 50 Pascals. Any dwelling unit with air infiltration less than 3 air
changes per hour requires mechanical ventilation.

Other changes relate to:

- Safety requirements for public swimming pools
- Roof-Mounted Mechanical Systems
- Residential Smoke Alarms (require 10-year non-removable, non-replaceable battery or hardwiring.)
- Fire service access elevators in high-rise buildings
- Phased permitting for construction documents
- Requirements to upgrade opening protections for residences in certain wind borne debris zones; triggers when construction costs exceed $50,000 and home value exceeds $750,000. Excludes roof repair.
- Zero lot line fire separation distance

Read the full report.

**Senate Approves Legislation To Reform Affordable Housing Programs**

The U.S. Senate passed the "Housing Opportunity Through Modernization Act of 2016" recently, legislation that includes many fixes to the U.S. Department of Housing and Urban Development (HUD) programs. Specifically, the bill would:

- Streamline inspection requirements in the Housing Choice Voucher Program, which will allow voucher holders to move into their units more quickly. The changes will level the playing field for voucher holders who are competing with market-rate renters who can move into a unit immediately.
- Allow the contract terms of HUD's Section 8 Project Based Housing Choice Voucher program to be extended from 15 to 20 years. This will help facilitate the use of project-based vouchers within the Low Income Housing Tax Credit properties.
- Protect Section 8 Housing Choice Voucher residents from displacement due to fluctuations in the Fair Market Rent, which determines payment standard amounts for the voucher program. This protects voucher holders from economic factors beyond their control and allows owners to retain good tenants.
- Change the Rural Housing Service Single Family Guaranteed Loan Program so that it will be current with other government loan programs while providing efficiencies for home buyers and lenders.
- Reduce current FHA regulations surrounding existing condominium projects, including streamlining project certification rules and reducing owner-occupancy requirements. Easing restrictions will assist first-time home buyers

Dow Cuts Solar Shingle Line
Florida Realtors Back Solar Tax Exemption
Who's Operating Renewable Energy Systems in Florida
FGBC Welcomes New Members
Education Opportunities
Calendar of Events
Certification News
Recent Certifications
FGBC Committee Meetings
Funding Opportunities
Job Opportunities

**Articles of Interest**

- Building Coastal Resilience through Capital Improvements Planning
- Pig Manure May Pave the Way to Sustainable Road Building
- Supreme Court to Consider Miami’s Predatory Lending Suit Against Bank of America, Wells Fargo
- Ozone Hole on the Mend 30 Years After Global Pact
- KB Homes Receives Top Energy Star Honors
- Dow Cuts Solar Shingle Line
- Florida Realtors Back Solar Tax Exemption
- Who's Operating Renewable Systems in Florida

**FGBC Welcomes New Members**

Fred Scheerle
Habitat for Humanity Sarasota, Inc.
Sarasota

Thiago Caldas
Deerfield Beach

Michael Ellis
Omnicrete International, Inc
Kissimmee

Kate Wesner
Ygrene Energy Fund
Palm Beach Gardens
and condo owners who want to sell their condo and move up to a single-family detached home.

The House approved a companion bill earlier this year.

Resiliency Becomes Design And Product Purchase Driver

According to the Shelton Group, building resiliency through design, technology, and product selection is becoming an important market driver, and we'd all be wise to leverage the momentum.

Last April, design professionals and the major building industry associations and standards groups, including ASHRAE, BOMA and NAHB (representing 1.7 million construction firms), collaborated on an Industry Statement on Resilience in which they committed to "significantly improving the resilience of our nation's buildings, infrastructure, public spaces and communities."

LEED added 3 pilot credits related to resilient design last November. And just this past month, the American Institute of Architects announced the creation of a resilience curriculum for the professional development of architects.

Financing Resiliency with Green Bonds

"Green bonds" have been identified by many in the investment community as an effective instrument for financing the transition to a low-carbon economy. Green bonds represent an opportunity to channel investment away from fossil fuel risk and into more sustainable infrastructure needed to support this transition.

The issuer of a green bond pledges to spend the money raised on projects with environmental benefits. Labelling a bond "green" generates more investor interest and makes environmentally-friendly projects easier for investors to find and support. The green bond market is growing rapidly. About $3 billion in green bonds were issued in 2012 and $41.8 billion in 2015. The call for green bonds is high among investors, but there are not enough green bonds to satisfy this demand.

Most green bonds in 2015 were issued for renewable energy projects (45.8%), energy efficiency (19.6%) and low-carbon transport (13.4%), such as rail service and electric vehicles, according to the Climate Bonds Initiative.

