

Georgia State Amendments to the International Mechanical Code (2018 Edition)



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

The INTERNATIONAL MECHANICAL CODE, 2018 Edition, published by the International Code Council, when used in conjunction with these Georgia State Amendments, 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 multiple single-family dwellings (townhouses) not more than three stories above grade with separate means of egress and their accessory structures shall comply with the *Georgia State Minimum Standard One- and Two-Family Dwellings 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				
Area	Primary	Supplement		
Occupancy Classification	LSC	IBC		
Building Construction Types				
including allowable height,				
allowable building areas, and the	IBC	LSC		
requirements for sprinkler				
protection related to minimum				
building construction types.				
Means of Egress	LSC	NONE		
Standpipes	IBC	IFC		
Interior Finish	LSC	NONE		
HVAC Systems	IMC	NONE		
Vertical Openings	LSC	NONE		
Sprinkler Systems minimum	LSC	NONE		
construction standard				
Fire Alarm Systems	LSC	NONE		
Smoke Alarms and Smoke	State			
Detection Systems	Statute	NONE		
,	and LSC			
Portable Fire Extinguishers	IFC	NONE		
Cooking Equipment	LSC and	NONE		
	NFPA 96			
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, 2018 Edition, as follows:

CHAPTER 1 ADMINISTRATION

*Delete Chapter 1 '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, 2020)

CHAPTER 2 DEFINITIONS

SECTION 202 GENERAL DEFINITIONS

*Add Definition of 'MAKE-UP AIR' to read as follows:

MAKE-UP AIR. SEE ENVIRONMENTAL AIR (Effective January 1, 2020)

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, 2020)

*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, 2020)

*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.

Exception to remain unchanged.

(Effective January 1, 2020)

GA International Mechanical Code Amendments 2020

*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 Georgia Insurance and Safety Fire Commissioner. (Effective January 1, 2020)

SECTION 306 ACCESS AND SERVICE SPACE

*Revise Section 306.3 'Appliances in attics' to add new exception to read as follows:

306.3 Appliances in attics.

Exceptions:

3. In Residential Occupancies, attics containing appliances or mechanical equipment service shall be accessible by pull down stairs or other permanent steps and at a minimum be sized to allow the removal of the largest appliance.

(Effective January 1, 2020)

CHAPTER 4 VENTILATION

SECTION 401 GENERAL

*Add new 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. Or a combination of ASHRAE 62.1 and ANSI/ASHRAE/ASHE Standard 170 may be utilized for different occupancy types within in a single building.

(Effective January 1, 2020)

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 paragraph 501.4 requirements for pressure equalization.

(Effective January 1, 2020)

SECTION 505 DOMESTIC COOKING EXHAUST EQUIPMENT

*Add new Section 505.3.1 'Exhaust ducts for domestic range hoods installed in commercial applications' to read as follows:

505.3.1 Exhaust ducts for domestic range hoods installed in commercial applications. Exhaust ducts for domestic range hoods installed in commercial applications shall be vented to the outside and shall be constructed of (a) Type B vent, or (b) smooth wall duct constructed of galvanized or stainless steel with a minimum duct thickness of 0.0157 inches (0.40 mm) or constructed of aluminum or copper with a minimum duct thickness of 0.023 inches (0.58mm).

(Effective January 1, 2020)

*Add new Section 505.7 'Commercial installations of domestic systems' to read as follows:

505.7 Commercial installations of domestic systems. Commercial installations of domestic systems shall comply with the current Life Safety Code NFPA 101 and 96 standards as adopted and amended by the Georgia Insurance and Safety Fire Commissioner. (Effective January 1, 2020)

SECTION 506

COMMERCIAL KITCHEN HOOD VENTILATION SYSTEM DUCTS AND EXHAUST EQUIPMENT

*Delete Section 506.1 'General' and substitute the following:

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 as adopted and amended by the Georgia Insurance and Safety Fire Commissioner. Other commercial kitchen hood ventilation system ducts and exhaust equipment shall comply with the requirements of this section. (Effective January 1, 2020)

SECTION 507 COMMERCIAL KITCHEN HOODS

*Delete Section 507.1 'General' and substitute the following:

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 as adopted and amended by the Georgia Insurance and Safety Fire Commissioner. Other commercial kitchen hoods shall comply with the requirements of this section. (Effective January 1, 2020)

*Delete Section 507.1.2 'Domestic cooking appliances used for commercial purposes' without substitution.

