

Georgia Rules and Regulations

Administrative Bulletin for October 2023

OFFICE OF SECRETARY OF STATE ADMINISTRATIVE PROCEDURE DIVISION

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Final rules filed with the Georgia Secretary of State during the month of *October 2023*:

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110. RULES OF GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS	110-11-1-.24 , 110-11-1-.25 , 110-11-1-.26 , 110-11-1-.27	amended	Oct. 11	Jan. 1, 2024	3
189. GEORGIA GOVERNMENT TRANSPARENCY AND CAMPAIGN FINANCE COMMISSION	189-3-.12	repealed	Oct. 18	Nov. 7, 2023	217
391. RULES OF GEORGIA DEPARTMENT OF NATURAL RESOURCES	391-3-11-.01	amended	Oct. 3	Oct. 23, 2023	218
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515. RULES OF GEORGIA PUBLIC SERVICE COMMISSION	515-7-3-.03	amended	Oct. 25	Nov. 14, 2023	243
560. RULES OF DEPARTMENT OF REVENUE	560-2-2-.02 , 560-2-2-.08 , 560-2-2-.12 , 560-2-2-.13	amended	Oct. 5	Oct. 25, 2023	251
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Final rules filed with the Georgia Secretary of State that became effective *October 2023*:

Department	Rules List	Action	Filed	Effective
111. RULES OF DEPARTMENT OF COMMUNITY HEALTH	111-8-25-.05	amended	Sept. 22, 2023	Oct. 12
391. RULES OF GEORGIA DEPARTMENT OF NATURAL RESOURCES	391-3-5-.07 , 391-3-5-.25	amended	Sept. 14, 2023	Oct. 4
	391-3-11-.01	amended	Oct. 3, 2023	Oct. 23
480. RULES OF GEORGIA STATE BOARD OF PHARMACY	480-52-.01 --- 480-52-.16	adopted	Sept. 14, 2023	Oct. 4
510. RULES OF STATE BOARD OF EXAMINERS OF PSYCHOLOGISTS	510-3-.01	amended	Sept. 25, 2023	Oct. 15
	510-7-.03	amended	Sept. 25, 2023	Oct. 15
	510-8-.01 , 510-8-.02	amended	Sept. 25, 2023	Oct. 15
	510-9-.01 , 510-9-.03	amended	Sept. 25, 2023	Oct. 15
560. RULES OF DEPARTMENT OF REVENUE	560-2-2-.02 , 560-2-2-.08 , 560-2-2-.12 , 560-2-2-.13	amended	Oct. 5, 2023	Oct. 25
	560-2-3-.04	amended	Oct. 5, 2023	Oct. 25
	560-2-5-.09 , 560-2-5-.10	amended	Oct. 5, 2023	Oct. 25
	560-2-11-.01 --- 560-2-11-.04	amended	Oct. 5, 2023	Oct. 25
	560-11-16-.05	amended	Oct. 5, 2023	Oct. 25

**Department 110. RULES OF GEORGIA DEPARTMENT OF
COMMUNITY AFFAIRS**

Chapter 110-11. GEORGIA STATE MINIMUM STANDARD CODES

Subject 110-11-1. GEORGIA STATE MINIMUM STANDARD CODES

**110-11-1-.24 [Effective 1/1/2024] International Building Code (IBC), 2018 Edition
with 2020, 2022 and 2024 Georgia State Amendments**



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



Georgia Department of Community Affairs
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Revised January 1, 2024

GEORGIA STATE MINIMUM STANDARD BUILDING CODE

(INTERNATIONAL BUILDING CODE WITH GEORGIA STATE AMENDMENTS)

The INTERNATIONAL BUILDING CODE, 2018 Edition, published by the International Code Council, when used in conjunction with these and any other Georgia State Amendments to the INTERNATIONAL BUILDING CODE, 2018 Edition, shall constitute the official *Georgia State Minimum Standard Building 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 equipment.

(c) Replace all references to the *International Existing Building Code (IEBC)* with references to Chapter 34 'Existing Buildings' of these Georgia State Amendments.

Note: By Georgia law, the *International Existing Building Code* is a permissive or optional State Minimum Standard Code. Consequently, the provisions contained in the *International Existing Building Code* are not mandatory or applicable unless specifically referenced in the adopting ordinance of local governments.

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 Building Code* shall apply to the construction, *alteration*, relocation, enlargement, replacement, *repair*, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exception #1: Detached one- and two-family *dwelling*s and multiple single-family *dwelling*s (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		
Area	Primary	Supplement
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

CODES REFERENCE GUIDE		
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 and LSC	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

**Revise the International Building Code, 2018 Edition, to read as follows:*

CHAPTER 2

DEFINITIONS

SECTION 202

DEFINITIONS

*Revise Section 202 'Definitions' to read as follows:

[F] FLAMMABLE GAS. A material which is a gas at 68°F (20°C) or less at 14.7 pounds per square inch atmosphere (psia) (101 kPa) of pressure [a material that has a *boiling point* of 68°F (20°C) or less at 14.7 psia (101 kPa)], subdivided as follows:

1. Category 1A.

1. A gas which is ignitable at 14.7 psia (101 kPa) when in a mixture of 13 percent or less by volume with air.
2. A gas with a flammable range at 14.7 psia (101 kPa) with air of not less than 12 percent, regardless of the lower limit, unless data show compliance with Category 1B.

