

S.O.D.A.F.S. U.P.D.A.T.E.

• Georgia Department of Community Affairs • Construction Codes & Industrialized Buildings •
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NEW GEORGIA ENERGY CODE TO TAKE EFFECT ON JANUARY 1, 2011

On November 3, 2010 the Department of Community Affairs Board voted to approve a new edition of the Georgia Energy Code. The 2009 International Energy Conservation Code (IECC) with 2011 Georgia Supplements and Amendments will replace the 2006 IECC on January 1, 2011 as the Georgia State Minimum Standard Energy Code. ASHRAE Standard 90.1-2007 as referenced in the 2009 IECC will also take effect on January 1, 2011. This very significant vote marked the conclusion of more than 18 months of work by DCA staff and the 2009 IECC Task Force.



All new construction and renovations permitted after January 1, 2011 will have to comply with the new code. Furthermore, the State will have to document a minimum

90% compliance rate with the 2009 IECC and ASHRAE 90.1-2007 by 2017 as stipulated in the American Recovery and Reinvestment Act of 2009. In an effort to assist industry stakeholders in complying with the new code, DCA and the Georgia Environmental Finance Authority will be partnering to provide both commercial and residential energy code trainings across the state. Look for the first trainings to be offered in January.

The U.S. Department of Energy (DOE) has provided funding to furnish free digital copies of the *2009 International Energy Conservation Code®* (2009 IECC). This free download is meant to support the building energy efficiency goals of DOE's Building Technologies Program, as well as those found within the American Recovery and Reinvestment Act.

DOE assists states and stakeholders with adoption and compliance related activities associated with the 2009 IECC. By making the code more readily available to all involved, DOE is confident that this collaboration with the International Code Council (ICC), the publisher of the IECC, will lead to greater energy efficiency in buildings.

Visit ICC's website to download your free copy of the 2009 IECC now!

URL: www.iccsafe.org/store/pages/doeregistration.aspx

The Georgia Supplements and Amendments to the 2009 IECC can be found on the web: <http://www.dca.ga.gov/development/constructioncodes/programs/codeAmendments.asp>.

This project is funded in part by the American Recovery and Reinvestment Act of 2009 in cooperation with the Georgia Environmental Finance Authority. For more information, please contact 404-679-3118 or constructioncodes@dca.ga.gov.

NEW RESIDENTIAL GREEN BUILDING STANDARD

The Department of Community Affairs Board, upon the recommendation of the State Codes Advisory Committee (SCAC) has adopted the National Green Building Standard (ICC 700-2008) for One- and -Two Family

Dwellings including Townhomes. This standard is intended to provide flexibility to permit the use of innovative approaches and techniques to mitigate environmental impact on the designing and construction of Single Family homes. ICC 700-2008 will be a permissive code for local governments to adopt if they choose to enforce as there Green Building Standard. The Residential Green Building Standard will take effect on January 1, 2011. For more information, please contact Anthony Z. Claffey, Building Codes Consultant, at 404-679-4845 or anthony.claffey@dca.ga.gov.



NEW GEORGIA STATE ENERGY CODE WORKSHOP TRAINING COMING SOON!

State-wide training for the new 2009 Georgia State Minimum Standard Energy Code is coming soon! The training will include the residential and commercial requirements of the 2009 IECC with 2011 Georgia Supplements and Amendments and the Duct and Envelope Tightness (DET) Verifier

Training as well.

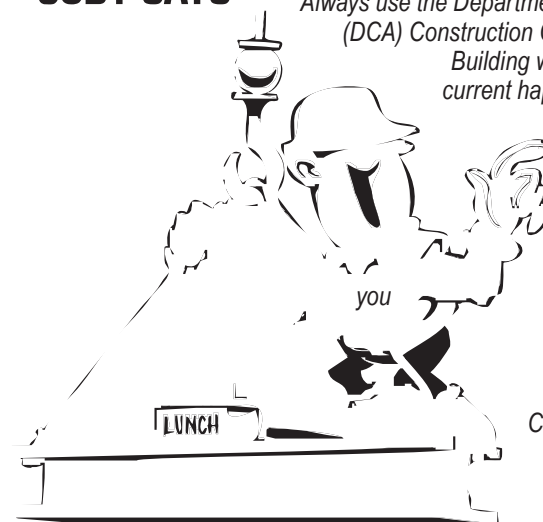
For more information and updates on the time and location when this training will become available stay tuned to the DCA website at: <http://www.dca.ga.gov/development/constructioncodes>.

