2011 NATIONAL ELECTRICAL CODE TO BECOME EFFECTIVE ON JANUARY 1, 2012

The Georgia Department of Community Affairs (DCA) Board, on the recommendation of the State Codes Advisory Committee (SCAC) has adopted the 2011 National Electrical Code (NEC) with no Georgia Amendments. The 2011 NEC becomes effective on January 1, 2012. If you have further questions, feel free to contact the Department of Community Affairs Office of Construction Codes at 404-679-3118 or by email at codes@dca.ga.gov.

DCA TO BEGIN REVIEW OF THE 2012 INTERNATIONAL CODES

In the year 2012, the Georgia Department of Community Affairs (DCA) will begin the process of reviewing the 2012 Editions of the International Codes. The process will include:

Year 2012:
- Task Force Review of the 2012 International Residential Code (IRC)
- Task Force Development of the 2012 Disaster Resilient Building Code Appendices

Year 2013:
- Task Force Review of the 2012 International Plumbing Code (IPC)
- Task Force Review of the 2012 International Mechanical Code (IMC)

The 2012 International Fire Code (IFC) will not be reviewed and will be adopted with any amendments submitted by the Safety Fire Marshal.

The effective date for the five new International Codes with any Georgia Amendments will be January 1, 2014.

If you have questions or would like to be placed on the interested parties list for the 2012 IBC Review Task Force, contact Calvin Jordan at calvin.jordan@dca.ga.gov or 404-679-1739; 2012 IRC Review Task Force, contact Bill Towson at bill.towson@dca.ga.gov or 404-679-3109 or the 2012 Disaster Resilient Building Construction Appendices Task Force, contact Dee Leclair at dee.leclair@dca.ga.gov or 404-679-3118.

ENERGY CODE COMPLIANCE EVALUATIONS

The Office of Construction Codes is working with a third-party contractor to conduct energy code compliance evaluations for the Georgia Environmental Finance Authority (GEFA) that measure state-wide energy code compliance to provide for a baseline as the state prepares to be ninety percent compliant with the International Energy Conservation Code (IECC) by 2017. This goal and deadline is a result of the 2009 American Reinvestment and Recovery Act which provided stimulus funds to aid in the state’s energy conservation.

In 2010, DCA staff began the first steps of these evaluations, forming “Compliance Working Groups” composed of industry stakeholders who would provide guidance and perspective to the study. The compliance evaluations separate the subject buildings into two categories, Residential and Commercial, with two further categories in each, New and Renovated. A Working Group was created for each type, with members from relevant residential and commercial building industries being represented in each group.

A study of New Commercial buildings was completed in April 2011 that found that eighty percent of the state’s buildings in that category comply with the IECC. This was viewed as a positive result and a good baseline for future measurement. A new contractor is being selected for the remaining three categories and the project has an expected completion date of May 2012. Please contact Austin Hackney at austin.hackney@dca.ga.gov or 404-679-3127 with questions regarding these evaluations.

CODY SAYS

A new updated RESCheck Version 4.4.2 (Build Version: 4.4.2.2) that encompasses the 2009 IECC with current 2011 GA State Amendments for residential construction is now available to download at http://www.energycodes.gov/rescheck/download.htm. HINT: click on the “Codes” tab and select “GA 2011” to make sure you use the current GA Code version.
NEW EQUIPMENT LOAN PROGRAM FOR DUCT AND ENVELOPE TIGHTNESS (DET) EQUIPMENT RENTALS

The Department of Community Affairs (DCA) is assisting the Georgia Environmental Finance Authority (GEFA) with implementation of a new Duct and Envelope Tightness (DET) testing equipment loan program for Georgia. GEFA is providing ARRA funding for DCA to purchase new blower door and duct leakage test equipment kits which will be made available statewide for anyone to rent and use locally. DCA is working in conjunction with the Home Builders Association of Georgia (HBAG) to administer the new DET rental equipment loan program. HBAG will be responsible for developing a standardized equipment rental program in conjunction with their local Home Builder Associations (HBAs). The DET testing equipment purchased by DCA will be distributed to 18 different local HBAs in Georgia and made available for public rental to HBAG members and non-members alike. The established equipment rental rate for the blower door and duct tester rental kits shall be $100 per day or $150 per weekend, plus any additional charges required for liability and rental insurance. HBAG will also design and host an interactive DET webpage which will be a one-stop shop for renting blower door and duct leakage testers. The webpage will include an online application form and rental reservation system, as well as, helpful information about the new code DET testing requirements, and where or how to find a certified DET verifier to perform the required residential tests in your area. For a list of local HBA offices that will have DET blower door and duct leakage testing kits available for local renting, visit www.hbag.org. For questions and additional assistance regarding the HBAG new equipment loan program, please contact Kelly Lass with HBAG at (404) 763-2453 or klass@hbag.org.