2. Category 1B.

A gas which meets the flammability criteria for Category 1A, is not pyrophoric or chemically unstable, and meets one or more of the following:

1. A lower flammability limit of more than 6 percent by volume of air; or
2. A fundamental burning velocity of less than 3.9 in/s (10 cm/s).

The limits specified shall be determined at 14.7 psi (101 kPa) of pressure and a temperature of 68°F (20°C) in accordance with ASTM E681.

Where not otherwise specified, the term "flammable gas" includes both Category 1A and Category 1B.

(Effective January 1, 2024)

CHAPTER 4

SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE

SECTION 414

HAZARDOUS MATERIALS

*Revise Table 414.5.1 'Explosion Control Requirements' and add new footnote i to read as follows:

Table 414.5.1 EXPLOSION CONTROL REQUIREMENTS

Portions of table not shown remain unchanged.

MATERIAL	CLASS	EXPLOSION CONTROL METHODS	
		Barricade construction	Explosion (deflagration) venting or explosion (deflagration) prevention systems
Hazard Category			
Flammable gas	Gaseous	Not required	Required ⁱ
	Liquefied	Not required	Required ⁱ

i. Not required for Category 1B Flammable Gases having a burning velocity not exceeding 3.9 in/s (10 cm/s).

CHAPTER 15

ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

SECTION 1511

REROOFING

*Revise Section 1511.1 'General' to read as follows:

1511.1 General.

Materials and methods of application for recovering or replacing an existing *roof covering* shall comply with the requirements of Chapter 15.

Exception 1

Roof replacement or *roof recover* of existing low-slope *roof coverings* shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide *positive roof drainage* and meet the requirements of Section 1608.3 and Section 1611.2.

Exception 2

Recovering or replacing an existing *roof covering* shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1502.2 for roofs that provide for *positive roof drainage* and meet the requirements of Section 1608.3 and Section 1611.2. For the purposes of this exception, existing secondary drainage or *scupper systems* required in accordance with this code shall not be removed unless they are replaced by secondary drains or *scuppers* designed and installed in accordance with Section 1502.2.



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



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The provisions of the *Georgia State Minimum Standard Building Code* shall apply to the construction, *alteration*, relocation, enlargement, replacement, *repair*, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exception #1: Detached one- and two-family *dwelling*s and multiple single-family *dwelling*s (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		
Area	Primary	Supplement
Occupancy Classification	LSC	IBC
Building Construction Types including allowable height, allowable building areas, and the requirements for	IBC	LSC

CODES REFERENCE GUIDE		
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 construction standard	LSC	NONE
Fire Alarm Systems	LSC	NONE
Smoke Alarms and Smoke Detection Systems	State Statute and LSC	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

**Revise the International Building Code, 2018 Edition, to read as follows:*

CHAPTER 6

TYPES OF CONSTRUCTION

SECTION 602

CONSTRUCTION CLASSIFICATION

**Add new Section 602.1.2 'Alternative mass timber provisions (Appendix P)' to read as follows:*

602.1.2 Alternative mass timber provisions (Appendix P). As an alternative to the construction types defined in 602.2 through 602.5, buildings and structures erected or to be erected, altered or extended in height or area shall be permitted to be classified as construction Type IV-A, IV-B or IV-C in accordance with Appendix P. Buildings and structures classified as IV-A, IV-B, and IV-C shall comply with the provisions of Appendix P, as well as all other applicable provisions of this code, including provisions for buildings of Type IV construction. (Effective January 1, 2022)

CHAPTER 17

SPECIAL INSPECTIONS AND TESTS

SECTION 1704

SPECIAL INSPECTIONS AND TESTS, CONTRACTOR RESPONSIBILITY AND STRUCTURAL OBSERVATION

**Revise Table 1704.2 'Minimum Special Inspector Qualifications' to read as follows:*

TABLE 1704.2 MINIMUM SPECIAL INSPECTOR QUALIFICATIONS			
Category of Testing and Inspection	Minimum Qualifications (refer to key at end of Table)		
	Shop Testing or Inspection	Field Testing or Inspection	Review Testing, Certification & Lab Reports
1704.2.5 Inspection of Fabricators			
Pre-cast concrete	A, C, E		
Structural steel construction	C, F, G		
Wood construction	A		
Cold formed metal construction	A		
1705.2, 1705.10, 1705.11 & 1705.12 Steel Construction			
Verification of welding consumables, filler metals, procedure specifications, procedure qualification records and personnel performance qualification records			C, F
Nondestructive testing of welding	G	G	
Inspection of welding	C, F	C, F	
Verification of fabricator and erector documents as listed in AISC 360, chapter N, paragraph 3.2			A, C
Material verification of weld filler materials			C, F
Inspection of high strength bolting and steel frame joint details		A, C	
Inspection of embedment		A, C, F	
Inspection of steel elements of composite construction		A, C, F	
Verification of reinforcing steel, cold formed steel deck and truss materials			A, C, F
Inspection of reinforcing steel, cold formed steel deck and trusses		A, C	
1705.3 & 1705.12 Concrete Construction			
Reinforcing placement, cast-in-place bolts, post installed anchors concrete and shotcrete placement and curing operations. Inspection of formwork for shape, location and dimensions		A, C, H	
Pre-stressing steel installation		A, C, D, E	
Erection of pre-cast concrete members		A, C, H	