CODY SAYS

Always use the Department of Community Affairs (DCA) Construction Codes and Industrialized Building webpage to find the most current happenings with regards to the State of Georgia building codes.

Using the link below will allow you to view current code editions in effect and also give all contact information needed for assistance.

<http://www.dca.ga.gov/development/ConstructionCodes/index.asp>



GEORGIA ENERGY CODE PILOT STUDY UPDATE



The State of Georgia was recently selected by the US Department of Energy (DOE) Building Energy Codes Program (BECP) in partnership with the Southeast Energy Efficiency Alliance (SEEA) to participate in a "State Energy Code Compliance Pilot Study". The pilot study includes: a survey of local energy code administrative practices and a plan review and onsite evaluations of 44 randomly chosen commercial buildings for compliance with ASHRAE 90.1-2007.

The Department of Community Affairs (DCA) has selected a Compliance Working Group to help locate and obtain the required random sample buildings and to make recommendations regarding the results of the study. The group is comprised of stakeholders representing both the public and private sectors, such as, state and federal energy agencies, architect and engineers, general contractors and building officials. For more information about the Pilot Study and the Compliance Working Group, visit our DCA webpage at <http://www.dca.state.ga.us/development/ConstructionCodes/programs/EnergyCodePilotStudy.asp>.

Participation in the survey is crucial, and it comes with key benefits: energy code training for local personnel, the chance to identify areas for code improvement and the need for additional resources to support code compliance initiatives. The local jurisdictional survey is available online at <http://www.energycodes.gov/GeorgiaJurisdictionalSurvey>. If anyone has any new commercial buildings or additions that are currently under construction which could be included in the study, then please contact Bill Towson, Program Coordinator at (404) 679-3109 or bill.towson@dca.ga.gov.

MARK YOUR 2011 CALENDAR

JANUARY

- 13 State Codes Advisory Committee Meeting, 10:00 a.m. @ DCA
- 11-16 International Builders Show, Orlando, FL

FEBRUARY

- 28- Mar 2 Resnet Building Performance Conference, Lake Buena Vista, FL

MARCH

- 14-15 Green Prints Conference and Tradeshow, Atlanta, GA

APRIL

- 9-13 BOAG Annual Conference, Marietta, GA
- 21 State Codes Advisory Committee 10:00 a.m. @ DCA
- 26-28 Manufacturing Housing Institute Congress and Expo, Las Vegas, NV

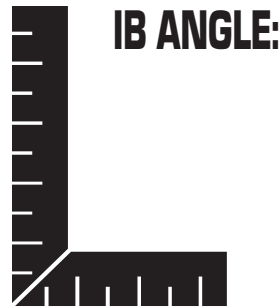
MAY

- 12 Industrialized Building Advisory Committee Meeting, 10:00 a.m. @ DCA
- 16-22 International Code Council Hearings and Conference, Dallas, TX

JUNE

- 12-15 NFPA World Safety Conference and Exposition, Boston, MA

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



House Bill 516 passed in the 2010 Legislative Cycle and became effective on May 20, 2010. This bill addresses factory built dwelling units by adding a definition for "residential industrialized building" (O.C.G.A. Section 8-2-111). The new definition prohibits residential industrialized buildings from being on-frame and requires that they be affixed to a permanent load-bearing foundation. The new law states that the residential industrialized building must be built to the

same code that site built one- and two-family dwellings are required to be built to. The law also clarifies that no ordinance or regulation enacted by a county or municipality shall exclude residential industrialized buildings from being sited in such county or municipality in a residential district solely because the building is a residential industrialized building (O.C.G.A. Section 8-2-112). If you have further questions please contact Max Rietschier, Building Codes Consultant at 404-679-3104 or max.rietschier@dca.ga.gov.

