

Adopting the International Energy Conservation Code 2006



A Roadmap for Cities, Towns, and Counties in Alabama

Produced for the

**Alabama Department of Economic and
Community Affairs**

By

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Introduction

City, town, and county administrators in Alabama are dedicated to protecting the safety and investments of the citizens and promoting the economic prosperity of their respective jurisdictions. To this end, one of the questions administrators need to deal with is the adoption of building codes, and in particular, energy codes.

The most current codes for building construction are produced by the International Code Council (ICC). These codes cover all aspects of construction for commercial and residential buildings. One of the codes is the International Energy Conservation Code (IECC). Energy conservation is one of the most vital issues confronting this nation. The use of modern codes saves energy and money for the citizens of Alabama and reduces the national energy needs.

Unfortunately, only 4% of the municipalities in Alabama have adopted codes from the International Code Council (ICC). Forty-six municipalities have adopted a version of the International Residential Code (IRC) (2000, 2003, or 2006), which include some energy efficient requirements and references the International Energy Conservation Code as it applies to residential construction. Nine municipalities have adopted the International Energy Conservation Code, which applies to all construction.

A survey of the code officials for the 39 municipalities that had adopted the IRC by February 2008 revealed several important facts. The officials were satisfied with the content of the codes, and appreciate the support and training received from the International Code Council. The codes were adopted with very few modifications, and most of these modifications were considered equal or more stringent. Several, though, modified the Energy Efficiency Chapter 11, where the code became less stringent, resulting in lower energy efficiency for structures. The results of the survey are discussed in more detail in later sections.

This publication is designed to assist administrators in the adoption of energy codes. A 2008 survey of city, town and county officials of non-adopting municipalities in Alabama was conducted to determine why the codes had not been adopted. The results showed that officials had questions and reservations about certain parts of building codes offered by the International Code Council, including the International Energy Conservation Code (IECC) and International Residential Code 2006 (IRC 2006).

The following addresses, and hopefully answers, those questions and reservations to allow municipal officials to make an informed decision about the modern building codes as they pertain to energy conservation. The questions are about the content of the building codes and the impact of the codes on home owners (home buyers), home builders, governmental bodies, and code officials. The codes referenced in the document are the International Energy Conservation Code and the International Residential Code 2006. Below are some frequently asked questions regarding energy codes.

1. What is the International Code Council?

The International Code Council (ICC) was established in 1994 as a nonprofit organization dedicated to developing a single set of comprehensive and coordinated national model construction codes. The founders of the ICC are Building Officials and Code Administrators International, Inc. (BOCA), International Conference of Building Officials (ICBO), and Southern Building Code Congress International, Inc. (SBCCI). Since the early part of the last century, these nonprofit organizations developed the three separate sets of model codes used throughout the United States. Although regional code development has been effective and responsive to our country's needs, the time came for a single set of codes. The nation's three model code groups responded by creating the International Code Council and by developing codes without regional limitations.

There were substantial advantages in combining the efforts of the existing code organizations to produce a single set of codes. Code enforcement officials, architects, engineers, designers and contractors can now work with a consistent set of requirements throughout the United States. Manufacturers can put their efforts into research and development rather than designing to three different sets of standards, and can focus on being more competitive in worldwide markets. Uniform education and certification programs can be used internationally. A single set of codes may encourage states and localities that currently write their own codes or amend the model codes to begin adopting the International Codes without technical amendments. This uniform adoption would lead to consistent code enforcement and higher quality construction. The code organizations can now direct their collective energies toward wider code adoption, better code enforcement and enhanced membership services. All issues and concerns of a regulatory nature now have a single forum for discussion, consideration and resolution. Whether the concern is disaster mitigation, energy conservation, accessibility, innovative technology or fire protection, the ICC provides a single forum for national and international attention and focus to address these concerns.

2. What is the International Energy Conservation Code?

Code officials, all levels of government, and the general population recognize the need for energy conservation in the operation of all buildings. The response from the ICC is a modern, up-to-date energy conservation code addressing the design of more energy efficient building envelopes and the installation of energy efficient mechanical, lighting, and power systems.

The International Energy Conservation Code (IECC) establishes minimum regulations for efficient buildings using prescriptive and performance related provisions. The codes are founded on broad based principles that make possible the use of new materials and new energy efficient designs.