Several groups are working to bring standardization to
the green bond market. Standardization enables certification and verification that funds raised through green bonds are used appropriately. [Download Report]

City Bans Demolitions to Cut Construction Waste

The Portland, Oregon city council has passed a law banning the demolition of homes built on or before 1916. The law requires instead for old homes to be deconstructed, allowing builders to salvage and reuse lumber and other materials. The city expects the new deconstruction policy will divert 8 million pounds (4,000 tons) of materials for reuse annually.

The construction industry produces a huge amount of waste. In the US alone, about 40 percent of solid waste comes from construction and demolition (C&D). [More]

Why Companies are Moving Downtown

Many companies - from Fortune 500 titans to lean startups to independent manufacturers - are moving to places that offer great quality of life for their employees. As Smart Growth America detailed in its 2015 report Core Values: Why American Companies are Moving Downtown, these companies want vibrant neighborhoods with affordable housing options, restaurants, nightlife, and other amenities in walking distance, and a range of transportation options for their employees, among other things.

This trend represents a marked shift in cities’ economic development strategy. Where cities once relied principally on subsidies or low tax rates in hopes of luring big employers, now they are doing everything they can to create great places where people and companies want to be. [More ]

Steel Framing, Pre-Cut Insulation System Creates Quick Net-Zero Homes

With the goal of mass-producing net-zero homes, a Canadian building and design firm has introduced a revolutionary steel construction system to the U.S.

The introduction comes as builders look for ways to meet Title 24, which requires all new homes in California to produce as much energy as they consume via renewable techniques such as solar or geothermal by 2020.

A custom home under construction in Stanford, Calif., will serve as a test case for the framing technique...
developed by Quebec-based design/build firm BONE Structure. It uses a patented light-steel building technology to create homes built from columns and beams that are laser cut in a manufacturing plant and delivered to the site for assembly. A five-person assembly crew can assemble the shell of the 3,200-square-foot home in days, using only battery-powered drills and self-tapping screws to secure the steel columns and beams in place.

Electrical, plumbing, heating and ventilation systems are easily connected thanks to precut openings acting as "highways" within the structure. Precut insulation panels clip into place between the steel columns and polyurethane foam insulation is sprayed on the exterior to tightly seal the building and acts as a vapor barrier. Together, the steel structure, insulation panels, spray insulation, and the roof create a tight, energy efficient envelope, says Charles Bovet, BONE Structure, U.S. vice president. [More]

TECHNOLOGY UPDATE:

Magnetic Fridge Eliminates Gases Drastically Reduces Energy Use

Cooltech Applications, S.A.S. (Cooltech), the world's leading magnetic refrigeration company, has announced the availability of the first commercial magnetic cooling system for its magnetic refrigeration system (MRS) product line. The magnetic cooling system utilizes a water coolant instead of a refrigerant gas—a major contributor to climate change—resulting in an eco-friendly solution that consumes minimal energy.

Based on the magnetocaloric effect (MCE), which is the heating or cooling of magnetic material caused by applying a magnetic field to it, the MRS eliminates the harmful gases that are used in compression-based refrigerators. The magnetic unit operates at low pressure with low rotational speed virtually eliminating vibrations, cutting noise to less than 35
decibels (db), and reducing maintenance costs. The whole system enjoys a quasi-indefinite lifespan.

MEMBER SPOTLIGHT:
Michael Ellis, OmniCrete

"Turning the world green, one building at a time..."
FLORIDA BUILDING CONTRACTOR
CBC#1259884

Omnicrete's mission is to leave as little a carbon footprint as possible, not only in the construction of its buildings, but the maintenance and utilities of those buildings throughout their useful lives.

The wall construction system consists of two Autoclaved Aerated Concrete [AAC or "lightweight concrete"] "stay-in-place" forming walls that are placed parallel in such a way as to form a cavity surrounding the perimeter of a building whereby concrete is poured into the cavity. This creates a completely monolithic wall system. The AAC "stay-in-place" forming walls are connected to the solid steel reinforced monolithic core (behind the vapor barrier) by unique proprietary anchor bolts. These anchor bolts are placed inside the core; with a six millimeter plastic vapor barrier (visqueen), and a state of the art moisture resistant, Green Building Compliant, Dow Blue Board insulating sheathing. This is done prior to the concrete pouring. The zero HCFC's (Dow Board) sheathing is a cost effective and energy efficient, sheathing material.

The reduction of energy consumption of this patented system has been documented to be over 78 percent. Omnicrete also provides the building owners added protection from fire, insects, mold, mildew, moisture, and withstands sustained winds in excess of 300 MPH.

Location: St. Cloud
Type: Local Government
Size: 52,864

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.

GreenTrends
1st Tuesday
Monthly
4 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.

Membership (New)
3rd Wednesday
Monthly
3 p.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