Q: Why do local governments need to complete the online Georgia Jurisdictional Survey?



A: Participation in the survey is crucial, and it comes with key benefits: energy code training for local personnel, the chance to identify areas for code improvement and the need for additional resources to support code compliance initiatives. The local jurisdictional survey is available online at www.energycodes.gov/GeorgiaJurisdictionalSurvey.

WEB SITES OF INTEREST

Department of Community Affairs
www.dca.ga.gov

State of Georgia
www.georgia.gov

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

National Association of Home Builders
www.nahb.com

International Code Council (ICC)
www.iccsafe.org

National Fire Protection Agency
www.NFPA.com

Building Officials Association of Georgia
www.boagcodes.org

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

State Fire Marshal
www.gainsurance.org

Southface Energy Institute
www.southface.org



PROFILE CORNER

As the Chief of Engineering of the Safety Fire Commissioners' Office, Dwayne Garriss, Georgia's Assistant State Fire Marshal, coordinates the building plan review and construction inspection activities of the Engineering/Inspection staff throughout the State. With an educational background in architecture from the University of Tennessee, Dwayne started his career as a Mechanical Engineer Project Manager with William E. Owen and Associates and then obtained a position with Chegwiddden Dorsey Holmes Architects.



In 1988, he relocated to the Office of the Insurance and Safety Fire Commissioner as a Fire Safety Engineer. Since 1993, he has served in his current position overseeing the Engineering and Inspection Division and the licensing of fire suppression contractors, inspectors and special hazard system technicians. Dwayne has served as the Safety Fire Commissioner's designee on the State Codes Advisory Committee for the Department of Community Affairs for 18 years.

Dwayne believes that by working together and utilizing the 3E principal of engineering, education and enforce, code officials have the best chance of regulating building construction that may constitute a special hazard to property or to the life and safety of the building occupants and providing a safer built environment for the Citizens of Georgia and its visitors. He has strived to build working relationships between the fire and building officials of Georgia. This evolved to a joint code official's taskforce in 1995 where fire and building code officials began to resolve the conflicting languages of the Southern Standard Codes and the NFPA Codes and Standards for which are often the basis for further code revisions today.

Dwayne was elected to serve as a Sectional Director on the Code Council Board for a region that includes Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee and the Caribbean during the Council's 2010 Annual Conference in late October in Charlotte, North Carolina. Dwayne believes in both passive and active balanced fire protection for the protection of life and property.

Dwayne has been an active member of the ICC's Fire Code Council which he served as Chair for the past two years. He has also served on two exam development committees and on the Governance Review Committee for the ICC. Other areas of involvement with the International Code Council include service on the Joint Fire Service Review Committee as an ICC appointee, the Codes Correlating Committee and the Steering Committee.

In addition, Dwayne has been a construction codes instructor for the University of Georgia through Clayton State College and University and Gainesville State College. Currently he is an adjunct instructor for the Georgia Fire Academy and has also served as an instructor for portions of the fire science program at Perimeter College.

His achievements include being an Eagle Scout, becoming SBCCI certified as a Fire Inspector I, an ICC certified Fire Inspector I, NPQ certified Fire Inspector I, NFPA Fire Inspector I, NFPA Certified Fire Plans Examiner, Georgia Certified Fire Inspector, Georgia Certified Fire and Life Safety Educator, ICC certified Pre-Engineered Kitchen Fire Extinguishing Technician and as a Pre-Engineered Industrial Fire Extinguishing Technician.

Dwayne has served as President of the Georgia Fire Inspectors Association, been recognized as Fire Official of the Year by the Georgia Fire Sprinkler Association, been recognized as Fire Safety Professional of the Year by the Society of Fire Protection Engineers (Georgia Chapter), was awarded the Fire and Life Safety Award from the American Fire Sprinkler Association, and awarded the H.D. Crossnline Award by the Southeastern Fire Chiefs Association.