TABLE 1704.2 MINIMUM SPECIAL INSPECTOR QUALIFICATIONS			
Concrete field sampling and field testing		J	
Concrete strength testing		P	
Review certified mill reports			A, C
Verify use of required design mix		A, I, J, H, C	
Pre-stressed (pre-tensioned) concrete force application	A, C, E		
Post-tensioned concrete force application		A, C, D	
Review of in-situ concrete strength, prior to stressing of			

Remainder of Table to remain unchanged.

(Effective January 1, 2022)

SECTION 1705

REQUIRED SPECIAL INSPECTIONS AND TESTS

*Revise Table 1705.3 'Required Special Inspections and Tests of Concrete Construction' to read as follows:

TABLE 1705.3

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD ^a	IBC REFERENCE
1. Inspect reinforcement, including prestressing tendons, and verify placement.	—	X	ACI 318: Ch. 20, 25.2, 25.3, 26.6.126.6.3	1908.4
2. Reinforcing bar welding:	—	X	AWS D1.4 ACI 318: 26.6.4	—
a. Verify weldability of reinforcing bars other than ASTM A706;	—	X		
b. Inspect single-pass fillet welds, maximum 5/16"; and	X			
c. Inspect all other welds.				
3. Inspect anchors cast in concrete.	—	X	ACI 318: 17.8.2	—

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD ^a	IBC REFERENCE
4. Inspect anchors post-installed in hardened concrete members. ^b a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. b. Mechanical anchors and adhesive anchors not defined in 4.a.	X		ACI 318: 17.8.2.4	
		X	ACI 318: 17.8.2	
5. Verify use of required design mix.	—	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6a. Prior to concrete placement, fabricate specimens for strength tests, perform slump or slump flow, air content tests, density and determine the temperature of the concrete with all results included in the test reports.	X	—	ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	1908.10
6b. Verify that concrete specimens for strength tests are maintained in the required initial curing and laboratory curing environment, and that the maximum and minimum temperatures during the initial curing period are reported.	X	—	ACI 318 26.12 ASTM C31	—
7. Inspect concrete and shotcrete placement for proper application techniques.	X	—	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. Verify maintenance of specified curing temperature and techniques.	—	X	ACI 318: 26.5.3 - 26.5.5	1908.9

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD ^a	IBC REFERENCE
9. Inspect prestressed concrete for: a. Application of prestressing forces; and b. Grouting of bonded prestressing tendons.	X X	— —	ACI 318: 26.10	—
10. Inspect erection of precast concrete members.	—	X	ACI 318: 26.9	—
11. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	—	X	ACI 318: 26.11.2	—
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	—	X	ACI 318: 26.11.1.2(b)	—

For SI: 1 inch = 25.4mm.

a. Where applicable, see Section 1705.12, Special inspections for seismic resistance.

b. Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with 17.8.2 in ACI 318, or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of work.

(Effective January 1, 2022)

*Add new Section 1705.3.3 'Testing agency' to read as follows:

1705.3.3 **Testing agency.** The testing agency performing acceptance testing shall comply with ASTM C1077.

(Effective January 1, 2022)

CHAPTER 35

REFERENCED STANDARDS

*Revise Chapter 35 'Referenced Standards' to add the following new reference standards to read as follows:

Standard reference number	Title	Referenced in code section number
c1077-17	Standard Practice for Agencies Testing concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation.	1705.3.3, GA Amendments

IBC APPENDIX P

TALL MASS TIMBER BUILDINGS

P101

GENERAL

P101.1 Purpose. The purpose of this appendix is to provide criteria for three new mass timber construction types: Type IV-A, Type IV-B and Type IV-C. These building types expand the allowable use of mass timber construction to larger areas and greater heights than allowed for Type IV-HT construction.

P101.2 Scope. The provisions in this appendix shall be permitted to be used in addition to or in lieu of the corresponding sections in the 2018 International Building Code, and shall be mandatory where Types IV-A, IV-B and IV-C construction are used. Where building Types IV-A, IV-B, or IV-C are not used, this appendix does not apply.

