CODES UPDATE

Georgia Department of Community Affairs • Construction Codes & Industrialized Buildings • 60 Executive Park South, N.E. • Atlanta, GA 30329-2231
404-679-3118 • www.dca.state.ga.us Volume 10, Number 1 • Spring 2008

COMMISSIONER BEATTY SELECTS INDUSTRIALIZED BUILDINGS ADVISORY COMMITTEE

Commissioner Mike Beatty has selected the eleven member Industrialized Buildings Advisory Committee. The members of the committee are responsible for advising the Commissioner of DCA in the drafting, promulgation and revision of the rules and regulations to be adopted for the purpose of the Industrialized Buildings Act, Title 8, Chapter 2, Article 2, Part 1 of the Official Code of Georgia Annotated. The following members have been selected to serve:

MEMBER	REPRESENTING
Councilman Jimmy Burnett, Chairman	Municipal Governing Body
Mr. Carl Fortson, Vice Chairman	Building Code Enforcement Officer
Commissioner J. Edgar Roberts, Secretary	County Governing Body
Mr. G. Hiller Spann	Residential Industrialized Buildings Manufacturing Industry
Mr. Garry Kornegay, P.E.	Licensed Design Professionals
Mr. Gary Davenport, A.I.A.	Licensed Design Professionals
Mr. Ron Garrett	Regional Development Centers
Ms. Jennifer Adams	Commissioner of the Department of Community Affairs
Mr. Danny L. Dunn	Commercial Industrialized Buildings Manufacturing Industry
Mr. Gordon H. Goodman	Industrialized Buildings Installation Industry
vacant	Industrialized Buildings Evaluation/Inspection Service

If you need additional information, please contact Ted Miltiades, Director at (404) 679-3106 or tmiltiad@dca.state.ga.us.

2008 SCAC AMENDMENT SUBCOMMITTEE

The 2008 SCAC Subcommittee which was tasked with reviewing the proposed amendments to the Georgia State Minimum Standard Codes for construction made their final report to the State Codes Advisory Committee (SCAC) at the April 24 SCAC meeting. Mr. Tom Carty, Chairman of the Subcommittee, presented the final report and recommendations to the SCAC. There were a total of sixteen (16) proposed amendments recommended for adoption; of these 16 Amendments, six (6) Amendments were to the International Residential Code, two (2) Amendments were to the International Building Code, four (4) Amendments were to the International Fuel Gas Code, and four (4) Amendments were to the International Plumbing Code which included adoption of 'Appendix C: Gray Water Recycling Systems' and 'Appendix I: Rainwater Recycling Systems'. The Subcommittee also recommended that the SCAC encourage the private sector to develop guidelines for Gray Water and Rain Water recycling systems. The Subcommittee also recommended that Chapter 17 "Structural Test and Special Inspections" of the International Building Code (IBC) and the GA Amendments to this chapter be revisited for further review and a study group be assigned. The recommended amendments and recommendations of the Subcommittee were approved unanimously by the SCAC at the April 24 SCAC meeting. If adopted, the amendments will become effective January 1, 2009. If you have questions or would like a copy of the approved proposed amendments of the Subcommittee, please contact Max Rietschier, SCAC Subcommittee Coordinator, at 404-679-3104 or mrietsch@dca.state.ga.us.

CODY SAYS

All of the current Georgia Amendments to the State Minimum Standard Codes for construction are available for free download at the Department of Community Affairs website at the following link:

http://www.dca.state.ga.us/development/constructioncodes/programs/codeAmendments.asp

MARK YOUR CALENDAR

JULY

14-18 Georgia State Inspectors Association – Jekyll Island, GA

16-19 Georgia International Association of Electrical Inspectors –Augusta, GA

22-25 National Workshop on State Building Energy Codes – St. Paul, MN.

24 State Codes Advisory Committee Meeting @ DCA

SEPTEMBER

14-23 International Code Council Annual Conference – Minneapolis, MN.

25 Industrialized Buildings Advisory Committee

If you have any meetings that you would like to include in this newsletter, please contact the Construction Codes Program at 404-679-3118.

