2005 National Electrical Code Adoption

The Department of Community Affairs (DCA) Board has adopted the 2005 National Electrical Code (NEC) into the State Minimum Standard Codes to replace the 2002 NEC. The 2005 NEC will become effective January 1, 2006 with the following (2) Georgia State Amendments:

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel.

(B) Other Than Dwelling Units.

All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in (1) through (6) shall have ground-fault circuit-interrupter protection for personnel:

(1) Bathrooms

(2) Commercial and institutional kitchens --- for the purposes of this section, a kitchen is an area with a sink and permanent facilities for food preparation and cooking

(3) Roof tops

(4) Outdoors in public spaces --- for the purpose of this section a public space is defined as any space that is for use by, or is accessible to, the public

Exception to (3) and (4): Receptacles that are not readily accessible and are supplied from a dedicated branch circuit for electric snow-melting or deicing equipment shall be permitted to be installed in accordance with the applicable provisions of Article 426.

(5) Outdoors, where installed to comply with 210.63

(6) Within 6 feet of a sink or basin, excluding those listed in Section 517.21

210.12 Arc-fault Circuit-Interrupter Protection.

(B) Dwelling Unit Bedrooms.

All 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by a listed arc-fault circuit interrupter, combination type installed to provide protection of the branch circuit.

Branch feeder AFCIs shall be permitted to be used to meet the requirements of 210.12(B) until January 1, 2008.

FPN: For information on types of arc-fault circuit interrupters, see UL 1699-1999, Standard for Arc-Fault Circuit Interrupters.

Exception: The location of the arc-fault circuit interrupter shall be permitted to be at other than the origination of the branch circuit in compliance with (a) and (b):

(a) The arc-fault circuit interrupter installed within 1.8 m (6 ft) of the branch circuit overcurrent device as measured along the branch circuit conductors.

(b) The circuit conductors between the branch circuit overcurrent device and the arc-fault circuit interrupter shall be installed in a metal raceway or a cable with a metallic sheath.

Georgia Amendments to the State Minimum Standard Codes to Become Effective: January 1, 2006


• Revise Exception #7 of Section 403.9.1 of the Georgia Amendments revised January 1, 2005.

• Revise Exception #9 of Section 707.14.1 ‘Elevator lobby’ of the Georgia Amendments revised January 1, 2005.

• Renumber Sections 1504.5 ‘Physical properties’ and 1504.6 ‘Impact resistance’ 1504.6 and 1504.7, respectively, and add new Section 1504.5 ‘Edge securement for low-slope roofs.’


• Add new Table A2.3 ‘Assembly U-Factors for Metal Building Roofs’ from ANSI/ASHRAE/IESNA Standard 90.1-2004 to Chapter 7 ‘Building Design for All Commercial Buildings.’

• Delete Table 805.4.2 ‘Interior Lighting Power’ and substitute.

• Revise Section 805.4.2.1 ‘Entire building method’ to add.

• Add new Figure 9-3 ‘Metal Roof U-Factors with Fiberglass Insulation Installed Over the Purlins’ to Chapter 9 ‘Referenced Standards.’


Continued next page
INTERNATIONAL PLUMBING CODE, 2000 EDITION

- Revise Section 708.3.2 ‘Building sewers’ to add.
- Revise Section 708.3.5 ‘Building drain and building sewer junction.’

INTERNATIONAL RESIDENTIAL CODE, 2000 EDITION

- Revise Section R316.1 ‘Guards required’ to add.
- Revise Section M1601.1 ‘Materials’ to add.
- Revise Section M1601.3 ‘Installation’ to add.

SEER AIR CONDITIONER STANDARD TO INCREASE BY 30%

The Seasonal Energy Efficiency Ratio (SEER) is defined in the International Energy Conservation Code (IECC), 2000 Edition, as “The total cooling output of an air conditioner during its normal annual usage period for cooling, in Btu/h (W), divided by the total electric energy input during the same period, in watt-hours, as determined by DOE 10 CFR Part 430, Subpart B, Test Procedures.”

Per the revision to paragraph (c)(2) of Section 430.32, Energy and water conservation standards and effective dates, of Subpart C, Energy and Water Conservation Standards, of DOE 10 CFR Part 430 (published in the Federal Register on August 17, 2004), effective January 23, 2006, the US Department of Energy (DOE) will enforce a 13 SEER standard for residential central air conditioners and central air conditioning heat pumps manufactured on or after that date.

On or after January 23, 2006, the sale and installation of units in inventory adhering to the current 10 SEER standard manufactured before January 23, 2006, will be permissible.

