



# **Georgia State Amendments to the International Mechanical Code (2012 Edition)**



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**Revised January 1, 2014**

**GEORGIA STATE MINIMUM STANDARD MECHANICAL CODE  
(INTERNATIONAL MECHANICAL CODE WITH GEORGIA STATE AMENDMENTS)**

The **INTERNATIONAL MECHANICAL CODE, 2012 Edition**, published by the International Code Council, when used in conjunction with these and any other Georgia State Amendments to the **INTERNATIONAL MECHANICAL CODE, 2012 Edition**, shall constitute the official *Georgia State Minimum Standard Mechanical Code*.

**GEORGIA STATE AMENDMENTS**

**CODE REFERENCE:**

- (a) Replace all references to the ICC *Electrical Code* with references to the *Georgia State Minimum Standard Electrical Code (National Electrical Code with Georgia State Amendments)*.
- (b) Replace all references to the *International Energy Conservation Code (IECC)* with references to the *Georgia State Minimum Standard Energy Code (IECC with Georgia State Supplements and Amendments)*. The *Georgia State Minimum Standard Energy Code* shall be used for efficiency and coefficient of performance ratings of mechanical equipment.

**APPENDICES:**

Appendices are not enforceable unless they are specifically referenced in the body of the code or adopted by the Department of Community Affairs or the Authority Having Jurisdiction.

**SCOPE:**

The provisions of the *Georgia State Minimum Standard Mechanical Code* shall regulate the design, installation, maintenance, *alteration* and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This code shall also regulate those mechanical systems, system components, *equipment* and appliances specifically addressed herein. The installation of fuel gas distribution piping and *equipment*, fuel gas-fired appliances and fuel gas-fired *appliance* venting systems shall be regulated by the Georgia State Minimum Standard *Gas Code (International Fuel Gas Code with Georgia Amendments)*.

**Exception 1:** Detached one- and two-family dwellings and townhouses separated by a 2-hour fire-resistance-rated wall assembly, not more than three stories above *grade plane* in height with a separate means of egress and their accessory structures shall comply with the *Georgia State Minimum Standard One and Two Family Dwelling Code (International Residential Code for One- and Two-Family Dwellings with Georgia State Amendments)*

**Exception 2:** The following table titled ‘Codes Reference Guide’ establishes specific primary and supplementary code applications and is to be applied by the Authority Having Jurisdiction.

<b>CODES REFERENCE GUIDE</b>		
<b>Area</b>	<b>Primary</b>	<b>Supplement</b>
Occupancy Classification	LSC	IBC
Building Construction Types including allowable height, allowable building areas, and the requirements for sprinkler protection related to minimum building construction types.	IBC	LSC
Means of Egress	LSC	NONE
Standpipes	IBC	IFC
Interior Finish	LSC	NONE
HVAC Systems	IMC	NONE
Vertical Openings	LSC	NONE
Sprinkler Systems minimum construction standard	LSC	NONE
Fire Alarm Systems	LSC	NONE
Smoke Alarms and Smoke Detection Systems	State Statute	NONE
Portable Fire Extinguishers	IFC	NONE
Cooking Equipment	LSC and NFPA 96	NONE
Fuel Fired Appliances	IFGC	NFPA 54
Liquid Petroleum Gas	NFPA 58	NFPA 54
Compressed Natural Gas	NFPA 52	NONE

**GEORGIA STATE MINIMUM  
REQUIREMENTS FOR BOILERS/WATER HEATERS AND PRESSURE VESSELS**

The State's minimum requirements for boilers/water heaters and pressure vessels over 200,000 BTU/h (58.61 kW), 210 degrees Fahrenheit or 120 gallons capacity shall be established by O.C.G.A. Title 25, Chapter 15 and the Rules and Regulations of the Office of Insurance and Safety Fire Commissioner.