SENATE BILL 115

On May 29, 2007, Governor Sonny Perdue signed the Licensing of General Contractors Bill, Senate Bill 115. Senate Bill 115 amends Chapter 41 of Title 43 of the Official Code of Georgia Annotated, relating to residential and general contractors. In doing so, the bill extends the term "contractor" to include industrialized buildings installers, thus making it a requirement that a person who installs industrialized buildings be a licensed contractor. In summary, the legislation includes licensure provisions for residential and general contractors, policies and procedures of the licensing board, development and administration of State exams and exemptions to licensing requirements. Please be advised that the licensing requirements set forth by Chapter 41 of Title 43 of the Official Code of Georgia Annotated become effective and enforceable July 1, 2008. If you need any additional information, please contact the Georgia Office of the Secretary of State, Residential Licensing section at (478) 207-1470.

2008 SCAC ELECTRIC-RESISTANCE HEATING SUBCOMMITTEE MEETING

On November 7, 2007, the DCA Board returned the International Energy Conservation Code (IECC) proposed 2008 amendment to add Section 403.1.2 Electric-resistance heating to the State Codes Advisory Committee (SCAC). A Subcommittee was appointed to review the issue and make a final recommendation to the SCAC. The Subcommittee consists of Chairman Gregori Anderson, with members Gregg Johnson and Barry Abernathy.

The 2008 SCAC Electric-Resistance Heating Subcommittee held its first and final meeting on Thursday, May 22. After further discussion, which included input from the public and interested parties, the Subcommittee voted to approve the following amendment to the 2006 IECC:

403.1.2 Primary heat source. For new dwelling unit central HVAC systems, or replacement HVAC systems installed in dwelling units that were originally permitted after January 1, 1996, electric-resistance heat shall not be used as the primary heat source. Primary heat source is defined as the heat source for the original dwelling unit system.

Exception: Alterations or additions of 50% or less than the original conditioned floor area.

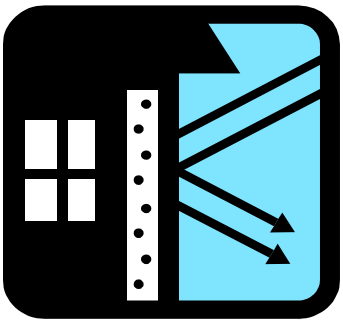
The Subcommittee Chairman Gregori Anderson will present the recommendations to the SCAC at the July 24, 2008 SCAC meeting.

2008 NATIONAL ELECTRICAL CODE (NEC) TASK FORCE

The Task Force was charged with reviewing the 2008 NEC with any proposed amendments and making recommendations to the State Codes Advisory Committee (SCAC) regarding its adoption. The Task Force consisted of the following members: Danny Lundstrom, Chairman (representing SCAC/Electrical Engineers); Mike Bean, Vice Chairman (representing SCAC/Electrical Contracting Industry); Roger McDaniel (representing International Association of Electrical Inspectors); Phil Huff (representing Atlanta Electrical Contractors Association); Tony Perry (representing Home Builders Association of Georgia); William Womack (representing Georgia Engineering Alliance); Steve Welborn (representing local inspectors); Marc Hawkins (representing local inspectors); and David Spain (representing Georgia Insurance and Safety Fire Commissioner).

The Task Force held meetings on March 27, April 16, and May 7. Chairman Danny Lundstrom made a preliminary progress report at the April 24 SCAC meeting and will make a final report to the SCAC at its July 24 meeting. The recommendations that the Task Force will make to the SCAC in its final report include the adoption of the 2008 edition of the NEC, and the adoption of four (4) Georgia Amendments to the 2008 NEC. The tentative effective date for the 2008 NEC with Georgia Amendments is January 1, 2009. If you have questions or would like additional information, please contact Ryan Meres, DCA Staff Representative for the 2008 NEC Task Force at (404) 679-3109 or rmeres@dca.state.ga.us.