BUILDING DEPARTMENT PILOT STUDY

The Office of Construction Codes is currently active in a Georgia Environmental Finance Agency (GEFA) sponsored Pilot Study focusing on the administrative procedures of Georgia’s local building departments. The goal of the study is to compile “best management practices” data to aid in the process of bringing the state into ninety percent compliance with the IECC by 2017. The study is being administered by Southface Energy Institute of Atlanta.

CALVIN JORDAN
DCA BUILDING CODES CONSULTANT

Calvin grew up in Decatur, Georgia where he attended Columbia High School. After graduating from high school, Calvin decided to get away from his comfort zone and take on an experience in a different part of the country. He attended college in the California Bay Area at Leland Stanford Jr. University. While at Stanford University, he was a four year varsity letterman on the football team and graduated with a BS in Civil Engineering.

Calvin always had a strong interest in the field of engineering growing up. While in college, he latched on to construction and structural engineering, and was intrigued on how buildings, bridges, and other large structures were analyzed and assembled. After completing his undergraduate degree, he moved back to Georgia and began a career as a structural engineer for a mid-sized structural engineering consulting company in Tucker, Georgia. During this period in his career, Calvin gained valuable experience while working on a wide variety of projects including; arenas, stadiums, schools, jails, residential houses, warehouses, and various commercial and retail buildings. Those five years of design experience furthered his knowledge and interest in the construction field. Calvin joined the DCA team on October 3, 2011. He is excited and looking forward to contributing and taking on the challenge in the Construction Codes and Industrialized Buildings Program.

Calvin currently lives in Scottsdale, GA with his wife, Candice, and four-year-old son, Chandler. In his free time, he coaches high school, middle school, and little league football.
NEW 2012 GEORGIA CODE AMENDMENTS ADOPTED BY DCA

The Georgia Department of Community Affairs (DCA) Board, on the recommendation of the State Codes Advisory Committee (SCAC), has adopted amendments to the 2006 Edition of the International Residential Code for One- and Two-Family Dwellings (IRC), the 2006 Edition of the International Mechanical Code (IMC), the 2006 Edition of the International Fuel Gas Code (IFGC), and the 2009 Edition of the International Energy Conservation Code (IECC), which will become mandatory and applicable statewide by Georgia law on January 1, 2012. Amendments to the IPC, IMC and IECC are, in accordance with SB370 “Governor’s Water Stewardship Act”, delayed until July 1 2012. A synopsis of the approved amendments is listed below:

INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2006 EDITION

- Revise Section M1411.3.2 ‘Drain pipe materials and sizes’ to add exception.
- Revise 2008 Georgia Amendment to Section G2411.1.1 ‘Bonding corrugated stainless steel tubing (CSST)’ to add exception.
- Revise Section G2415.8 (404.6) ‘Protection against corrosion’.
- Rename and revise Section G2417.6.2 (406.6.2) ‘Before turning gas on’.
- Delete 2007 Georgia Amendment to Section G2419.4 (408.4) ‘Sediment trap’.
- Revise Section G2419.4 (408.4) ‘Sediment trap’.
- Add new Figure G2419.4 ‘SEDIMENT TRAP’.

INTERNATIONAL PLUMBING CODE, 2006 EDITION

- Add new definition of ‘High Efficiency Plumbing Fixtures and Fittings’.
- Add new definition of ‘Lavatory Faucet’.
- Revise the definition of ‘Plumbing Fixture’.
- Rename and revise the definition of ‘Fixure Fitting’.
- Add new definition of ‘Pressurized Flushing Device’.
- Add new definition of ‘Toilet’.
- Add new definition of ‘Water Closet’.
- Add new definition of ‘WaterSense’.
- Add new definition of ‘WaterSense Listed Plumbing Fixture or Plumbing Fixture Fitting’.
- Add new Section 301.1.1 ‘Requirements for high efficiency plumbing fixtures’.
- Add new Section 301.1.2 ‘Waiver of requirements for high efficiency plumbing fixtures’.
- Revise Section 419.1 ‘Approval’.
- Delete 2009 Georgia Amendment to Section 419.2 ‘Substitution for water closets’.
- Revise Section 420.1 ‘Approval’.
- Revise Section 424.1 ‘Approval’.
- Revise Table 604.4.
- Revise to add the new standards for ASME.
- Revise to add the new standards for WaterSense.