P102

AMENDMENTS TO THE 2018 INTERNATIONAL BUILDING CODE

CHAPTER 1

SCOPE AND ADMINISTRATION

Add new text as follows:

110.3.5 Type IV-A, IV-B and IV-C connection protection inspection. In buildings of Type IV-A, IV-B and IV-C Construction where connection fire resistance ratings are provided by wood cover calculated to meet the requirements of Section 2304.10.1 inspection of the wood *cover* shall be made after the cover is installed but before any other coverings or finishes are installed.

CHAPTER 2

DEFINITIONS

Add new text as follows:

MASS TIMBER. Structural elements of Type IV construction primarily of solid, built-up, panelized or engineered wood products that meet minimum cross section dimensions of Type IV construction.

NONCOMBUSTIBLE PROTECTION (FOR MASS TIMBER). Noncombustible material, in accordance with Section 703.5, designed to increase the fire-resistance rating and delay the combustion of mass timber.

Revise as follows:

[BS] WALL, LOAD-BEARING. Any wall meeting either of the following classifications:

1. Any metal or wood stud wall that supports more than 100 pounds per linear foot (1459 N/m) of vertical load in addition to its own weight.
2. Any *masonry*, concrete or mass timber wall that supports more than 200 pounds per linear foot (2919 N/m) of vertical load in addition to its own weight.

CHAPTER 4

SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE

Revise as follows:

[F] 403.3.2 Water supply to required fire pumps. In all buildings that are more than 420 feet (128 m) in building height, and buildings of Type IV-A and IV-B construction that are more than 120 feet in building height, required fire pumps shall be supplied by connections to not fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: Two connections to the same main shall be permitted provided that the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through not fewer than one of the connections.

CHAPTER 5

GENERAL BUILDING HEIGHT AND AREAS

Revise as follows:

TABLE 504.3

ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE^a

OCCUPANCY CLASSIFICATION	SEE FOOTNOTES	TYPE OF CONSTRUCTION											
		TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
		A	B	A	B	A	B	A	B	C	HT	A	B
A, B, E, F, M, S, U	NS ^b	UL	160	65	55	65	55	65	65	65	65	50	40
	S	UL	180	85	75	85	75	270	180	85	85	70	60
H-1, H-2, H-3, H-5	NS ^{c,d}	UL	160	65	55	65	55	120	90	65	65	50	40
	S												
H-4	NS ^{c,d}	UL	160	65	55	65	55	65	65	65	65	50	40
	S	UL	180	85	75	85	75	140	100	85	85	70	60
I-1 Condition 1, I-3	NS ^{d,e}	UL	160	65	55	65	55	65	65	65	65	50	40
	S	UL	180	85	75	85	75	180	120	85	85	70	60
I-1 Condition 2, I-2	NS ^{d,e,f}	UL	160	65	55	65	55	65	65	65	65	50	40
	S	UL	180	85	75	85	75	180	120	85	85	70	60

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION												
	SEE FOOTNOTES	TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
		A	B	A	B	A	B	A	B	C	HT	A	B
I-4	NS ^{d,g}	UL	160	65	55	65	55	65	65	65	65	50	40
	S	UL	180	85	75	85	75	180	120	85	85	70	60
R ^h	NS ^d	UL	160	65	55	65	55	65	65	65	65	50	40
	S13D	60	60	60	60	60	60	60	60	60	60	50	40
	S13R	60	60	60	60	60	60	60	60	60	60	60	60
	S	UL	180	85	75	85	75	270	180	85	85	70	60

For SI: 1 foot = 304.8 mm

UL = Unlimited; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3.

- See Chapters 4 and 5 for specific exceptions to the allowable heights in the chapter.
- See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.
- New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5
- The NS value is only for use in evaluation of existing building height in accordance with the International Existing Building Code.
- New Group I-1 and I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6. For new Group I-1 occupancies Condition 1, see Exception 1 of Section 903.2.6.
- New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the International Fire Code.
- For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.
- New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.

Revise as follows:

Table 504.4

ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE^{a, b}

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION												
	SEE FOOTNOTES	TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
		A	B	A	B	A	B	A	B	C	HT	A	B
A-1	NS	UL	5	3	2	3	2	3	3	3	3	2	1
	S	UL	6	4	3	4	3	9	6	4	4	3	2