*\*Revise the International Mechanical Code, 2012 Edition, as follows:*

**CHAPTER 1  
SCOPE AND ADMINISTRATION**

\*Delete Chapter 1 'Scope And Administration' without substitution. Chapter 1 to remain in the Code as a *reference and* guide for local governments in the development of their own *Administrative Procedures*.  
(Effective January 1, 2014)

**CHAPTER 2  
DEFINITIONS**

**SECTION 202  
GENERAL DEFINITIONS**

\*Add new definition for 'Cooling Tower' to read as follows:

**COOLING TOWER.** A building heat removal device used to transfer process waste heat to the atmosphere.  
(Effective January 1, 2014)

\*Add new definition for 'Make-up Air' to read as follows:

**MAKE-UP AIR.** See ENVIRONMENTAL AIR.  
(Effective January 1, 2014)

**CHAPTER 3  
GENERAL REGULATIONS**

**SECTION 301  
GENERAL**

\*Revise Section 301.1 'Scope' to read as follows:

**301.1 Scope.** This chapter shall govern the approval and installation of all *equipment* and appliances that comprise parts of the building mechanical systems regulated by this code.  
(Effective January 1, 2014)

\*Revise Section 301.2 ‘Energy utilization’ to read as follows:

**301.2 Energy utilization.** Heating, ventilating and air-conditioning systems of all structures shall be designed and installed for efficient utilization of energy in accordance with the *International Energy Conservation Code*. Cooling towers installed in new construction shall be in compliance with ASHRAE, Standard 90.1.  
(Effective January 1, 2014)

\* Revise Section 301.3 ‘Identification’ to read as follows:

**301.3 Identification.** Each length of pipe and tubing utilized in a mechanical system shall bear the identification of the manufacturer. If not provided on the packaging or crating or by other approved documentation, each pipe fitting, utilized in a mechanical system, shall bear the identification of the manufacturer.  
(Effective January 1, 2014)

\*Revise Section 301.4 ‘Plastic pipe, fittings and components’ to read as follows:

**301.4 Plastic pipe, fittings and components.** Plastic pipe, fittings and components shall conform to NSF 14.  
(Effective January 1, 2014)

\*Delete Section 301.5 ‘Third-party testing and certification’ and substitute to read as follows:

**301.5 Application.** All piping, tubing and fittings shall comply with the applicable referenced standards, specifications and performance criteria of this code and shall be identified in accordance with Section 301.3.  
(Effective January 1, 2014)

\*Revise Section 301.7 ‘Listed and labeled’ to read as follows:

**301.7 Listed and labeled.** Appliances regulated by this code shall be *listed* and *labeled* for the application in which they are installed and used, unless otherwise approved.  
(Effective January 1, 2014)

\*Add new Section 301.19 ‘Related fire codes’ to read as follows:

**301.19 Related fire codes.** Any reference to the *International Fire Code* and/or NFPA standards in any chapter of this code shall be to the latest edition as adopted and amended by the Office of Insurance and Safety Fire Commissioner.  
(Effective January 1, 2014)

## SECTION 312 HEATING AND COOLING LOAD CALCULATIONS

\*Revise Section 312.1 ‘Load calculations’ to add exception as follows:

### **312.1 Load calculations.**

**Exception:** For R-2 occupancies of three stories or less in height, heating and cooling equipment may be sized based on building loads calculated in accordance with ACCA Manual J.

(Effective January 1, 2014)

## **CHAPTER 4 VENTILATION**

### **SECTION 401 GENERAL**

\*Revise Section 401.2 'Ventilation required' to add at the end of first paragraph as follows:

#### **401.2 'Ventilation required'**

...with Section 403. A private dwelling unit shall be ventilated by mechanical means in accordance with Section M1507.3 of the IRC or ASHRAE 62.2, and may not be used interchangeably.

(Effective January 1, 2014)

\*Add Section 401.7 'Alternative ventilation procedures' to read as follows:

**401.7 Alternative ventilation procedures.** As an alternative to Chapter 4, the following shall be permitted:

1. Ventilation Rate Procedure, Natural Ventilation Procedure or Indoor Air Quality Procedure, as prescribed by ASHRAE 62.1. Software programs to calculate outdoor ventilation air may be used to demonstrate ASHRAE 62.1 compliance, as approved by Authority Having Jurisdiction.
2. Ventilation in Healthcare Facilities shall comply with ANSI/ASHRAE/ASHE Standard 170.
3. Or a combination of ASHRAE 62.1 and ANSI/ASHRAE/ASHE Standard 170 may be utilized in a single building.