3. What is the International Residential Code 2006?

The International Residential Code 2006 (IRC 2006) is the most recent and complete set of procedures and regulations for the construction of residential structures, describing the minimum standards for foundations, structure, roofing, doors, windows, plumbing, electrical, mechanical systems, and other matters of safety and sanitation. The IRC 2006, Chapter 11 contains provisions on residential energy efficiency, but is not as broad as the IECC.

The first version of the International Residential Code was released in 2000. The second version came in 2003 and the current version (as of 2008) is the IRC 2006.

4. How does the International Energy Conservation Code relate to the International Residential Code 2006?

The sections of the International Energy Conservation Code (IECC) that pertain to residential buildings are contained in the International Residential Code (IRC) 2006. Chapters 3 and 4 of the IECC correlate to Chapter 11 of the IRC 2006. The significant areas of construction addressed are: insulation, windows, air infiltration, HVAC systems, and domestic hot water systems.

5. What structures are covered by the International Residential Code?

The IRC 2006 applies to detached single family, two family dwellings, and town houses not more than three stories high above grade. The codes apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, and demolition.

6. How does the International Residential Code differ from the Southern Building Code?

The IRC was created out of the Southern Building Code (SBC) and the two other regional building codes. The SBC 1999 was modified in format and content to match the IRC 2000 so the transition would be smooth throughout the country. Most home builders and code officials working under the SBC 1999 would not have noticed an appreciable change moving to the IRC 2000.

The IRC 2003 and 2006 have been modified to clarify some codes and now include the Energy Conservation section.

7. What groups endorse the adoption of the International Energy Conservation Code and International Residential Code 2006?

Some of the many organizations endorsing the ICC codes include:

- National Association of Home Builders
- Code Officials Association of Alabama
- Fire Marshals Association of Alabama
- Department of Energy
- Energy Efficient Codes Coalition
- Environment America
- Fenestration Manufactures Association
- National Fenestration Rating Council
- Buildings Code Acceptance Project

8. How many municipalities in Alabama have adopted the International Residential codes?

As of September 2008, there are 46 cities, towns, and counties that have adopted the International Residential Code, either the 2000, 2003, or the 2006 version. More significantly, the adopted codes cover 57% of the population of Alabama. The largest city adopting the International Residential Code has 243,000 people and the smallest has 1200 people.

9. What are the advantages of changing to the IRC 2006 with the energy conservation code included?

The goal of the ICC is consistent codes throughout the country, which are fair to home owners and builders. There are advantages for owners, builders, and code officials in adopting the IRC 2006. More details are included in the following questions.

- Home Owners
 - Many times home owners shop for homes in more than one jurisdiction and want to be able to compare the quality of homes in different areas.
 - Home owners need to know that someone is watching to make sure that their home is properly constructed.
 - Home owners would have the confidence that their home is energy-efficient.
- Home Builders
 - Home builders work in different jurisdictions and would prefer working under one set of codes.
 - If everyone is building to the same requirements home builders can compete on a “level playing field.”

- Code Officials
 - Code officials would have a set of codes which are current and an organization that provides support.
 - Code officials would have access to the training provided by the ICC.
 - The IECC is referenced in Chapter 11, therefore the adopters of the IRC get the full benefit of the IECC for residential structures.

10. Are building codes a benefit to home owners or do they simply raise the cost of the home?

The modern building codes:

- Provide lower energy costs
- Protect the personal safety of the homeowner, their family, and guests
- Protect the homeowner's economic investment in the property
- Protect the economic well being of the community
- Protect future home purchasers
- Contribute to lower property insurance rates
- Make homes more affordable by lowering operating costs.

There are costs related to the improved quality of homes using the IECC and IRC 2006, but the costs are offset by the benefits. The energy section has some changes in insulation, windows, and HVAC equipment. Some of the changes can result in higher costs, while some changes can result in lower costs. The impacts of the changes are discussed in more detail in later questions.