CLARIFICATION ON THE USE OF SPRAY FOAM INSULATION



The use of spray foam insulation in residential applications falls under the scope of the Georgia State Minimum Standard One- and Two-Family Dwelling Code, which is the 2006 edition of the International Residential Code (IRC) with Georgia Amendments. Section R314 'Foam Plastics' addresses the use of all foam plastics in residential construction.

Section R314.3 'Surface burning characteristics' allows a maximum flame spread index of 75 and a maximum smoked developed index of 450 unless otherwise allowed in Section R314.5 'Specific requirements' or R314.6 'Specific approval.' Section R314.4 'Thermal barrier' requires a thermal barrier of minimum 0.5 inch gypsum wallboard to separate the foam plastic from the interior of the building unless otherwise allowed in Section R314.5 or R314.6.

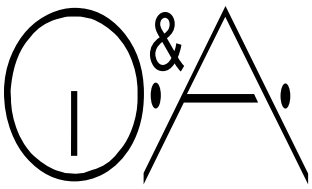
Section R314.5 'Specific requirements' addresses the specific installation requirements of foam plastics that have not been approved in accordance with Section R314.6. In determining the installation requirements for attics and crawl spaces, refer to Sections R314.5.3 'Attics' and R314.5.4 'Crawl spaces.' For attics, Section R314.5.3 eliminates the requirement for a thermal barrier (R314.4) where attic access is required in accordance with Section R807.1 and where the space is entered only for the service of utilities and when the foam plastic insulation is protected against ignition using an approved ignition barrier material. Attic applications of spray foam

Continued next page

must also follow the requirements of Section R806.4 'Conditioned attic assemblies.' The crawl space requirements of Section R314.5.4 also eliminate the thermal barrier requirement when crawl space access is required by Section R408.4 and where entry is made only for the service of utilities and foam plastic insulation is protected by an approved ignition barrier material. The ignition barrier in Sections R314.5.3 and R314.5.4 is not required when the foam plastic insulation has been tested in accordance with Section R314.6.

The use of spray foam insulation also falls within the scope of the Georgia State Minimum Standard Energy Code, which is the 2006 International Energy Conservation Code (IECC) with Georgia Supplements and Amendments. Typically spray foam insulation is applied with a maximum R-value of 20. Since the ceiling/roof insulation requirement for Georgia is R-30 or R-38, the R-20 spray foam would not meet the prescriptive requirements of the Energy Code. To show compliance with the Georgia Energy Code, a UA tradeoff should be completed per Section 402.1.4 'Total UA alternative' (REScheck) or an energy model should be completed per Section 404 'Simulated Performance Alternative' of the 2006 IECC. When installed between the floor joists of a crawlspace, spray foam has the ability to meet the prescriptive R-value of 19.

If spray foam insulation is being used in an attic or crawlspace, it needs to be covered by either a thermal or ignition barrier unless it has been tested in accordance with IRC Section R314.6. When being installed in a roof/ceiling assembly, it should be accompanied with a passing compliance certificate from an approved energy modeling or UA compliance software. The use of evaluation reports from the International Code Council may be helpful in determining a product's compliance. The use or non-use of evaluation reports falls under the purview of the local jurisdiction. This clarification is not a formal interpretation, but rather the opinion of the Department of Community Affairs (DCA). Under the Uniform Codes Act, final interpretation of the Georgia State Minimum Standard Codes for Construction ultimately lies with the local building official. For more information or with further questions, please contact DCA Staff member Ryan Meres at rmeres@dca.state.ga.us or (404) 679-3109.



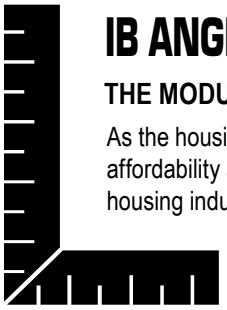
Q: How can I show compliance with the Georgia Residential Energy Code (2006 International Energy Conservation Code (IECC) with Georgia Supplements and Amendments)?

A: 1. Use the Georgia version of REScheck at www.energycodes.gov.