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION												
	SEE FOOTNOTES	TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
		A	B	A	B	A	B	A	B	C	HT	A	B
A-2	NS	UL	11	3	2	3	2	3	3	3	3	2	1
	S	UL	12	4	3	4	3	18	12	6	4	3	2
A-3	NS	UL	11	3	2	3	2	3	3	3	3	2	1
	S	UL	12	4	3	4	3	18	12	6	4	3	2
A-4	NS	UL	11	3	2	3	2	3	3	3	3	2	1
	S	UL	12	4	3	4	3	18	12	6	4	3	2
A-5	NS	UL	UL	UL	UL	UL	UL	1	1	1	UL	UL	UL
	S	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL
B	NS	UL	11	5	3	5	3	5	5	5	5	3	2
	S	UL	12	6	4	6	4	18	12	9	6	4	3
E	NS	UL	5	3	2	3	2	3	3	3	3	1	1
	S	UL	6	4	3	4	3	9	6	4	4	2	2
F-1	NS	UL	11	4	2	3	2	3	3	3	4	2	1
	S	UL	12	5	3	4	3	10	7	5	5	3	2
F-2	NS	UL	11	5	3	4	3	5	5	5	5	3	2
	S	UL	12	6	4	5	4	12	8	6	6	4	3
H-1	NS ^{c,d}	1	1	1	1	1	1	NP	NP	NP	1	1	NP
	S							1	1	1			
H-2	NS ^{c,d}	UL	3	2	1	2	1	1	1	1	2	1	1
	S							2	2	2			
H-3	NS ^{c,d}	UL	6	4	2	4	2	3	3	3	4	2	1
	S							4	4	4			
H-4	NS ^{c,d}	UL	7	5	3	5	3	5	5	5	5	3	2
	S	UL	8	6	4	6	4	8	7	6	6	4	3
H-5	NS ^{c,d}	4	4	3	3	3	3	2	2	2	3	3	2
	S							3	3	3			
I-1 Condition 1	NS ^{d,e}	UL	9	4	3	4	3	4	4	4	4	3	2
	S	UL	10	5	4	5	4	10	7	5	5	4	3
I-1 Condition 2	NS ^{d,e}	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
	S ⁱ	UL	10	3	2	2	1	7	4	1	2	2	1
I-2	NS ^{d,f}	UL	4	2	1	1	NP	NP	NP	NP	1	1	NP
	S	UL	5	3				7	5	1			
I-3	NS ^{d,e}	UL	4	2	1	2	1	2	2	2	2	2	1
	S	UL	5	3	2	3	2	7	5	3	3	3	2
I-4	NS ^{d,g}	UL	5	3	2	3	2	3	3	3	3	1	1
	S	UL	6	4	3	4	3	9	6	4	4	2	2
M	NS	UL	11	4	2	4	2	4	4	4	4	3	1
	S	UL	12	5	3	5	3	12	8	6	5	4	2
R-1 ^h	NS ^d	UL	11	4	4	4	4	4	4	4	4	3	2
	S13R	4	4									4	3
	S	UL	12									4	3
R-2 ^h	NS ^d	UL	11	4	4	4	4	4	4	4	4	3	2
	S13R	4	4									4	3
	S	UL	12									4	3
R-3 ^h	NS ^d	UL	11	4	4	4	4	4	4	4	4	3	3
	S13D	4	4									3	3
	S13R	4	4									4	4
	S	UL	12									4	4

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION												
	SEE FOOTNOTES	TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
		A	B	A	B	A	B	A	B	C	HT	A	B
R-4 ^h	NS ^d	UL	11	4	4	4	4	4	4	4	4	3	2
	S13D	4	4									3	2
	S13R	4	4									4	3
	S	UL	12	5	5	5	5	18	12	5	5	4	3
S-1	NS	UL	11	4	2	3	2	4	4	4	4	3	1
	S	UL	12	5	3	4	3	10	7	5	5	4	2
S-2	NS	UL	11	5	3	4	3	4	4	4	4	4	2
	S	UL	12	6	4	5	4	12	8	5	5	5	3
U	NS	UL	5	4	2	3	2	4	4	4	4	2	1
	S	UL	6	5	3	4	3	9	6	5	5	3	2

UL = Unlimited; NP = Not Permitted; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3.

- a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.
- b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.
- c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.
- d. The NS value is only for use in evaluation of existing building height in accordance with the International Existing Building Code.
- e. New Group I-1 and I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6. For new Group I-1 occupancies, Condition 1, see Exception 1 of Section 903.2.6.
- f. New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and 1103.5 of the International Fire Code.
- g. For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.
- h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.
- i. For all I-1 Condition 2, the building shall be protected throughout with an approved automatic sprinkler system, installed in accordance with NFPA 13 as adopted by the Rules and Regulations of the Safety Fire Commissioner. No increase in story height shall be permitted.

Revise as follows:

Table 506.2

ALLOWABLE AREA FACTOR (A_t= NS, S1, S13R, S13D OR SM, as applicable) IN SQUARE FEET^{a,b}