11. How would adopting the IECC and IRC 2006 benefit home builders?

Home builders want to build quality homes that are a value to the owners and the community. Home builders also need to make a profit on the homes they build, and to make a profit home builders need to be competitive. Adopting the IECC and IRC 2006 would ensure that all builders in the area were building to the same standard. Without codes, some builders might cut corners to provide a competitive advantage. Cutting corners is not a benefit to the buyer or the community. Most quality builders are currently using the materials and methods prescribed in the IECC and IRC 2006. The codes "level the playing field" for all parties involved.

In addition, most builders do not work in only one area. Having uniform codes, where each city and county is working under the IECC and IRC 2006, gives the home builders consistent codes, which lowers their costs of design and construction.

Higher appraisals come from the knowledge that homes are less susceptible to storm damage, termites, rot, general deterioration, and they are more energy

efficient. Banks need to protect their investment and the investment of the home owners. Knowing that homes are built to a consistent and quality code that the IECC and IRC 2006 provide could result in better appraisals.

12. How would adopting the IECC and IRC 2006 benefit the code officials?

Building code officials have a great deal of responsibility to protect the safety and investments of the citizens. The only tool the code officials have to perform their duties is the building code. These officials need the best code possible and the support of the organization behind that code.

The IECC and IRC 2006 are the most modern and comprehensive codes available. The ICC will train code officials and provide plan review services if needed. The ICC will answer questions about the code and resolve disputes. In cases where the home builder and code official have different interpretation of the code, the question can be presented to the ICC and a "letter of interpretation" will be issued. Past interpretations are also available. A list of resources is included in Appendix A.

13. What are the new Energy Conservation rules on insulation?

There are few people who would argue that insulation benefits the homeowner by decreasing heating and cooling needs. The question is whether additional insulation is warranted. The IECC and IRC 2006 have divided the country into eight climate zones in order to tailor the energy conservation measures to a particular zone. Alabama is located in Climate Zones 2 and 3. Mobile County and Baldwin County are in Zone 2, and the remainder of the state in Zone 3. The wall and ceiling insulation requirements are the same for both zones.

Insulation is rated by a term called the R-value. An R-value indicates insulation's resistance to heat flow. The higher R-value materials have greater insulating effectiveness. The R-value depends on the type of insulation and includes its material, thickness, and density.

The code requires walls in Zones 2 and 3 to have an R-13 value, which is satisfied by standard 3 ½ inch fiberglass insulation. The ceilings require an R-30. There are two common methods of achieving R-30. The first type is blanket or batt installation, commonly made of spun fiberglass. The second common method is through loose fill of cellulose, fiberglass, or mineral wool insulation. This installation is blown into place using special equipment or is sometimes poured in. Blown-in and spray foam insulation are good for adding insulation to existing areas, and are very good at filling around irregularly shaped areas and obstructions.

The use of R-13 in Walls and R-30 in ceilings is consistent with current means and methods used by Alabama home builders, whether working under a specific

building code or not. As a result, there is no additional cost for wall and ceiling insulation under the IECC and IRC 2006.

14. What is the additional cost for windows under the IECC and IRC 2006?

There are additional requirements for windows under the new codes. The first is a Solar Heat Gain Coefficient lower than .40 for Zones 2 and 3. The Solar Heat Gain Coefficient (SHGC) measures the fraction of incident solar radiation, or heat from the sun, that enters a building through the windows. The SHGC number ranges from zero to one, with the lowered number indicating lower heat gain in the building. A SHGC of .40 means that only 40% of the solar heat that could come into the house through the window is actually coming into the room. Different climate zones require different SHGC ratings.

The second factor on the windows is the U-value, which is a measurement of the resistance to heat loss. This factor indicates the insulating performance of the entire window unit. The lower the U-value, the better the window provides a barrier to thermal changes. Zone 2 requires a U value of .75, and Zone 3 requires a U value of .65. There are slightly higher costs for windows that meet the code requirements. A national window manufacturer representative stated that the additional charge for windows that meet the energy performance ratings required for Alabama is approximately 5%. Lower-cost window units may have a higher percentage charge for the glazing upgrade, but the dollar increase per home would be the same.

For example, based on estimated costs, a 2500 square foot home in Alabama would typically have about \$5000 of windows installed. The additional cost to the builder and homeowner for high efficiency windows would be approximately \$250.