INTERNATIONAL MECHANICAL CODE, 2006 EDITION

- Add new definition for ‘Cooling Tower’.
- Revise Section 301.2 ‘Energy utilization’.
- Revise Section 908.1 ‘General’.
- Revise 2007 Georgia Amendment for the referenced standard of ASHRAE.

INTERNATIONAL FUEL GAS CODE, 2006 EDITION

- Revise Section 408.4 ‘Sediment trap’.
- Add new Figure 408.4 ‘SEDIMENT TRAP’.

INTERNATIONAL ENERGY CONSERVATION CODE, 2009 EDITION

- Add new Section 101.5.3 ‘Requirements for high efficiency cooling towers’.
- Add new definition for ‘Cooling Tower’.
- Revise Section 503.4.3.3.2 ‘Heat rejection’.

Please be reminded that the new 2012 Georgia State Code Amendments shall be used in conjunction with any other applicable prior year state code amendments. For example, the 2007 + 2008 + 2009 + 2010 + 2012 IFGC code amendments with the 2006 IFGC constitutes the current State Fuel Gas Code.

Copies of the new 2012 Georgia state code amendments, as well as, copies of any other applicable and current Georgia state code amendment packages may be downloaded for free from DCA's webpage at: http://www.dca.state.ga.us/development/constructioncodes/programs/codeAmendments.asp.

For questions or further assistance regarding the new 2012 Georgia State Code Amendments, please contact the Construction Codes Office at (404) 678-3118 or constructioncodes@dca.ga.gov

Q: What are Blower Door and Duct Blaster Testing?
A: The criteria of Section 402.4 “Air Leakage” is mandatory for all residential buildings as described in the 2009 International Energy Conservation Code. This section implements the Building Thermal Envelope and Air Sealing and Insulation requirements. Section 402.4.2.1 ‘Testing Required’ for air leakage was amended in the 2007 Georgia State Supplements and Amendments to the 2009 International Energy Conservation Code. The amendments can be viewed / downloaded from the Department of Community Affairs website at the following link: http://www.dca.state.ga.us/development/constructioncodes/programs/codeAmendments.asp.

The Blower Door Test depressurizes the house to help measure infiltration/air leakage rate in the building envelope. The Duct Blaster Test pressurizes/depressurizes the air ducts in order to determine the quantity of air leakage in the ductwork and air handler unit. Blower Door and Duct Blaster Testing (Duct and Envelope Tightness (DET)) must be performed by a certified DET verifier who is either a certified Home Energy Rating Systems (HERS) rater, Building Performance Institute Analyst, or has successfully completed a certified DET verifier course approved by the Georgia Department of Community Affairs. You can reduce infiltration and leakage by determining where the leaky areas in the building envelope and duct system are located, and sealing the holes according to Appendix A in the Georgia Amendments to the 2009 IECC.
MARTHA MINNIS

Market Masters has worked for Augusta Richmond County for 23 years and serves as the Construction Manager.

Mr. Masters was exposed to construction as a teenager working summer breaks and weekends for family that were in the homebuilding industry. Mr. Masters remembers carrying lumber for what seemed like years but was actually two summers before being given his first set of tools and allowed to work alongside the other workers. After graduating he continued the journey working in residential construction.

In 1981 he was accepted into The Local 283 Carpenters and Joiners of America where he served a four year apprenticeship and earned the title of Journeyman Carpenter. Mr. Masters is especially proud of this achievement due to the many night classes that were required over these four years after a hard day of work on the construction site. He expressed gratitude to the experienced instructors that were provided and the work opportunities that allowed him to work on residential, commercial, and heavy industrial sites. These early work experiences proved to be valuable and allowed Mr. Masters to build his first home at the age of 23.