(Effective January 1, 2014)

### **SECTION 406 VENTILATION OF UNINHABITED SPACES**

\*Revise Section 406.1 'General' to add exception as follows:

#### **406.1 General.**

**Exception:** Unvented attic assemblies that comply with Section R806.5 of the International Residential Code.

(Effective January 1, 2014)

**CHAPTER 5  
EXHAUST SYSTEMS**

**SECTION 501  
GENERAL**

\*Revise Section 501.3 ‘Exhaust discharge’ Exception 1 to read as follows:

**501.3 Exhaust discharge.**

**Exceptions:**

1. Whole-house ventilation-type attic fans shall be permitted to discharge into the ventilated attic space of *dwelling units* having private attics, provided the installed system meets the requirements of Section 501.4 for pressure equalization.

(Effective January 1, 2014)

**SECTION 505  
DOMESTIC KITCHEN EXHAUST EQUIPMENT**

\*Add new Section 505.3 ‘Commercial installations of domestic systems’ to read as follows:

**505.3 Commercial installations of domestic systems.** Commercial installations of domestic systems shall comply with the current NFPA standards as adopted and amended by the Office of Insurance and Safety Fire Commissioner.

(Effective January 1, 2014)

\*Add new Section 505.4 ‘Exhaust ducts’ to read as follows:

**505.4 Exhaust ducts.** Exhaust ducts for domestic range hoods installed in commercial applications shall be vented to the outside and shall be constructed of Type B vent or smooth- wall duct constructed of 0.0157 inch (0.4 mm) galvanized steel.

(Effective January 1, 2014)

**SECTION 506  
COMMERCIAL KITCHEN HOOD VENTILATION SYSTEM DUCTS AND EXHAUST  
EQUIPMENT**

\*Delete Section 506.1 ‘General’ and substitute to read as follows:

**506.1 General.** The State’s minimum requirements for Type I commercial kitchen hood ventilation system ducts and exhaust equipment shall be designed, constructed and installed in accordance with the Life Safety Code NFPA 101 and NFPA 96. Other commercial kitchen hood

ventilation system ducts and exhaust equipment shall comply with the requirements of this section.  
(Effective January 1, 2014)

## **SECTION 507 COMMERCIAL KITCHEN HOODS**

\*Delete Section 507.1 ‘General’ and substitute to read as follows:

**507.1 General.** The State’s minimum requirements for Type I commercial kitchen hoods shall be designed, constructed and installed in accordance with the Life Safety Code NFPA 101 and NFPA 96. Other commercial kitchen hoods shall comply with the requirements of this section.  
(Effective January 1, 2014)

\*Delete Section 507.2.3 ‘Domestic cooking appliances used for commercial purposes’ without substitution.  
(Effective January 1, 2014)

## **SECTION 508 COMMERCIAL KITCHEN MAKEUP AIR**

\*Re-number Section 508.1 ‘Makeup air’ as Section 508.2, re-number Section 508.2 ‘Compensating Hoods’ as 508.3, and add new Section 508.1 ‘General’ to read as follows:

**508.1 General.** The State’s minimum requirements for commercial kitchen makeup air Type I hoods shall be in accordance with the Life Safety Code NFPA 101 and NFPA 96. Commercial kitchen makeup air for Type II hoods shall comply with the requirements of this section.  
(Effective January 1, 2014)

## **SECTION 509 FIRE SUPPRESSION SYSTEMS**

\*Delete Section 509.1 ‘Where required’ and substitute to read as follows:

**509.1 Where required.** The State’s minimum requirements for fire suppression systems for commercial cooking equipment shall be established by the Life Safety Code NFPA 101 and NFPA 96. (Effective January 1, 2014)

## **CHAPTER 6 DUCT SYSTEMS**

### **SECTION 603 DUCT CONSTRUCTION AND INSTALLATION**

\*Revise the first sentence of Section 603.2 ‘Duct sizing’ to read as follows:



**603.2 Duct sizing.** Ducts installed within a one-or two-family dwelling unit shall be designed and sized in accordance with ACCA Manual D or other approved methods. (Remainder of section left unchanged).  
(Effective January 1, 2014)

## **SECTION 606 SMOKE DETECTION SYSTEMS CONTROL**

\*Revise Section 606.2.1 'Return air systems' to read as follows:

**606.2.1 Supply air systems.** Smoke detectors shall be installed in supply air systems with a design capacity greater than 2,000 cfm (0.9 m<sup>3</sup>/s), in the supply air duct downstream of any filters, fan motors, outdoor air connections, and upstream of any branch connections or decontamination equipment and appliances.