Conforming to the requirements of the window section of the IECC and IRC 2006 is easy. The National Fenestration Rating Council rates each window and supplies a tag showing the SHGC and the U-factor for the window. The tag should be attached to each window. Separate certification is available for documentation. If the window is ENERGY STAR certified it will also have an ENERGY STAR label with information on the climate zones the window is rated for.

Several factors should be considered when choosing windows. The insulation, windows and HVAC equipment are all components of the energy efficient system. The sections below will discuss the overall savings and other benefits for the home owner and the home builder when installing energy efficient windows.

15. Would the additional cost for the windows be offset by energy savings?

The heating load and the cooling load for any building are determined by examining all of the components that impact the loads. Cooling loads are

computed by adding internal heat sources to external heat sources. The size of the air-conditioning equipment is determined by the peak cooling load. Since internal heat sources, such as lighting and appliances, are often constant throughout the year, the peak cooling load variable is the solar heat gain on the building envelope. On national average space cooling represents 10% of annual energy use in residential buildings, but this percentage is much higher in southern states such as Alabama.

According to the Department of Energy's, Federal Energy Management Program, the annual cost for air conditioning a 2500 square foot home in Alabama is \$874 per year. The annual cost is based on a 5-ton air conditioner with average efficiency, operating 1500 hours per year, and an energy cost of \$.10 per kilowatt hour (The Energy Information Administration states that, as of May 2008, the average residential electricity rate in Alabama is \$.0983. Rates vary in different areas. The annual hours of usage will depend on the individual home and the needs of the residents).

Windows account for 33% of the heat gain in a home. Therefore, if the total annual cooling cost is \$874, the windows account for \$291. A window with a SHGC of .40 would decrease the heat gain through the windows by 60%, and save \$191 per year. The windows would have a payback period of one year and three months. Most homeowners will see a value to installing quality windows.

But the energy savings is only part of the story. It was stated above that the insulation, windows, and equipment need to be viewed together as an energy efficient system. The home builder can also benefit when installing energy efficient components.

16. How does the home builder benefit from installing energy efficient windows?

Energy efficient windows which have lower solar heat gain and better insulation qualities have a benefit to the builder as well as the homeowner. When the cooling loads are lowered, the equipment used to cool the building will be smaller.

The IECC and IRC 2006 require that the heating and cooling equipment be sized according to a defined criterion, which takes into consideration all of the homes systems. When sizing cooling equipment, bigger is not better. "Right sizing" the equipment gives better performance. Cooling equipment that is too large has several problems. First, the equipment will start and stop more often, which makes it less efficient to operate (more energy used in the start-up than the operation), requires more maintenance, and does not remove as much humidity from the air. Moist air feels warmer, so lower indoor temperature is required for comfort.

The Table 1 shows the average cost for different sized equipment (Grainger Equipment Supply) and annual operating costs (Federal Energy Management Program).

Table 1 - AC Equipment and Operating Cost			
AC size	Air Conditioning unit	Cost to operate	to
Tons	Incl. Evaporator Coil	per year	15 years
2	\$1,749	\$350	\$5,250
2.5	\$1,878	\$437	\$6,555
3	\$2,140	\$524	\$7,860
3.5	\$2,386	\$612	\$9,180
4	\$2,662	\$699	\$10,485
5	\$2,865	\$874	\$13,110

A home builder is able to reduce the cooling loads by installing windows with greater energy efficiency and proper insulation. If the calculated cooling loads with standard windows required a 5-ton AC unit, the home with the energy efficient windows and proper insulation would require a 3.5 ton AC unit.

The potential savings for the home builder would be \$479 in equipment and the savings to the homeowner would be \$262 per year.

The net difference for the home builder to install more energy efficient windows and a "right sized" cooling unit, is a net savings of \$229 per home.

17. Can any of the codes be modified to meet particular needs?

The code may be modified but it is not recommended when the resulting code becomes less restrictive. The 39 municipalities that had adopted the IRC by February of 2008 were contacted to evaluate what areas had been modified, as well as solicit feedback on the general acceptance of the IECC and the IRC. Twenty-eight percent (11 responses) of the municipalities responded. Only sixteen revisions were made in the adopted codes, but four of the revisions were in the adoption of the energy section, which resulted in less restrictive codes and lower energy efficiency of the structures. Revisions in the mechanical, electrical and plumbing sections were changed to the International Mechanical Code, International Plumbing Code, and the National Electric Code (NEC), which are the same or more restrictive.