Mr. Masters accepted the position as Building Inspector with Richmond County in Augusta Georgia in 1989 and was moved to the senior position two years later. Richmond County and The City of Augusta consolidated in 1996 and Mr. Masters was offered the position as Construction Manager in the new consolidated government in which he accepted. He has a dual role as the manager and plans examiner. Mr. Masters was proud to state that the City of Augusta employs 10 highly experienced construction inspectors that have a good working relationship with the public as well as the Fire Inspectors in the Fire Marshal's Office. The inspection staff has 38 ICC Certifications and 8 State Cards among them. Mr. Masters has four ICC Commercial Certifications as well as numerous State and Manufacturer Certifications.

Mr. Masters was quick to point out that Augusta has performed well through these tough economic times due to the leadership of elected officials and has received several high rankings that include: Top 20 Strongest Performing Metro Areas (#2), 40 Strongest Metro Economies In The US (#23), Americas Strongest Housing Building Markets (#6), Best Bang For The Buck Cities In The US (#5), Best United States Cities For Starter Homes (#1), 101 Best Cities For Families In The US (#20), Best Middle Class Housing Markets (#7), Best Cities For Job Growth In Midsized Cities (#22), Fastest Recovering Cities In America (#22), 30 Strongest Housing Markets In The US (#2). Mr. Masters stated that when you look deep into the above listed rankings you soon realize that Augusta is not only a great place to live and work but a great place to have a business.

1. All IB Manufacturers should be made aware of important upcoming changes in the state law with the passage of the Georgia Water Stewardship Act (SB 370). This new law requires high efficiency plumbing fixtures to be installed in all new residential and commercial construction, effective July 1, 2012. Refer to the attached document entitled “New Requirements for High Efficiency Plumbing Fixtures and Cooling Towers” for a summary of these requirements. Please take this important information into consideration for current and future inventory purposes.

2. For residential construction, please make sure that any plans submitted under the International Residential Code (IRC) Code reference the International Energy Conservation Code (IECC), 2009 edition with current 2011 GA Amendments. It is important to note that the current state energy code now requires that all residential windows shall have a maximum solar heat gain coefficient (SHGC) of 0.30. A new updated REScheck Version 4.4.2.2 for GA which encompasses the 2009 IECC with current 2011 GA State Amendments is now available to download for free at http://www.energycodes.gov/rescheck/download.stm. Please make sure that all REScheck reports are completed using the new updated REScheck Version 4.4.2.2 for GA. Hint: Under the ‘Code’ tab, click on ‘GA 2011’. Any REScheck reports submitted that do not use the new REScheck Version 4.4.2.2 for GA will no longer be accepted.

3. Please be reminded that the Life Safety Code and State Minimum Fire Safety Standards as adopted and amended by Georgia Safety Fire Commissioner are also mandatory and applicable statewide in Georgia. These standards and regulations, which affect fire and life safety code requirements, apply to all building, structures and facilities except for one- and two-family dwellings or one- and two family row houses (townhouses) separated by a two hour fire wall. Where applicable, these rules and regulations which fall under the purview of the Office of the State Fire Marshal (SFM) shall be used in conjunction with the current State Minimum Standard Codes for Construction as adopted by DCA. So, for any IB buildings that are installed in Georgia and the model plans are submitted under the International Building Code (IBC), please make sure the current National Fire Protection Association (NFPA) 101, Life Safety Code (LSC), 2000 Edition, with SFM 120-3-3, 2010 Amendments are properly listed on the model plan cover sheet. Any plans submitted without the applicable LSC and SFM references listed on the cover sheet will no longer be accepted. The current SFM Rules and Regulations are available at: http://www.gainsurance.org/FireMarshal/Rules%20and%20Regulations.aspx.
NEW REQUIREMENTS FOR HIGH EFFICIENCY PLUMBING FIXTURES AND COOLING TOWERS
(SB 370 - Effective on July 1, 2012)

1. Requirements for high efficiency plumbing fixtures. On or after July 1, 2012, in accordance with O.C.G.A. Section 8-2-3(a), the installation of high efficiency plumbing fixtures are required in all new construction. This includes both residential and commercial installations.

Note: The requirements for high efficiency plumbing fixtures resulted from Senate Bill 370 which was enacted into State law in July 2010 with a delayed effective date of July 1, 2012.