**Exception:** Smoke detectors are not required in the supply air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with NFPA 72. The area smoke detection system shall comply with Section 606.4.

(Effective January 1, 2014)

\*Revise Section 606.2.2 'Common supply and return air systems' to read as follows:

**606.2.2 Common supply and return air systems.** Where multiple air-handling systems share common supply or return air ducts or plenums with a combined design capacity greater than 2,000 cfm (0.9 m<sup>3</sup>/s), the supply air system shall be provided with smoke detectors in accordance with Section 606.2.1.

**Exception:** Individual smoke detectors shall not be required for each fan-powered unit, provided that such units do not have an individual design capacity greater than 2,000 cfm (0.9 m<sup>3</sup>/s) and will be shut down by activation of one of the following;

1. Smoke detectors required by Sections 606.2.1 and 606.2.3.
2. An approved area smoke detector system located in the supply air duct serving such units.
3. An area smoke detector system as prescribed in the exception to Section 606.2.1.

In all cases, the smoke detectors shall comply with Sections 606.4 and 606.4.1.

(Effective January 1, 2014)

\*Revise Section [F] 606.4.1 'Supervision' to read as follows:

**606.4.1 Supervision.** The duct smoke detectors shall be connected to a fire alarm system where a

fire alarm system is required by the Life Safety Code. The actuation of a duct smoke detector shall activate a visual and audible supervisory signal at a constantly attended location.  
(Effective January 1, 2014)

## **CHAPTER 8 CHIMNEYS AND VENTS**

### **SECTION 804 DIRECT-VENT, INTEGRAL VENT AND MECHANICAL DRAFT SYSTEMS**

\*Revise requirement 3 of Section 804.3.8 ‘Mechanical draft systems for manually fired appliances and fireplaces’ to read as follows:

**804.3.8 Mechanical draft systems for manually fired appliances and fireplaces.** Requirement 3. A smoke detector powered by the building wiring and equipped with a battery back-up shall be installed in the room with the appliance or fireplace.  
(Effective January 1, 2014)

## **CHAPTER 9 SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL-BURNING EQUIPMENT**

### **SECTION 908 COOLING TOWERS, EVAPORATIVE CONDENSERS AND FLUID COOLERS**

\*Revise Section 908.1 ‘General’ to read as follows:

**908.1 General.** A cooling tower used in conjunction with an air-conditioning appliance shall be installed in accordance with the manufacturer’s installation instructions. Factory-built cooling towers shall be listed in accordance with UL 1995. The standards related to high efficiency cooling towers shall include without limitation the minimum standards prescribed by the ASHRAE, Standard 90.1.  
(Effective January 1, 2014)

### **SECTION 917 COOKING APPLIANCES**

\*Delete Section 917.2 ‘Prohibited location’ without substitution.  
(Effective January 1, 2014)

\*Delete Section 917.3 ‘Domestic appliances’ without substitution.  
(Effective January 1, 2014)

**CHAPTER 10  
BOILERS, WATER HEATERS AND PRESSURE VESSELS**

**SECTION 1001  
GENERAL**

\*Revise Section 1001.1 ‘Scope’ to add at the end of first paragraph as follows:

**1001.1 Scope.**

...and pressure vessels. The State’s minimum requirements for boilers/water heaters and pressure vessels over 200,000 BTU/h (58.61 kW), 210 degrees Fahrenheit or 120 gallons capacity shall be established by O.C.G.A. Title 25, Chapter 15 and the Rules and Regulations of the Office of Insurance and Safety Fire Commissioner.

(Effective January 1, 2014)

**SECTION 1007  
BOILER LOW-WATER CUTOFF**

\*Revise Section 1007.1 ‘General’ to add at the end as follows:

**1007.1 General.**

...low-water cutoff control. In lieu of the low-water cutoff control, a flow switch or other mechanism as recommended by the manufacturer shall be allowed for water tube boilers.

(Effective January 1, 2014)

**CHAPTER 11  
REFRIGERATION**

**SECTION 1105  
MACHINERY ROOM, GENERAL REQUIREMENTS**

\*Renumber Section [F] 1105.3 ‘Refrigerant detector’ as 1105.3 and revise to read as follows:

**1105.3 Refrigerant detector.** Refrigerant detectors in machinery rooms shall be provided as required in accordance with ASHRAE 15.