18. Does the International Code Council support local governments?

The Government Relations Plan is the advocacy program of the ICC, affecting the interests of ICC and its members in relation to Federal, State and Local governments and private sector organizations. The Government Relation's mission is to partner and forge strategic alliances with entities having objectives and missions compatible with ICC and that support the I-Codes and the developmental process upon which these codes are based.

The Government Relations Department, the Department of Energy and the Building Code Acceptance Project are dedicated to providing assistance to ICC members in their efforts to adopt the I-Codes in the United States and around the world.

19. If there is not an existing residential code in place and no inspection department, how do you begin the process?

The ICC understands that getting started is a challenge. Personnel from the ICC will work with any local government to put the new codes in place. Appendix A gives information on the ICC support services. The ICC also has a sample ordinance that can be used for code adoption, which can be found in Appendix B. Similar documents are available for all of the ICC codes.

The IRC 2006 manual helps code officials and administrators adopt and administer the code. Chapter 1 of the IRC 2006 covers administration, and goes through:

- Applicability of the code
- Creation of a Department of Building Safety
- Duties and powers of Building Officials
- Permitting process
- Construction documents required
- Fees
- Inspections
- Certificates of Occupancy
- Service Utilities
- Board of Appeals
- Violations
- Stop Work Orders

20. How would the Building Officials be trained?

The International Code Council has an ongoing training program for building officials and inspectors. The training is available in seminars and on-line. In

addition, continuing education is available through the Code Officials Association of Alabama (COAA).

21. What is the cost of starting and maintaining a Department of Building Safety?

The cost of setting up and maintaining a Department of Building Safety is difficult to estimate. In an ideal situation the permit fees would be adequate to finance the department.

Administrators of small towns that do not feel there is enough construction to support a Building Safety Department may adopt the IECC and IRC 2006 and contract with the county to collect the permit fees, issue the permits and conduct all inspections. In this case, the town has a fully functioning residential building code and the county benefits from additional revenue to offset expenses.

22. If there is an existing code and inspections department, how could building inspectors be trained on the newly adopted code?

Just like new departments, the ICC will work with everyone on becoming current with the new codes. They offer training for building inspectors both through seminars and on-line training. In addition, continuing education is available through the Code Officials Association of Alabama (COAA).

The Department of Energy provides software for checking code compliance. The program for residential buildings is called *REScheck* and for commercial buildings is *COMcheck*. The software is free and easy to use.

23. How do building codes impact insurance rates?

The Insurance Services Office, Inc. (ISO) supplies data, analysis, and decision support services for property insurance companies. One of the services is the Building Code Effectiveness Grading Schedule (BCEGS), which assesses the building codes in effect in a particular community and how the community enforces its building codes, with special emphasis on mitigation of losses from natural hazards.

The concept is simple: municipalities with well-enforced, up-to-date codes should demonstrate better loss experience, and insurance rates can reflect that. The prospect of lessening catastrophe-related damage and ultimately lowering insurance costs provides an incentive for communities to enforce their building codes rigorously — especially as they relate to windstorm and earthquake damage.

The anticipated upshot: safer buildings, less damage, and lower insured losses from catastrophes. The BCEGS program assigns each municipality a BCEGS grade of 1 (exemplary commitment to building-code enforcement) to 10. ISO develops advisory rating credits that apply to ranges of BCEGS classifications (1-3, 4-7, 8-9, 10). ISO gives insurers BCEGS classifications, BCEGS advisory credits, and related underwriting information.

ISO began implementing the program in states with high exposure to wind (hurricane) hazards, then moved to states with high seismic exposure, and then continued through the rest of the country.