GEORGIA CODES AND GEORGIA AMENDMENTS TO THE STATE MINIMUM STANDARD CODES TO BECOME EFFECTIVE JANUARY 1, 2011:

The Department of Community Affairs (DCA) Board, on the recommendation of the State Codes Advisory Committee (SCAC), has adopted the 2009 edition of the International Energy Conservation Code with 2011 Georgia Supplements and Amendments, the 2008 edition of the International Green Building Standard with 2011 Georgia Amendments along with 2011 Georgia Amendments to the following State Minimum Standard Codes for construction, the International Mechanical Code, the International Plumbing Code, and the International Residential Code, which will become effective January 1, 2011. A synopsis of the approved codes and amendments is listed below:

INTERNATIONAL ENERGY CONSERVATION CODE, 2009 EDITION

- Delete Section 101.1, 'Title', without substitution.
- Delete Section 103, 'CONSTRUCTION DOCUMENTS', without substitution.
- Delete Section 104, 'INSPECTIONS', without substitution.
- Delete Section 107, 'FEES', without substitution.
- Delete Section 108, 'STOP WORK ORDER', without substitution.
- Delete Section 109, 'BOARD OF APPEALS', without substitution.
- Add definition of 'ATTIC KNEEWALL'.
- Add definition of 'CERTIFIED DUCT AND ENVELOPE TIGHTNESS (DET) VERIFIER'.
- Delete definition of 'CONDITIONED SPACE' and substitute.
- Revise Section 401.3, 'Certificate', by revising first sentence and adding at end.
- Delete Tables 402.1.1, 'INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a', and 402.1.3, 'EQUIVALENT U-FACTORS^a', and substitute by adding new Table 402.1.1, 'INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a'.
- Revise Section 402.1.4, 'Total UA alternative'.
- Add new Table 402.1.4, 'When trade-offs are used'.
- Revise Section 402.2.1, 'Ceilings with attic spaces' by adding at end.
- Add new Section 402.2.1.1, 'Wind wash baffle and air-permeable insulation dam'.
- Delete Section 402.2.3, 'Access hatches and doors', and substitute.
- Revise Section 402.2.6, 'Floors'.
- Revise Section 402.2.9, 'Crawl space walls'.
- Revise Section 402.3.4, 'Opaque door exemption'.
- Revise Section 402.4.1, 'Building thermal envelope', to add at end.
- Revise Section 402.4.2, 'Air sealing and insulation'.
- Re-name and Revise Section 402.4.2.1, 'Testing option'.
- Add new Section 402.4.2.1.1, 'Certified duct and envelope tightness (DET) verifier'.
- Delete Section 402.4.2.2, 'Visual inspection option', and substitute.
- Revise Section 403.2.2, 'Sealing (Mandatory)'.
- Revise Section 403.2.3, 'Building cavities (Mandatory)'.
- Add new Section 403.2.4, 'Joints and seams'.
- Add new Section 403.6.1, 'Primary heat source'.
- Add new Section 403.10, 'Power attic ventilators'.
- Revise Section 404.1, 'Lighting equipment (Prescriptive)'.
- Add new Section 502.1.1.1, 'Permanently vegetative green roof'.
- Revise Table 502.3, 'BUILDING ENVELOPE REQUIREMENTS: FENESTRATION'.
- Revise Section 503.3.1, 'Economizers', to add exceptions.
- Revise Table 503.3.1(1), 'ECONOMIZER REQUIREMENTS'.
- Add new Appendix A, 'AIR SEALING KEY POINTS'.
- Add new Appendix B, 'BUILDING ENVELOPE AND DUCT

TIGHTNESS TESTING PROTOCOL'

- Add new Appendix C, 'THIRD PARTY VERIFICATION'.
- Add new Appendix D, 'SAMPLE COMPLIANCE CERTIFICATE'.