2. Definitions of High Efficiency Plumbing Fixtures:
   - **Single flush water closet.** A single flush water closet or toilet, including gravity, pressure assisted, and electro-hydraulic tank types, which the average flush volume does not exceed 1.28 gallons and is listed to the Water Sense Tank-Type High Efficiency Toilet Specification. Single flush toilets shall also comply with the flush volume testing requirements of ASME A112.192/CSA B45.1-2008 or ASME A112.19.14-2006.
   - **Dual flush water closet.** A dual flush water closet or toilet which the average flush volume of two reduced flushes and one full flush does not exceed 1.28 gallons and is listed to the WaterSense Tank-Type High Efficiency Toilet Specification. Dual-flush toilets shall comply with the flush volume testing requirements of ASME A112.19.2-2008 and ASME A112.19.14-2006.
   - **Urinal.** A urinal and associated flush valve that uses no more than 0.5 gallons of water per flush and is listed to the WaterSense Specification for Flushing Urinals. Urinals shall also comply with the flush volume testing requirements of ASME A112.19.2/CSA 45.1.
   - **Nonwater urinal.** A urinal that discharges into the sanitary drainage system but is not supplied by a water distribution system. Non-water urinals shall conform to ASME A112.19.3 CSA/ B45.4 or A112.19.19/CSA B45. Where non-water urinals are employed, they shall be cleaned and maintained in accordance with the manufacturer’s instructions after installation and have a properly sized water distribution line roughed-in to the urinal location at a minimum height of 56 inches (1,422 mm) to allow for the installation of an approved backflow prevention device in the event of a retrofit. Note: Nonwater urinals are not required to be WaterSense listed.
   - **Lavatory faucet or lavatory replacement aerator.** A lavatory faucet or lavatory replacement aerator that allows a flow of no more than 1.5 gallons per minute at a pressure of 60 pounds per square inch and is listed to the WaterSense High Efficiency Lavatory Faucet Specification.
   - **Kitchen faucet or kitchen faucet replacement aerator.** A kitchen faucet or kitchen replacement aerator that allows a flow of no more than 2.0 gallons of water per minute. Note. Kitchen faucets or kitchen faucet replacement aerators are not required to be WaterSense listed.
   - **Shower head.** A shower head that allows a flow of no more than the average of 2.5 gallons of water per minute at 60 pounds per square inch of pressure. Note. Shower heads are not required to be WaterSense listed.

3. Requirements for flushometer valves and tanks. On or after July 1, 2012, flushometer valves and flushometer tanks for commercial type toilets or water closets shall have an average flush volume that does not exceed 1.28 gallons. Flushometer valves are not required to be WaterSense listed. However, Flushometer (pressure assist) toilets or water closet tanks must be listed to the Water Sense Tank-Type High Efficiency Toilet Specification.

4. Sale of non-high efficiency toilets or water closets. After July 1, 2012, in accordance with O.C.G.A. 8-2-3(j), the sale of a gravity tank type, flushometer valve or flushometer tank toilet or water closet that uses more than an average of 1.28 gallons of water per flush is prohibited in Georgia.

5. High Efficiency Cooling Towers. On or after July 1, 2012, all cooling towers installed in new construction shall be of the high efficiency type in accordance with ASHRAE 90.1 as adopted and amended by the Department. A cooling tower means a building heat removal device.

6. Waiver for exemption to the requirements of high efficiency plumbing fixtures. On or after July 1, 2012, in accordance with O.C.G.A. Section 8-2-3, counties and municipalities are permitted to adopt an ordinance which shall provide procedures and requirements to apply for an exemption to the requirements of subsection (c) of this Code section, relative to new construction and to the repair or renovation of an existing building, under the following conditions:

   1) When the repair or renovation of the existing building does not include the replacement of the plumbing or sewage system servicing toilets, faucets, or shower heads within such existing building;
   2) When such plumbing or sewerage system within such existing building, because of its capacity, design, or installation, would not function properly if the toilets, faucets, or shower heads required were installed;
   3) When such system is a well or gravity flow from a spring and is owned privately by an individual for use in such individual's personal residence; or
   4) When units to be installed are:
      a. Specifically designed for use by person with disabilities;
      b. Specifically designed to withstand unusual abuse or installation in a penal institution; or
      c. Toilets for juveniles