24. What is a community's classification based on?

A community's classification is based on:

Administration of codes, including

- building-code edition in use
- modification of the codes
- zoning provisions to mitigate natural hazards
- training of code enforcers
- certification of code enforcers
- incentives for outside education/certification
- building officials' qualifications
- contractor/builder licensing and bonding
- public-awareness programs
- participation in code-development activities and the appeal process

Review of building plans, including:

- staffing levels
- qualifications
- level of detail of plan review
- performance evaluations
- review of plans for one- and two-family dwellings, multifamily dwellings, and commercial buildings

Field inspections, including:

- staffing levels
- qualifications
- level of detail of inspections
- performance evaluations
- final inspections
- issuance of certificates of occupancy

In addition, ISO collects underwriting information, including natural hazards common to the area, number of inspection permits issued, number of inspections completed, the building department's funding mechanism and date of

establishment, size of the jurisdiction and population, and fair market value of all buildings.

Table 2 – A summary of some of the most frequently asked questions.

Table 2 – Summary of Perceived Problems and Answers for Municipal Administrators		
Energy Efficiency Issues	Issues as Perceived Problems	Issues as Advantages
Compliance	It is very complicated to build under the energy code.	The IECC and IRC 2006 have simplified the energy section to make compliance simpler. <ol style="list-style-type: none"> 1. Reduced the number of climate zones from 17 to 8. 2. Increased the option to obtain compliance. 3. Clearly defines insulation requirements. 4. Clearly defines window requirements.
Design limitations	The code limits design options.	Standard designed homes do not require additional modifications, while unique designs may require additional documentation to show compliance to the energy codes. Design professionals can provide the necessary documentation as part of the design process.
Windows	High efficiency windows that meet the Energy Efficiency criteria are more expensive.	There are additional costs for windows that meet the Energy Efficiency criteria, but the additional cost is outweighed by the energy savings to the owner and the lower cost for heating and cooling equipment for the home builder.
Insulation	More insulation is required and the certification is difficult.	<ol style="list-style-type: none"> 1. The amount of insulation required in Zones 2 and 3 are the standard used by home builders in Alabama. 2. Installers are aware of the requirements for installation and will provide the appropriate certification documents.
HVAC System	The heating and cooling equipment required by the IRC 2006 is more expensive.	<ol style="list-style-type: none"> 1. The IECC and IRC 2006 have eliminated the equipment efficiency requirements which were in IRC 2003. 2. The IRC 2006 only requires that the system is properly sized and the ducts are insulated and sealed. 3. The duct insulation has been increased from R-5 to R-8. 4. The required windows and insulation normally requires the downsizing of HVAC equipment, which will provide better performance. 5. Downsizing HVAC lowers the cost of construction
Hot water systems	The IRC 2006 requires more expensive water heaters.	The IECC and IRC 2006 have eliminated the efficiency requirement of water heaters.

Appendix A

Regional ICC Support and Chapters

Staff LiaisonMark Roberts

ICC Louisiana Field
Office
19186 5th Avenue
Covington, LA 70433
Phone: 1-888-ICC-
SAFE
(422-7233), x7265
Fax: 985-249-7627

Fire Service LiaisonMel Cosgrove

ICC Alabama Fire Services Field
Office
1073 Fairbank Lane
Chelsea, AL 35043
Phone: 1-888-ICC-SAFE
(422-7233), x5229
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Board LiaisonJohn LaTorra

Building & Inspection
Mgr.
City of Redwood City
1017 Midfield Road
PO Box 391
Redwood City, CA
94064
Phone: 650-780-7360
Fax: 650-556-9224

Secondary Board LiaisonJames Brothers

Building Director
City of Decatur
401 Lee Street
PO Box 488
Decatur, AL 35602-0488
Phone: 256-341-4571
Fax: 256-341-4572

Regional Chapter**Gulf Coast Region IX**Ronnie Spooner

c/o City of Tallahassee
300 S Adams St B28
Tallahassee, FL 32301
Phone: 850-891-7048
Fax: 850-891-7099

Alabama Chapters

Alabama Association of Plumbing, Gas & Mechanical Inspectors

Leslie Moon

c/o City of Tuscaloosa
2201 University Blvd
Tuscaloosa, AL 35401
Phone: 205-248-5129
Fax: 205-349-0136

Alabama Gulf Coast Chapter

Landon Smith

c/o City of Orange Beach
PO Box 2432/4101 Orange Peach
Blvd
Orange Beach, AL 36037
Phone: 251-981-2610
Fax: 251-981-3725

Association of North Alabama Code Officials

David Price

c/o Madison Co
266 A Shields Rd
Huntsville, AL 35803
Phone: 256-883-8142
Fax: 256-746-2953