For questions or more information visit DOE’s website at www.energy.gov.

WEB SITES OF INTEREST

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

EasyLiving Home™ Program
www.easylivinghome.org

International Codes Council (ICC)
www.intlcode.org

Building Officials Association of GA
www.boagcodes.org

State of Georgia
www.georgia.gov

Q: When does the 13 SEER requirement go in to effect in Georgia?

A: On January 23, 2006. This standard will apply to residential central air conditioners and heat pumps and will increase by 30 percent the SEER standard which applies to units manufactured today.

BUILDING OFFICIALS’ SURVEY REMINDER

On August 1, 2005, this office sent out a Building Officials’ Survey, requesting basic address/telephone information along with the name of your building official, code enforcement information and inspections information. We asked that each jurisdiction complete the survey and return it to our office. Although we have had a good response from many cities/counties, there are still quite a few surveys that need to be returned to us. We are in the process of calling the jurisdictions that have not responded and we ask that when we contact you, please complete the form as soon as possible and fax it back to us. It is very important that we have this information on file!

Mark Your Calendar

| JANUARY | 12 | Industrialized Buildings Advisory Committee 10:00 a.m. @ DCA |
|         | 19 | State Codes Advisory Committee 10:00 a.m. @ DCA |
|         | 23-26 | ICC Code Official Institute, Phoenix, Arizona |
| MARCH   | 20-22 | ICC 2006 Codes Forum, Sacramento, CA |
| APRIL   | 27 | State Codes Advisory Committee 10:00 a.m. @ DCA |
|         | APRIL 29 - MAY 3 | BOAG Annual Conference @ Jekyll Island |
| JULY    | 16-20 | Georgia State Inspectors Association Conference @ Jekyll Island |

If you have any meetings that you would like to include in this newsletter, please contact the Construction Codes Section at 404-679-3118 or lmassey@dca.state.ga.us.
The 2006 International Building Code Task Force is charged with reviewing the International Building Code (IBC), 2006 Edition and making recommendations regarding its adoption. The first meeting was held October 11, 2005, where Ted Miltiades, DCA Construction Codes and Industrialized Buildings Manager, called the meeting to order at 10 a.m. by welcoming task force members, DCA staff and guests. Windell Peters, State Codes Advisory Committee (SCAC) Chairman, charged the task force with reviewing the 2006 Edition of the International Building Code. The task force is made up of nine members representing various segments of the building industry and is as follows:

Bill Chambless, Chairman, SCAC/Building Officials
Rex Pless, Vice Chairman, SCAC/Structural Engineers
Randall Bagwell, American Council of Engineering Companies (ACEC)
Tom Carty, Building Officials Association of Georgia (BOAG)
Hal Cosper, Building Officials Association of Georgia (BOAG)
Josh Davis, Local Fire Officials
William de St. Aubin, American Institute of Architects (AIA)
Bill Lusk, General Contractors
Larry Wolfe, Georgia Apartment Association (GAA)

For the purpose of reviewing the code, the chapters were divided up and assigned to task force members. The task force has met twice. The tentative effective date of the 2006 International Building Code is January 1, 2007.

If you have any questions or would like to be added to the interested parties list for this task force please contact Max Rietschier, DCA Staff and IBC Task Force Coordinator at 404-679-3104 or at mrietsch@dca.state.ga.us.


At its July meeting, the State Codes Advisory Committee (SCAC) voted to establish a task force to review the 2006 Edition of the International Residential Code (IRC): The 2006 IRC Task Force is charged with assessing the differences between the 2000 IRC with Georgia Amendments (existing code) and the 2006 IRC, and making recommendations to the SCAC regarding adoption of the 2006 IRC and any necessary amendments. The task force will give a preliminary progress/status report to the SCAC at the January 19, 2006, SCAC quarterly meeting and its final report to the SCAC at the April 27, 2006, SCAC quarterly meeting.

The 2006 IRC itself is as yet unavailable and will remain so for the majority of the duration of the review process. To effectively assess the differences between the existing code and the 2006 IRC by the April 27, 2006 deadline it will be necessary for the task force to assess the differences between the existing code and the 2003 IRC; the 2003 IRC and the 2004 IRC Supplement; and the 2004 IRC Supplement and the results of the 2005 International Code Council (ICC) Code Development Final Action Hearings (FAH) (September 28-October 2, 2005, in Detroit, Michigan).