2. Comply with Table 402.1.1 of the 2008 GA Amendments to the IECC.

3. Use an approved energy modeling software per Section 404 'Performance' of the 2006 IECC.

Bonus Answer: Regardless of the compliance path chosen, all 'Mandatory' requirements of Chapter 4 of the 2006 IECC must be followed.



IB ANGLE:

THE MODULAR ALTERNATIVE

As the housing market repositions itself, it is clear that affordability and sustainability will be the main focus in the housing industry moving forward. Builders are looking for ways to reduce their construction costs while increasing the quality of their products and services. Homeowners want a quality affordable home with increased energy efficiency that is environmentally friendly. Modular/off-site construction combined with advanced building technology provides the housing industry with a feasible solution to the challenges addressed by both builders and homeowners.

The Georgia Department of Community Affairs is the State's leading agency on affordable housing and homeownership. In addition, the department administers the Industrialized Buildings Program which supports the modular housing industry throughout the State. The Program was formed after passage of the "Industrialized Buildings Act" by the Georgia General Assembly in an effort "to encourage the reduction of building construction costs and to make building and homeownership more feasible for all residents of the state."

The process by which modular homes are constructed occurs off-site in a factory-controlled environment allowing up to 90 percent of the home to be completed without the disruption of inclement weather or material and contractor/labor shortages which commonly plague site-built homes. Because 90 percent of construction occurs off-site, there is minimal impact to the construction site and the environment. Other added benefits of modular homes include: 1) their enhanced structural stability which enables them to withstand hurricane force winds and the rigors of transportation and erection; 2) their speed of construction; and 3) their energy efficiency. Manufacturers of modular homes use in-house and third-party inspectors which negate a large portion of the often expensive and lengthy local permitting and inspection process. Furthermore, manufacturers reap the benefits of purchasing materials in bulk at wholesale prices, in turn passing the savings on to the homeowner. With the average cost of a modular home being $30 to $50 per square foot, excluding land and site development expenses, the benefits of modular construction as it relates to affordability and sustainability are innumerable.

Ideal for disaster relief, infill projects, community revitalization and in areas not easily accessible to local contractors, today's modular homes take on many forms and are used in various settings. Currently, modular home manufacturers produce six percent of the nation's housing stock. Unfortunately, modular homes still face many hurdles. With increased public awareness and education, the stigma of being "trailers" or "mobile homes" is slowly diminishing. However, there is still more work to be done. In keeping with the surrounding neighborhoods, more aesthetically pleasing home designs, along with local architectural standards applied to all types of housing, would better serve communities and the housing industry in general. This would help further diminish the stigma of modular homes. Constructed to the same codes as site-built homes and bound by all local ordinances or regulations, modular homes in the State of Georgia are protected by law, prohibiting the restriction of "industrialized buildings" based solely on the fact that it was not built on site. In conclusion, the Department of Community Affairs is committed to affordable, sustainable housing and to the growth of the modular industry in the State of Georgia and beyond.

For more information, please visit our website www.dca.state.ga.us or contact Edward Kessie at 404-679-4998.

IMPORTING MODULAR BUILDINGS TO GEORGIA

On many occasions each year, consultants for Georgia's Industrialized Buildings Program receive telephone inquiries from local building officials asking about the legality of, and permitting procedures for, modular buildings that have been imported into Georgia.

Every year, hundreds of buildings are legally imported into Georgia from approved manufacturers located in all areas of the United States. The manufacturers of these buildings have received approval from Georgia's Industrialized Buildings Program prior to the buildings being manufactured or shipped into the State. These manufacturers are eligible to order insignias from the Georgia Department of Community Affairs (DCA), administrators of the State's Industrialized Buildings Program. Once buildings intended for export to Georgia have been given final approval by the manufacturer and their third party inspection firm, the manufacturer can then purchase

Continued next page

insignias for their buildings from DCA. They are required to place these insignias on their buildings to indicate that the buildings have been approved for entry into Georgia and should be accepted by local officials for permitting and installation.