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION												
	SEE FOOTNOTES	TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
		A	B	A	B	A	B	A	B	C	HT	A	B
A-1	NS	UL	UL	15,500	8,500	14,000	8,500	45,000	30,000	18,750	15,000	11,500	5,500
	S1	UL	UL	62,000	34,000	56,000	34,000	180,000	120,000	75,000	60,000	46,000	22,000
	SM	UL	UL	46,500	25,500	42,000	25,500	135,000	90,000	56,250	45,000	34,500	16,500
A-2	NS	UL	UL	15,500	9,500	14,000	9,500	45,000	30,000	18,750	15,000	11,500	6,000
	S1	UL	UL	62,000	38,000	56,000	38,000	180,000	120,000	75,000	60,000	46,000	24,000
	SM	UL	UL	46,500	28,500	42,000	28,500	135,000	90,000	56,250	45,000	34,500	18,000
A-3	NS	UL	UL	15,500	9,500	14,000	9,500	45,000	30,000	18,750	15,000	11,500	6,000
	S1	UL	UL	62,000	38,000	56,000	38,000	180,000	120,000	75,000	60,000	46,000	24,000
	SM	UL	UL	46,500	28,500	42,000	28,500	135,000	90,000	56,250	45,000	34,500	18,000
A-4	NS	UL	UL	15,500	9,500	14,000	9,500	45,000	30,000	18,750	15,000	11,500	6,000
	S1	UL	UL	62,000	38,000	56,000	38,000	180,000	120,000	75,000	60,000	46,000	24,000
	SM	UL	UL	46,500	28,500	42,000	28,500	135,000	90,000	56,250	45,000	34,500	18,000
A-5	NS	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL
	S1												
	SM												
B	NS	UL	UL	37,500	23,000	28,500	19,000	108,000	72,000	45,000	36,000	18,000	9,000
	S1	UL	UL	150,000	92,000	114,000	76,000	432,000	288,000	180,000	144,000	72,000	36,000
	SM	UL	UL	112,500	69,000	85,500	57,000	324,000	216,000	135,000	108,000	54,000	27,000
E	NS	UL	UL	26,500	14,500	23,500	14,500	76,500	51,000	31,875	25,500	18,500	9,500
	S1	UL	UL	106,000	58,000	94,000	58,000	306,000	204,000	127,500	102,000	74,000	38,000
	SM	UL	UL	79,500	43,500	70,500	43,500	229,500	153,000	95,625	76,500	55,500	28,500
F-1	NS	UL	UL	25,000	15,500	19,000	12,000	100,500	67,000	41,875	33,500	14,000	8,500
	S1	UL	UL	100,000	62,000	76,000	48,000	402,000	268,000	167,500	134,000	56,000	34,000
	SM	UL	UL	75,000	46,500	57,000	36,000	301,500	201,000	125,625	100,500	42,000	25,500
F-2	NS	UL	UL	37,500	23,000	28,500	18,000	151,500	101,000	63,125	50,500	21,000	13,000
	S1	UL	UL	150,000	92,000	114,000	72,000	606,000	404,000	252,500	202,000	84,000	52,000
	SM	UL	UL	112,500	69,000	85,500	54,000	454,500	303,000	189,375	151,500	63,000	39,000
H-1	NS ^c	21,000	16,500	11,000	7,000	9,500	7,000	10,500	10,500	10,500	10,500	7,500	NP
	S1												
H-2	NS ^c	21,000	16,500	11,000	7,000	9,500	7,000	10,500	10,500	10,500	10,500	7,500	3,000
	S1												
	SM												
H-3	NS ^c	UL	60,000	26,500	14,000	17,500	13,000	25,500	25,500	25,500	25,500	10,000	5,000
	S1												
	SM												
H-4	NS ^{c,d}	UL	UL	37,500	17,500	28,500	17,500	72,000	54,000	40,500	36,000	18,000	6,500
	S1	UL	UL	150,000	70,000	114,000	70,000	288,000	216,000	162,000	144,000	72,000	26,000
	SM	UL	UL	112,500	52,500	85,500	52,500	216,000	162,000	121,500	108,000	54,000	19,500
H-5	NS ^{c,d}	UL	UL	37,500	23,000	28,500	19,000	72,000	54,000	40,500	36,000	18,000	9,000
	S1	UL	UL	150,000	92,000	114,000	76,000	288,000	216,000	162,000	144,000	72,000	36,000
	SM	UL	UL	112,500	69,000	85,500	57,000	216,000	162,000	121,500	108,000	54,000	27,000
I-1	NS ^{d,e}	UL	55,000	19,000	10,000	16,500	10,000	54,000	36,000	18,000	18,000	10,500	4,500
	S1	UL	220,000	76,000	40,000	66,000	40,000	216,000	144,000	72,000	72,000	42,000	18,000
	SM	UL	165,000	57,000	30,000	49,500	30,000	162,000	108,000	54,000	54,000	31,500	13,500
I-2	NS ^{d,f}	UL	UL	15,000	11,000	12,000	NP	36,000	24,000	12,000	12,000	9,500	NP
	S1	UL	UL	60,000	44,000	48,000	NP	144,000	96,000	48,000	48,000	38,000	NP
	SM	UL	UL	45,000	33,000	36,000	NP	108,000	72,000	36,000	36,000	28,500	NP
I-3	NS ^{d,e}	UL	UL	15,000	10,000	10,500	7,500	36,000	24,000	12,000	12,000	7,500	5,000
	S1	UL	UL	45,000	40,000	42,000	30,000	144,000	96,000	48,000	48,000	30,000	20,000
	SM	UL	UL	45,000	30,000	31,500	22,500	108,000	72,000	36,000	36,000	22,500	15,000
I-4	NS ^{d,g}	UL	60,500	26,500	13,000	23,500	13,000	76,500	51,000	25,500	25,500	18,500	9,000
	S1	UL	121,000	106,000	52,000	94,000	52,000	306,000	204,000	102,000	102,000	74,000	36,000
	SM	UL	181,500	79,500	39,000	70,500	39,000	229,500	153,000	76,500	76,500	55,500	27,000
M	NS	UL	UL	21,500	12,500	18,500	12,500	61,500	41,000	25,625	20,500	14,000	9,000
	S1	UL	UL	86,000	50,000	74,000	50,000	246,000	164,000	102,500	82,000	56,000	36,000
	SM	UL	UL	64,500	37,500	55,500	37,500	184,500	123,000	76,875	61,500	42,000	27,000
R-1 ^h	NS ^d	UL	UL	24,000	16,000	24,000	16,000	61,500	41,000	25,625	20,500	12,000	7,000
	S13R												
	S1												