The approval of new amendments and the carrying forward of existing amendments will be done conservatively, in order that amendments be limited to only those which the task force deems necessary for the betterment of the code.

The task force is comprised of 7 members: Mr. Bill Duck, Chairman, representing the SCAC and building officials; Mr. Tim Williams, Vice Chairman, representing the SCAC and home builders; Ms. Glenda Casteel, representing building officials; Mr. Bruce Douglas, representing local fire officials; Mr. Alan Knuchel, representing residential designers; Mr. Gary Lewis, representing home inspectors; and Mr. Nathan Youngblood, Jr., representing home builders.

The task force held its first meeting on Thursday, October 13, and has met twice since, on Wednesday, October 26, and Monday, November 14. A fourth meeting is scheduled for Wednesday, November 30, and tentative dates for four additional meetings have been scheduled through early March 2006.

The tentative effective date for the 2006 IRC with any necessary amendments is January 1, 2007. For questions, more information, or to be placed on the Interested Parties list, contact Tate Holt, DCA Staff Representative for the 2006 IRC Task Force at (404) 679-3109 or by email at tholt@dca.state.ga.us.

2006-2007 STATE CODES ADVISORY COMMITTEE OFFICERS AND MEMBERS

Mr. Gregori Anderson, C.B.O., Chairman, Representing: Code Enforcement Officials
Mr. William H. Chambless, Jr., C.B.O., Vice-Chairman, Representing: Code Enforcement Officials
Mr. William L. Duck, Jr., C.B.O., Secretary, Representing: Code Enforcement Officials
Mr. Windell Peters, C.B.O., Designee, Georgia Department of Community Affairs
Mr. Barry Abernathy, Representing: Conditioned Air Contractors
Mr. Michael Bean, Representing: Licensed Electrical Contractors
Mr. William C. Lusk, Representing: General Contractors
Mr. Doug Anderson, Representing: Manufactured Housing Industry
Mr. Dwayne Garriss, Designee, Georgia Safety Fire Commissioner
Mr. S. Gregg Johnson, Representing: Mechanical Engineers
Mr. Bob Qurnel, Representing: Industrialized Building Industry
Mr. William S. Guinade, Representing: Licensed Plumbing Contractors
Mr. Danny Lundstrom, Representing: Electrical Engineers
Mr. Robert Magbee, Representing: Building Material Dealers
Mr. Tim Williams, Representing: Home Builders
Mr. Rex T. Pless, Representing: Structural Engineers
Mr. Josh Davis, Representing: Local Fire Officials
Mr. David Adams, Designee, Commissioner of DHR
Mr. Jim Vaseff, AIA, Representing: Profession of Architecture
Ms. Tamara Gofman, Representing: Local Fire Officials
Mr. Morgan Wheeler, Sr. C.B.O., Representing: Code Enforcement Officials

OPTIONAL CODES AND THE O.C.G.A:

The Official Code of Georgia Annotated (O.C.G.A.) states that local jurisdictions may choose to adopt one or both of the permissive codes. These codes are The International Property Maintenance Code and The International Existing Building Code. As stated in O.C.G.A. Section 8-2-25 (b) these codes “shall not be applicable in a jurisdiction until adopted by a municipality or county. The governing authority of any municipality or county in this state is authorized to adopt and enforce the State Minimum Standard Codes enumerated in this subsection in that subject area which is being regulated by the municipality or county, and a copy of the local ordinance or resolution adopting any such code shall be forwarded to the department in

Continued next page
order that such municipality or county may be apprised of subsequent amendments in the State Minimum Standard Code so adopted."

When adopting a permissive code, the local jurisdiction does not need to include legislative findings when notifying DCA of their adoption intent. The local jurisdiction does need to state the specific codes being adopted and the effective date of the code adoption.

Local jurisdictions may also choose to adopt appendices to the mandatory codes. O.C.G.A. Section 8-2-21 states that they “shall not include enforcement of appendices to such codes except when:

(1) Any provision of an appendix is specifically referenced in the code text;
(2) An appendix to a code is specifically included in an administrative ordinance adopted by a municipality or county; or
(3) An appendix to a code is specifically adopted by the department with the approval of the board.”

Local jurisdictions must also notify DCA when adopting appendices.

