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


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.
## CODES REFERENCE GUIDE

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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.


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

*Renumber Section 508.1 ‘Makeup air’ as Section 508.2, renumber 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 m³/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 m³/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 m³/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
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.  
…the 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)

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### 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

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<td>Manual J 86 or 02</td>
<td>Residential Load Calculations-7th or 8th Edition</td>
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#### ASHRAE

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

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<td>Ventilation of Health Care Facilities</td>
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National Fire Protection Association  
Battery March Park  
Quincy, MA

NFPA

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(Effective January 1, 2014)

**End of Amendments.**