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION												
	SEE	TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
	FOOTNOTES	A	B	A	B	A	B	A	B	C	HT	A	B
R-2 ^h	NS ^d	UL	UL	72,000	48,000	72,000	48,000	184,500	123,000	76,875	61,500	36,000	21,000
	S13R	UL	UL	24,000	16,000	24,000	16,000	61,500	41,000	25,625	20,500	12,000	7,000
	S1	UL	UL	96,000	64,000	96,000	64,000	246,000	164,000	102,500	82,000	48,000	28,000
	SM	UL	UL	72,000	48,000	72,000	48,000	184,500	123,000	76,875	61,500	36,000	21,000
R-3 ^h	NS ^d	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL	UL
	S13D												
	S13R												
	S1												
	SM												
R-4 ^h	NS ^d	UL	UL	24,000	16,000	24,000	16,000	61,500	41,000	25,625	20,500	12,000	7,000
	S13D												
	S13R												
	S1	UL	UL	96,000	64,000	96,000	64,000	246,000	164,000	102,500	82,000	48,000	28,000
	SM	UL	UL	72,000	48,000	72,000	48,000	184,500	123,000	76,875	61,500	36,000	21,000
S-1	NS	UL	48,000	26,000	17,500	26,000	17,500	76,500	51,000	31,875	25,500	14,000	9,000
	S1	UL	192,000	104,000	70,000	104,000	70,000	306,000	204,000	127,500	102,000	56,000	36,000
	SM	UL	144,000	78,000	52,500	78,000	52,500	229,500	153,000	95,625	76,500	42,000	27,000
S-2	NS	UL	79,000	39,000	26,000	39,000	26,000	115,500	77,000	48,125	38,500	21,000	13,500
	S1	UL	316,000	156,000	104,000	156,000	104,000	462,000	308,000	192,500	154,000	84,000	54,000
	SM	UL	237,000	117,000	78,000	117,000	78,000	346,500	231,000	144,375	115,500	63,000	40,500
U	NS ⁱ	UL	35,500	19,000	8,500	14,000	8,500	54,000	36,000	22,500	18,000	9,000	5,500
	S1	UL	142,000	76,000	34,000	56,000	34,000	216,000	144,000	90,000	72,000	36,000	22,000
	SM	UL	106,500	57,000	25,500	42,000	25,500	162,000	108,000	67,500	54,000	27,000	16,500

For SI: 1 square foot = 0.0929 m².

UL = Unlimited; NP = Not Permitted; NS = Buildings not equipped throughout with an automatic sprinkler system; S1 = Buildings a maximum of one story above grade plane equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; SM = Buildings two or more stories above grade plane equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3.

a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.

b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.

c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.

d. The NS value is only for use in evaluation of existing building area in accordance with the International Existing Building Code.

e. New Group I-1 and I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6. For new Group I-1 occupancies, Condition 1, see Exception 1 of Section 903.2.6.

f. New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the International Fire Code.

g. New Group I-4 occupancies see Exceptions 2 and 3 of Section 903.2.6.

h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.

i. The maximum allowable area for a single-story nonsprinklered Group U greenhouse is permitted to be 9,000 square feet, or the allowable area shall be permitted to comply with Table C102.1 of Appendix C.

Revise as follows:

508.4.4.1 **Construction.** Required separations shall be fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both, so as to completely separate adjacent occupancies. Mass timber elements serving as fire barriers or horizontal assemblies to separate occupancies in Type IV-B or IV-C construction shall be separated from the interior of the building with an approved thermal barrier consisting of gypsum board that is not less than 12 inch (12.7 mm) in thickness or a material that is tested in accordance with and meets the acceptance criteria of both the Temperature Transmission Fire Test and the Integrity Fire Test of NFPA 275.

Add new text as follows:

509.4.1.1 **Type IV-B and IV-C construction.** Where Table 509 specifies a fire-resistance-rated separation, mass timber elements serving as fire barriers or horizontal assemblies in Type IV-B or IV-C construction shall be separated from the interior of the incidental use with an approved thermal barrier consisting of gypsum board that is not less than 12 inch (12.7 mm) in thickness or a material that is tested in accordance with and meets the acceptance criteria of both the Temperature Transmission Fire Test and the Integrity Fire Test of NFPA 275.