The provisions for administering and enforcing the mandatory codes are enumerated in O.C.G.A. Section 8-2-26 (a): “The governing body of any municipality or county adopting any State Minimum Standard Code shall have the power:

(1) To adopt by ordinance or resolution any reasonable provisions for the enforcement of the State Minimum Standard Codes, including procedural requirements, provisions for hearings, provisions for appeals from decisions of local inspectors, and any other provisions or procedures necessary to the proper administration and enforcement of the requirements of the State Minimum Standard Codes;
(2) To provide for inspection of buildings or similar structures to ensure compliance with the state minimum standard codes;
(3) To employ inspectors, including chief and deputy inspectors, and any other personnel necessary for the proper enforcement of such codes and to provide for the authority, functions, and duties of such inspectors;
(4) To require permits and to fix charges therefor;
(5) To contract with other municipalities or counties adopting any state minimum standard code to administer such codes and to provide inspection and enforcement personnel and services necessary to ensure compliance with the codes; and
(6) To contract with any other county or municipality whereby the parties agree that the inspectors of each contracting party may have jurisdiction to enforce the state minimum standard codes within the boundaries of the other contracting party.”

Any jurisdiction requiring assistance in adopting optional codes or administrative procedures for the enforcement of the State Minimum Standard Codes should contact The Department of Community Affairs.

INDUSTRIALIZED BUILDINGS ADVISORY COMMITTEE

The next meeting of the Industrialized Buildings Advisory Committee will be held on Thursday, January 12, 2006, in the third floor board room of the Department of Community Affairs (DCA).

At the present time, we have the following vacancies on the committee:
Representing: Local Government
Representing: Mechanical Engineering
Representing: Architects

If you are interested in serving or you know someone you would like to nominate, please contact Ted Miltiadis, Manager, Construction Codes and Industrialized Buildings at 60 Executive Park South, Atlanta, GA 30329, or call 404-679-3106 or email tmiltiad@dca.state.ga.us, as soon as possible as we would like to have these vacancies filled before the January 2006 meeting.

INDUSTRIALIZED BUILDINGS ADVISORY COMMITTEE 2006

Mr. Jerry Hopkins
Representing: Third Party Agencies

Mr. Carl Fortson
Representing: Code Enforcement Officials

Ms. Rosemary Kernahan
Representing: Housing Finance

Mr. Garry Kornegay
Representing: Structural Engineers

Councilman Jim Burnett
Representing: Municipal Government

Mr. Ron Garrett, Building Official
Representing: Regional Development Centers

Mr. Rex Kennedy
Representing: IB Manufacturers

Mr. Harold Hyatt
Representing: Building Code Officials

With the mass devastation created by the record-setting hurricane season brought forth in the Atlantic Ocean region, the Georgia Department of Community Affairs Industrialized Buildings Program anticipates a substantial increase in the demand for industrialized buildings, both residential and commercial, to replace the mangled or destroyed homes and businesses in these devastated regions.

Although these units are manufactured in Georgia, they do not have to comply with Title 8, Chapter 2, Article 2, Part 1 of the Official Code of Georgia Annotated, Appendix A, The Industrialized Buildings Act. This rule only applies to the inspection process and the approval of the attachment of the insignia to the units or modules.

O.C.G.A Section 8-2-112 states that any industrialized building which is sold, offered for sale or installed within this state or outside this state must bear an approved insignia. These units cannot leave the State of Georgia without an approved insignia attached to each module or unit. The insignia will be labeled “THIS UNIT MAY BE ONLY EXPORTED FROM GEORGIA AND CANNOT BE INSTALLED IN THE STATE OF GEORGIA”. These units or modules must still undergo the same in-plant inspection process by the third party evaluation agency and must be approved before the insignia is adhered to the unit unless otherwise authorized by the Commissioner of the Department of Community Affairs. These units have an exception to the Rules of the Commissioner of Community Affairs whereas they do not have to be manufactured under the guidelines and construction codes set forth by the Georgia State Minimum Standard Codes and any adopted amendments. Therefore the units or modules cannot be installed within the State of Georgia.
Once the above information is provided, local code officials will have confidence in their administrative handling of industrialized buildings, and in their ability to inspect all work accomplished at the building’s installation site. Industrialized buildings are built to the same codes and standards as are site-built buildings. Therefore, the work accomplished at the installation site should be inspected in the same manner and held to the same standards as work performed on site-built buildings.

**FLEX DUCT TASK FORCE REPORT**

The Flex Duct Task Force was appointed in January of 2005 to review issues regarding the use of flexible duct that have been raised during the code amendment review process in 2003 and 2004. The Task Force was charged to review the use of flexible duct in commercial and residential construction in Georgia, to make recommendations and/or offer code amendments that would reduce the likelihood of HVAC system problems associated with the use of flexible duct.