It is illegal to import modular buildings into the State of Georgia without first obtaining approval through DCA. Prior to issuance of a permit, local code officials check for the DCA insignia on each module of the building as an indication of the building having received State approval. When the buildings are found not to have Georgia Insignias attached, calls then come in to DCA from the affected code officials, the contractor or the manufacturers themselves. They are calling to inquire about what can be done to get State approval for the affected imported buildings.

Once buildings have entered Georgia without prior approval, they must undergo the re-manufacturing process before being allowed to remain in the State. The re-manufacturing process provides for the retention of one of the State's approved third party engineering/inspection firms to review plans of the building and to inspect the building for compliance with Georgia's Construction Codes. Any aspect of the building found to deviate from the requirements of Georgia's Construction Codes must be brought into compliance with the applicable code. Once all deviations on the building have been corrected, the third party engineering/inspection firm must then submit building plans and inspection reports to DCA with his application for insignia.

For additional information, please contact the Industrialized Buildings Program at (404) 679-3118.

WEB SITES OF INTEREST

Department of Community Affairs
www.dca.state.ga.us

EasyLiving Home^{cm} Program
www.easylivinghome.org

International Code Council (ICC)
www.iccsafe.org

Building Officials Association of Georgia
www.boagcodes.org

State of Georgia
www.georgia.gov

Georgia General Assembly
www.legis.state.ga.us

State Fire Marshal
www.inscomm.state.ga.us

National Association of Home Builders
www.nahb.com

Southface Energy Institute
www.southface.org

PROFILE CORNER

MIKE BARCIK, SOUTHFACE ENERGY INSTITUTE

Mike Barcik is the director of technical services and a senior research engineer at Atlanta-based Southface, a non-profit energy institute, where he has worked for nearly 13 years. His experience as a research engineer in energy modeling, building diagnostics and mechanical systems has revered Mike as a respected engineer in the green building industry. His career as an engineer, educator and trainer spans more than 20 years.

Mike has trained more than 850 professionals nationally in the Home Energy Rating System and facilitated over 50 commercial sustainable design charettes. As an energy code trainer, he has developed teaching materials for energy efficiency and energy codes for high-performance residential and commercial buildings. He led and taught courses in Advanced Building Diagnostics, Building Science Fundamentals and the Building Envelope, EarthCraft House for new and renovated homes, Home Energy Rating System, Real Strategies for High-Performance Commercial Buildings, Passive Solar Design and the Southface Home Building School.

Simultaneously, Mike taught mold, moisture and indoor air quality classes, as well as conducted duct sealing and load calculation workshops intended for HVAC professionals. Not only a trainer, he is also a technical writer. He authored and edited numerous Southface factsheets and technical bulletins available for free at www.southface.org as well as several publications, including a guidebook on Indoor Air Quality: What it means to you. Additionally, he co-authored with Brett Dillion, vice president of IBS Advisors, a HERS Rater Handbook of Essential Subjects. Mike's technical articles have been featured in trade publications, such as the Home Energy Magazine and the Southface Journal. More recently, he has been featured in online training modules including "A LEED 2.2 Study Guide" (available for free at www.southfaceonlinemodules.org) and "High Performance Residential and Commercial Buildings for Hot, Humid Climates" (available for free at www.codecollegenetwork.com).

Further, he assisted with the design and construction of the Eco Office, a 10,000-square-foot commercial demonstration facility, which displays state-of-the shelf energy, water and waste-reducing strategies and technologies (tracking LEED Platinum). He also contributed to the design and construction of the Southface Energy and Environmental Resource Center, a 6,400-square-foot residential demonstration facility that employs more than 100 'green' ideas and technologies. Mike's previous technical experience includes R&D with the design and prototype construction of residential gas-fired adsorption heat pumps and residential gas cooking technologies.

A Georgia Institute of Technology graduate, Mike earned a B.S. and M.S. in mechanical engineering. He is a certified Home Energy Rater trainer, a LEED™ Accredited Professional and a USGBC LEED-NC and LEED for Homes faculty member. He is an active member of the State of Georgia Energy Code Task Force and has taught energy code throughout the southeast. He is also a member of ASHRAE, ACAA, EEBA and the USGBC, Atlanta Chapter. He is a long-time volunteer with Habitat for Humanity.