(Effective January 1, 2014)

**SECTION 1106  
MACHINERY ROOM, SPECIAL REQUIREMENTS**

\*Renumber Section [F] 1106.5 ‘Remote controls’ as 1106.5 and revise to read as follows:

**1106.5 Remote controls.** Remote control of the mechanical equipment and appliances located in the machinery room shall be provided as required by ASHRAE 15.

(Effective January 1, 2014)

\*Renumber Section [F] 1106.6 ‘Emergency signs and labels’ as 1106.6 and revise to read as follows:

**1106.6 Emergency signs and labels.** Refrigeration units and systems shall be provided with *approved* emergency signs, charts, and labels in accordance with ASHRAE 15.

(Effective January 1, 2014)

## **CHAPTER 12 HYDRONIC PIPING**

### **SECTION 1206 PIPING INSTALLATION**

\*Revise Section 1206.8 ‘Steam piping pitch’ to add at the end as follows:

**1206.8 Steam piping pitch.**

...the steam piping. Branch piping from steam mains shall be taken off at the top of the pipe.

(Effective January 1, 2014)

## **CHAPTER 13 FUEL OIL PIPING AND STORAGE**

### **SECTION 1301 GENERAL**

\*Revise Section 1301.1 ‘Scope’ to add at the end as follows:

**1301.1 Scope.**

...International Fire Code. The State’s minimum requirements for fuel oil piping and storage shall be as established by the Georgia State Minimum Fire Safety Standards and the Rules and Regulations of the Office of Insurance and Safety Fire Commissioner. Any areas not addressed by the Georgia State Minimum Fire Safety Standards shall be regulated by this chapter.

(Effective January 1, 2014)

## **CHAPTER 14 SOLAR SYSTEMS**

### **SECTION 1402 INSTALLATION**

\*Add new Section 1402.8 ‘Protection of drains’ to read as follows:

**1402.8 Protection of drains.** Drains serving heat transfer fluids over 140°F (60°C) or which are toxic or corrosive shall be protected in accordance with the requirements of the *International Plumbing Code*.

(Effective January 1, 2014)

\*Add new Section 1402.9 ‘Warning label’ to read as follows:

**1402.9 Warning label.** Drains in solar systems where high temperature, high pressure, or hazardous fluids are discharged shall have a warning label. For hazardous fluids, the label shall describe the hazardous properties of the fluid and emergency first aid procedures. Valves regulating such a discharge shall not be readily accessible to unauthorized personnel.  
(Effective January 1, 2014)

## CHAPTER 15 REFERENCED STANDARDS

\*Revise Chapter 15 ‘Referenced Standards’ to add as follows:

**ACCA**                      Air Conditioning Contractors of America  
2800 Shirlington Road, Suite 300  
Arlington, VA 22206

Standard reference number	Title	Referenced in code section number
Manual J 86 or 02	Residential Load Calculations-7 <sup>th</sup> or 8 <sup>th</sup> Edition	312.1, GA
Manual D- 2009	Residential Duct Systems	603.2, GA

American Society of Heating, Refrigeration and Air Conditioning Engineers, Inc.  
1791 Tullie Circle, NE  
Atlanta, GA 30329-2305

## **ASHRAE**

Standard reference number	Title	Referenced in code section number
90.1--2007	Energy Standard for Buildings Except Low-rise Residential Buildings	301.2, 908.1 GA
62.1--2010	Ventilation for Acceptable Indoor Air Quality	401.7, GA
15--2010	Safety Standard for Refrigeration Systems	1105.3, 1106.5, 1106.6, GA
170—2008	Ventilation of Health Care Facilities	401.7, GA
62.2--2010	Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings	401.2, GA

National Fire Protection Association  
Battery March Park  
Quincy, MA

# NFPA

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Referenced in code <u>number</u> <u>number</u>	Title	Standard reference section
96	Standard for Ventilation and Fire Protection of Commercial Cooking Operations	506.1, 507.1, 508.1, 509.1, GA
101	Life Safety Code	506.1, 507.1, 508.1, 509.1, GA

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(Effective January 1, 2014)

**End of Amendments.**