Code Officials Association of Alabama

Matthew Danner

Code Officials Assn of Alabama
c/o Madison County
266-A Shields Rd
Huntsville, AL 35811
Phone: 256-746-2950
Fax: 256-746-2453

Code Officials of Lower Alabama

Edmund A. Velaski, Sr.

c/o City of Mobile
PO Box 1827
Mobile, AL 36633
Phone: 251-208-7424
Fax: 251-208-5896

East Alabama Code Officials

Todd Betts

c/o City of Alexander City
PO Box 552
Alexander City, AL 35011
Phone: 256-329-6712
Fax: 256-329-6711

Fire Marshals Association of Alabama

Chip Martin

c/o Daphne Fire Department
PO Box 400
Daphne, AL 36526
Phone: 251-621-2815
Fax: 251-621-0067

North Central Alabama Chapter

Michael Petrovich

c/o City of Trussville
131 Main St/PO Box 159
Trussville, AL 35173
Phone: 205-655-5483
Fax: 205-655-7487

South Alabama Code Officials Association

Craig Scurlock

South Alabama Code Officials Assn
c/o City of Dothan
126 St Andrews St/PO Box 2128
Dothan, AL 36301
Phone: 334-615-4454
Fax: 334-615-4469

Appendix B

ORDINANCE

The International Codes are designed and promulgated to be adopted by reference by ordinance. Jurisdictions wishing to adopt the 2006 *International Energy Conservation Code* as an enforceable regulation governing energy efficient building envelopes and installation of energy efficient mechanical, lighting and power systems should ensure that certain factual information is included in the adopting ordinance at the time adoption is being considered by the appropriate governmental body. The following sample adoption ordinance addresses several key elements of a code adoption ordinance, including the information required for insertion into the code text.

SAMPLE ORDINANCE FOR ADOPTION OF THE *INTERNATIONAL ENERGY CONSERVATION CODE* ORDINANCE NO. _____

An ordinance of the **[JURISDICTION]** adopting the 2006 edition of the *International Energy Conservation Code*, regulating and governing energy efficient building envelopes and installation of energy efficient mechanical, lighting and power systems in the **[JURISDICTION]**; providing for the issuance of permits and collection of fees therefor; repealing Ordinance No. _____ of the **[JURISDICTION]** and all other ordinances and parts of the ordinances in conflict therewith.

The **[GOVERNING BODY]** of the **[JURISDICTION]** does ordain as follows:

Section 1. That a certain document, three (3) copies of which are on file in the office of the **[TITLE OF JURISDICTION'S KEEPER OF RECORDS]** of **[NAME OF JURISDICTION]**, being marked and designated as the *International Energy Conservation Code*, 2006 edition, as published by the International Code Council, be and is hereby adopted as the Energy Conservation Code of the **[JURISDICTION]**, in the State of **[STATE NAME]** for regulating and governing energy efficient building envelopes and installation of energy efficient mechanical, lighting and power systems as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Energy Conservation Code on file in the office of the **[JURISDICTION]** are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

Section 2. The following sections are hereby revised:

Section 101.1. Insert: **[NAME OF JURISDICTION]**.

Section 3. That Ordinance No. _____ of **[JURISDICTION]** entitled **[FILL IN HERE THE COMPLETE TITLE OF THE ORDINANCE OR ORDINANCES IN**

EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY DEFINITE MENTION] and all other ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 4. That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The **[GOVERNING BODY]** hereby declares that it would have passed this ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

Section 5. That nothing in this ordinance or in the Energy Conservation Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 3 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

Section 6. That the **[JURISDICTION'S KEEPER OF RECORDS]** is hereby ordered and directed to cause this ordinance to be published. (An additional provision may be required to direct the number of times the ordinance is to be published and to specify that it is to be in a newspaper in general circulation. Posting may also be required.)

Section 7. That this ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect **[TIME PERIOD]** from and after the date of its final passage and adoption.

Thanks to:

**Building Code Acceptance Project
Code Officials Association of Alabama
Energy Information Administration
Federal Energy Management Program
Grainger Equipment supply
International Code Council
Insurance Services Office, Inc.
National Fenestration Rating Council**