Mike lives in a renovated and energy efficient historic bungalow in Decatur with his much-smarter architect wife, two young daughters and beloved dachshund.

CLASSES BEING OFFERED BY CLAYTON STATE UNIVERSITY

Clayton State University, Harry S. Downs Center for Continuing Education, is once again offering its summer classes for the building codes professional. For course dates and more information, or to register, please call (678) 466-5050 or visit their Web site at www.conted.clayton.edu.

Code	Course Name	Location	Begins	Ends	Meets	Fee
084CDCA112	Application of Georgia Safety Fire Laws & Rules	CE Main Campus	05/15/2008	05/16/2008	Th, F from 8:30 AM to 3:30 PM, 2 Sessions	245.00
084CDCA105	Plumbing Inspector and Plans Examiner	CE Main Campus	06/03/2008	06/06/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
084CDCA106	Mechanical Inspector & Plans Examiner	CE Main Campus	06/10/2008	06/13/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
084CDCA107	Building Inspector and Plans Examiner	CE Main Campus	06/17/2008	06/20/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
084CDCA108	Commercial Electrical Principles & Code Applications	CE Main Campus	06/24/2008	06/27/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
084CDCA114	Application of Fire Codes to Existing Buildings	CE Main Campus	06/26/2008	06/26/2008	Thursday from 8:30 AM to 3:30 PM, 1 Session	135.00
091CDCA103	Residential Building Principles & Code Applications	CE Main Campus	08/19/2008	08/22/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
091CDCA104	Residential - Electrical Principles & Code Applications	CE Main Campus	08/26/2008	08/29/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
091CDCA119	Legal Aspects of Code Enforcement	CE Main Campus	09/11/2008	09/11/2008	Thursday from 8:30 AM to 3:30 PM, 1 Session	135.00
092CDCA117	2006 International Residential Code Updates	CSU-Continuing Education 333	09/18/2008	09/18/2008	Thursday from 8:30 AM to 3:30 PM, 1 Session	135.00
092CDCA107	Building Inspector and Plans Examiner	CE Main Campus	10/14/2008	10/17/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
092CDCA106	Mechanical Inspector & Plans Examiner	CE Main Campus	10/14/2008	10/17/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
092CDCA105	Plumbing Inspector and Plans Examiner	CE Main Campus	10/14/2008	10/17/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
092CDCA116	Georgia Accessibility Standards	CSU-Continuing Education 301	10/16/2008	10/17/2008	Th, F from 8:30 AM to 3:30 PM, 2 Sessions	195.00
092CDCA108	Commercial Electrical Principles & Code Applications	CE Main Campus	10/28/2008	10/31/2008	Tu, W, Th, F from 8:30 AM to 3:30 PM, 4 Sessions	525.00
092CDCA210	Builder Inspector Orientation Training	CE Main Campus	11/11/2008	11/11/2008	Tuesday from 8:30 AM to 3:30 PM, 1 Session	135.00
092CDCA111	Complying With IRC On Residential Framing	CE Main Campus	11/12/2008	11/12/2008	Wednesday from 8:30 AM to 3:30 PM, 1 Session	135.00
092CDCA115	Provisions of NFPA Life Safety Code	CE Main Campus	11/13/2008	11/14/2008	Th, F from 8:30 AM to 3:30 PM, 2 Sessions	195.00

CODES AND INDUSTRIALIZED BUILDINGS

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The main telephone and fax numbers for the Codes and Industrialized Buildings Section are:

(404) 679-3118 (404) 679-0646 (Fax)

Email: codes@dca.state.ga.us

Ted Miltiades, Director, Office of Construction Codes and Industrialized Buildings

(404) 679-3106

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Ryan Meres, Consultant, (404) 679-3109
Email: rmeres@dca.state.ga.us

GEORGIA AMENDMENTS MAY BE DOWNLOADED DIRECTLY FROM THE WEBSITE!

INDUSTRIALIZED BUILDINGS:

John Watts, Consultant, (404) 679-5246
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