- Revise Section 104.1, 'Administration'.
- Add new Section 104.2, 'Special Green Inspector'.
- Add definition of 'ACCESSORY STRUCTURE'.
- Revise definition of 'GROUND SOURCE HEAT PUMP'.
- Add definition of 'TOWNHOUSE'.
- Revise Section 301.2, 'Awarding of points'.
- Delete Section 304, 'GREEN MULTI-UNIT BUILDINGS', in its entirety without substitution.
- Revise Section 305.5.4(1).

NATIONAL GREEN BUILDING STANDARD, 2008 EDITION

- Add new Section 101.4, 'Local Ordinances'.
- Revise Section 102.1, 'Applicability'.
- Add new Section 102.2.1, 'Supplementary document'.
- Revise Section 103.3, 'Documentation'.
- Add new Section 103.4.1, 'Deemed to comply'.

MAJOR CHANGES TO THE 2011 GEORGIA ENERGY CODE—RESIDENTIAL

[Please Note: This document is a short list of the major changes to the residential requirements from the 2006 IECC with GA Amendments to the 2009 IECC with GA Amendments. This is not intended to demonstrate all changes. Please refer to the 2009 IECC and the 2011 GA Amendments to the 2009 IECC for all code requirements.]

Glazed Fenestration Requirements:

Climate Zone	U-factor (2006/2009)	SHGC (2006/2009)
2	0.65/0.50	0.40/0.30
3	0.65/0.50	0.40/0.30
4	0.40/0.35	0.40/0.30



Access Hatches and Doors:

Assembly	2006	2009
Hinged Vertical Access	R-3	R-5
Hatches/Scuttle Hole Covers	R-19	R-19
Pull Down Stairs	R-3	R-5 (over min. 75% of panel area)

Total UA Alternative (REScheck) Hard Limit Trade-offs:

- When insulating a ceiling with an attic space above, R-30 is the minimum allowed even when using the UA Alternative (REScheck) compliance pathway. The previous minimum trade-off limit was R-19.
- This table now addresses air-permeable and air-impermeable roofline installed insulation. Air-impermeable (spray foam, foam board, etc.) roofline installed insulation can be traded-off to a minimum of R-19. Air-permeable (fiberglass, cellulose, etc.) insulation must be installed with a minimum amount of air-impermeable insulation as follows: Climate Zone 2&3: R-19 air-permeable + R-5 air-impermeable; Climate Zone 4: R-19 air-permeable + R-15 air-impermeable.

Building Envelope Tightness Testing:

- Building envelope tightness testing is required for all one and two family dwellings and townhouses. This testing must be done by a Certified Duct and Envelope Tightness (DET) Verifier. See Section 402.4.2 of the 2011 GA Amendments to the 2009 IECC for the full requirements and see Chapter 2 of the GA Amendments for the definition of a 'Certified DET Verifier'.
- Residential buildings classified as R2 occupancy may choose to have a visual inspection conducted by an approved third-party inspector as defined in the exception to Section 402.4.2.2 of the 2011 GA Amendments to the 2009 IECC in lieu of the tightness testing.

Sealing Duct Systems:

- The joints and seams of all duct systems must be made substantially airtight by means of tapes, mastics, liquid sealants, gasketing or other approved closure systems. Without exception, all closure systems shall have mastic applied that is at least 0.08 inches (2mm) thick.
- Building framing cavities shall not be used as supply or return ducts. All supply and return ducts must be lined with metal, flex duct, duct board, or other material approved in Section M1601 of the IRC.

Duct Tightness Testing:

- All new residential structures shall pass either a 'rough-in' or 'post-construction' duct tightness test. The only exception is if the entire duct system and air handler are located within conditioned space.
- For renovations that effect the duct system, duct tightness testing is only required if more than 50% of the duct system is modified.

Power Attic Ventilators:

- In new construction, power attic ventilators shall not be connected to the electric grid. Solar powered attic ventilators are allowed.

Lighting Equipment:

- A minimum of 50% of the permanently installed lighting fixtures shall contain only high-efficacy (CFL, LED, etc.) lamps or be controlled with an occupancy/vacancy sensor or automated lighting control system.