1. Most issues regarding poor installation of flexible ductwork occur in residential construction, especially within one and two family dwellings. The use of flexible ductwork in commercial construction is more limited and, in most cases, installed more in accordance with the requirements of the International Mechanical Code (IMC) and the manufacturer’s installation instructions. The Task Force chose to focus its efforts on the one and two family dwelling segment of the construction industry; however, our recommendations for proper design, sizing and installation techniques would be applicable to any type structure.

2. The International Residential Code (IRC) for One and Two Family Dwellings does not adequately address the proper design and installation of systems using flexible duct.

3. No evidence was found of any inherent problems with the flexible ductwork being used today as a building material, in fact, in some ways, the product is superior to duct systems using all metal.

4. An HVAC system using a distribution system of flexible ductwork can be successfully installed if the system is properly designed following proper engineering practices and then properly installed according to the IMC and manufacturers instructions. However, abundant testimony was received that leads the task force to conclude that a major cause of poor installations is a lack of training both in design and in installation techniques. General poor workmanship, which may be further indicative of a lack of training, is also a major concern.

5. HVAC Contractors, Industry Associations, Vendors and Manufacturers should acknowledge the need for installation and design training and make a concerted effort to make training on these issues available.

Following on these conclusions, the Task Force presented the following for consideration by the SCAC:

1. The Task Force recommends that the SCAC approve three amendments to Chapter 16 of the IRC which will direct designers, HVAC sub-contractors and code officials to the IMC for all duct design and installation. As indicated above, the IRC does not adequately address the design or installation of flexible ductwork systems. The IMC, with the addition of Georgia amendments, is much more comprehensive on these topics. By action of the SCAC these amendments were approved.

2. During the next code review cycle, the Task Force recommends that SCAC consider deleting the IRC mechanical sections and use the IMC for all HVAC issues. This would reduce confusion over which code to apply in the field.

3. The Task Force has put together a document “Design and Installation of
As an urban affairs advisor at Georgia Power, Mr. Vaseff coordinates efforts in support of the economic development of the company’s major service territory, metropolitan Atlanta. He has worked in downtown revitalization and more recently in the development of commuter rail corridors around Atlanta. Before coming to Georgia Power in 1982, Jim was in private architectural practice in Boston, London, and North Carolina. He taught in a college of architecture, and was with the U. S. Department of the Interior. Jim is a licensed architect, a graduate of the Boston Architectural Center, and was a Loeb Fellow in Advanced Environmental Studies at Harvard’s Graduate School of Design. Jim has been published on topics of Issue Management and articles related to the fields of architecture, urban design, and reuse of structures; photographed a book on medieval cities, and made a short film on the design method of Frank Lloyd Wright.

His first work with DCA was in 1980-81 when Georgia was one of the first five National Main Street States. He was Chief of Preservation Services for the Southeast Region of the National Park Service. He worked with Alton Moultrie from DCA, with the State Preservation office, and other organizations in the state for the Georgia Main Street Program and served on the Waycross Main Street Resource Team. Steve Story was another DCA person working on Main Street and downtown issues along with Bruce McGregor. When he came to Georgia Power’s Community Development Department in 1982, he worked almost exclusively on Downtown Development and Main Street, with Lynn Menne, Becky Johnson and Frank McIntosh as they were the DCA managers of Main Street. He served on almost 30 Main Street Resource teams over the years and was president of the Georgia Downtown Development Association.

In the late 1980s he served on the Governor’s Rural Development Study Group which was staffed by the University and DCA, Griff Doyle was in that Group. After that was the Growth Strategies Study work that turned into the 1989 Georgia Planning Act. He served on the DCA Planning Standards Committee with Mike Gleaton and Jim Frederick.

In 1993 he became a member of the State Codes Advisory Committee representing the profession of Architecture. Since that time he has chaired two rounds of the Georgia Energy Code updates, chaired the Handicapped Access for Single Family Dwellings study committee, and served on the Amendments Committee. He also chaired a task force to look at white roofing to cut heat loads for commercial structures.

The most memorable work he did was the first round of the Energy Code to make it most useful to contractors and inspectors. The quick reference charts took some complex information and presented simple charts that could be used with confidence that the single family dwellings they were constructing or inspecting were in compliance with the Energy Code. In addition building supply retailers could assemble a package of critical materials such as doors, windows and insulation for a builder in a clear and concise fashion.

The Department of Community Affairs has always had a significant role in the development and growth of Georgia’s communities in many different ways. As a citizen of Georgia he is quoted as saying “I am honored to be able to help the Department over the years.”