(Effective January 1, 2020)

SECTION 509 FIRE SUPPRESSION SYSTEMS

*Delete Section 509.1 'Where required' and substitute the following:

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 as adopted and amended by the Georgia Insurance and Safety Fire Commissioner. (Effective January 1, 2020)

CHAPTER 6 DUCT SYSTEMS

SECTION 606 SMOKE DETECTION SYSTEMS CONTROL

*Rename Section 606.2.1 'Return air systems' and revise 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 (0.9m³/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, 2020)

*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 (0.9m³/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 (0.9m³/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, 2020)

*Revise Section 606.4.1 'Supervision' first sentence 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 NFPA 101 and NFPA 96 as adopted and amended by the Georgia Insurance and Safety Fire Commissioner. (Effective January 1, 2020)

CHAPTER 8 CHIMNEYS AND VENTS

SECTION 804

DIRECT-VENT, INTERGRAL VENT AND MECHANICAL DRAFT SYSTEMS

*Revise Section 804.3.8 'Mechanical draft systems for manually fired appliances and fireplaces' numbers 2 and 3 to read as follows:

804.3.8 Mechanical draft systems for manually fired appliances and fireplaces.

#2 A device shall be installed that produces visible and audible warning upon failure of the mechanical draft device or loss of electrical power, at any time that the mechanical draft device is turned on. This device shall be installed in an approved location, receive power from the building wiring and equipped with a battery backup.

#3 A smoke detector shall be installed in the room with the *appliance* or fireplace. This device shall receive power from the building wiring and equipped with a battery backup. (Effective January 1, 2020)

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 ASHRAE 90.1. (Effective January 1, 2020)

SECTION 917 COOKING APPLIANCES

*Revise Section 917.1 'Cooking appliances' to add new Exception to read as follows:

Exception:

Listed and labeled commercial cooking appliances may be installed in dwelling units and domestic kitchens when such installation is designed by a Georgia Licensed Professional Engineer and accepted by the local authority having jurisdiction.

(Effective January 1, 2020)

*Delete Section 917.2 'Domestic appliances' without substitution. (Effective January 1, 2020)

CHAPTER 10 BOILERS, WATER HEATERS AND PRESSURE VESSELS

SECTION 1001 GENERAL

*Revise Section 1001.1 'Scope' to add the following at the end of first paragraph:

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 as adopted and amended Rules and Regulations of the Office of Insurance and Safety Fire Commissioner. (Effective January 1, 2020)

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, 2020)

SECTION 1106 MACHINERY ROOM, SPECIAL REQUIREMENTS

*Renumber Section [F] 1106.6 'Remote controls' as 1106.6 and revise to read as follows:

1106.6 Remote controls. Remote control of the mechanical equipment and appliances located in the machinery room shall be provided as required in accordance with ASHRAE 15. (Effective January 1, 2020)

*Renumber Section [F] 1106.7 'Emergency signs and labels' as 1106.7 and revise to read as follows:

1106.7 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, 2020)

CHAPTER 12 HYDRONIC PIPING

SECTION 1206 PIPING INSTALLATION

*Revise Section 1206.8 'Steam piping pitch' to add the following at the end of the paragraph:

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, 2020)

CHAPTER 13 FUEL OIL PIPING AND STORAGE SOLAR THERMAL SYTEMS

SECTION 1301 GENERAL

*Revise Section 1301.1 'Scope' to add the following at the end of the paragraph:

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 as adopted and amended Rules and Regulations of the Georgia 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, 2020)

CHAPTER 14 SOLAR THERMAL SYTEMS

SECTION 1402 INSTALLATION

*Revise Section 1402.4 'Protection from freezing' to read as follows:

1402.4 Protection from freezing

...at the lowest ambient temperatures that will be encountered. Freeze... (Remainder of paragraph to remain unchanged). (Effective January 1, 2020)

SECTION 1403 HEAT TRANSFER FLUIDS

*Add new Section 1403.2.1 'Protection of drains' to read as follows:

1403.2.1 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, 2020)

CHAPTER 15 REFERENCED STANDARDS

*Revise Chapter 15 'Referenced Standards' to add the following:

<u>ASHRAE</u>	Atlanta, GA 30329-2305	
Standard reference number	Title	Referenced in code section number
90.12016	Energy Standard for Buildings Except Low-rise Residential Buildings	301.2, 908.1, GA Amendments
62.12016	Ventilation for Acceptable Indoor Air Quality	401.7, GA Amendments
15—2016	Safety Standard for Refrigeration Systems	1105.3, 1106.6, 1106.7, GA Amendments
170-2017	Ventilation of Health Care Facilities	401.7, GA Amendments

NFPA	National Fire Protection Association, Battery March Park, Quincy, MA 02269		
Standard reference		Referenced in code	
number	Title	section number	
96	Standard for Ventilation and Fire Protection of Commercial		
	Cooking Operations	505.7, 506.1, 507.1,	
		508.1, 509.1, GA	
		Amendments	
101	Life Safety Code	506.1, 507.1, 508.1, 509.1,	
		GA Amendments	

(Effective January 1, 2020)

End of Amendments.

Authority: O.C.G.A. § 8-2-20 et seq.