CHAPTER 6

TYPES OF CONSTRUCTION

Revise as follows:

602.4 Type IV.

Type IV construction is that type of construction in which the building elements are mass timber or noncombustible materials and have fire resistance ratings in accordance with Table 601. Mass timber elements shall meet the fire resistance rating requirements of this section based on either the fire resistance rating of the noncombustible protection, the mass timber, or a combination of both and shall be determined in accordance with Section 703.2 or 703.3. The minimum dimensions and permitted materials for building elements shall comply with the provisions of this section and Section 2304.11. Mass timber elements of Type IV-A, IV-B and IV-C construction shall be protected with noncombustible protection applied directly to the mass timber in accordance with Sections 602.4.1 through 602.4.3. The time assigned to the noncombustible protection shall be determined in accordance with Section 703.8 and comply with Section 722.7.

Cross laminated timber shall be labeled as conforming to PRG 320-19 as reference in Section 2303.1.4.

Exterior load bearing walls and nonload-bearing walls shall be mass timber construction, or shall be of noncombustible construction.

Exception: Exterior load-bearing walls and nonload-bearing walls of Type IV-HT Construction in accordance with Section 602.4.4.

The interior building elements, including nonload-bearing walls and partitions, shall be of mass timber construction or of noncombustible construction.

Exception: Interior building elements and nonload-bearing walls and partitions of Type IV-HT Construction in accordance with Section 602.4.4.

Combustible concealed spaces are not permitted except as otherwise indicated in Sections 602.4.1 through 602.4.4. Combustible stud spaces within light frame walls of Type IV-HT construction shall not be considered concealed spaces, but shall comply with Section 718.

In buildings of Type IV-A, IV-B and IV-C, construction with an occupied floor located more than 75 feet (22 860 mm) above the lowest level of fire department access, up to and including 12 stories or 180 feet (54 864 mm) above grade plane, mass timber interior exit and elevator hoistway enclosures shall be protected in accordance with Section 602.4.1.2. In buildings greater than 12 stories or 180 feet (54 864 mm) above grade plane, interior exit and elevator hoistway enclosures shall be constructed of non-combustible materials.

Add new text as follows:

602.4.1 Type IV-A. Building elements in Type IV-A construction shall be protected in accordance with Sections 602.4.1.1 through 602.4.1.6. The required fire resistance rating of noncombustible elements and protected mass timber elements shall be determined in accordance with Section 703.2 or Section 703.3.

602.4.1.1 Exterior protection. The outside face of exterior walls of mass timber construction shall be protected with noncombustible protection with a minimum assigned time of 40 minutes as determined in Table 722.7.1(1). Components of the exterior wall covering shall be of noncombustible material except water resistive barriers having a peak heat release rate of less than 150 kW/m², a total heat release of less than 20 MJ/m² and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and having a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m².

602.4.1.2 Interior protection. Interior faces of all mass timber elements, including the inside faces of exterior mass timber walls and mass timber roofs, shall be protected with material complying with Section 703.5.

602.4.1.2.1 Protection time. Noncombustible protection shall contribute a time equal to or greater than times assigned in Table 722.7.1(1), but not less than 80 minutes. The use of materials and their respective protection contributions listed in Table 722.7.1(2) shall be permitted to be used for compliance with Section 722.7.1.

602.4.1.3 Floors. The floor assembly shall contain a noncombustible material not less than 1 inch (25 mm) in thickness above the mass timber. Floor finishes in accordance with Section 804 shall be permitted on top of the noncombustible material. The underside of floor assemblies shall be protected in accordance with 602.4.1.2.

602.4.1.4 Roofs. The interior surfaces of roof assemblies shall be protected in accordance with Section 602.4.1.2. Roof coverings in accordance with Chapter 15 shall be permitted on the outside surface of the roof assembly.

602.4.1.5 Concealed spaces. Concealed spaces shall not contain combustibles other than electrical, mechanical, fire protection, or plumbing materials and equipment permitted in plenums in accordance with Section 602 of the International Mechanical Code, and shall comply with all applicable provisions of Section 718. Combustible construction forming concealed spaces shall be protected in accordance with Sections 602.4.1.2.

602.4.1.6 Shafts. Shafts shall be permitted in accordance with Section 713 and Section 718. Both the shaft side and room side of mass timber elements shall be protected in accordance with Section 602.4.1.2.

602.4.2 Type IV-B. Building elements in Type IV-B construction shall be protected in accordance with Sections 602.4.2.1 through 602.4.2.6. The required fire resistance rating of noncombustible elements or mass timber elements shall be determined in accordance with Section 703.2 or Section 703.3.

602.4.2.1 Exterior protection. The outside face of exterior walls of mass timber construction shall be protected with non-combustible protection with a minimum assigned time of 40 minutes as determined in Table 722.7.1(1). Components of the exterior wall covering shall be of noncombustible material except water resistive barriers having a peak heat release rate of less than 150 kW/m², a total heat release of less than 20 MJ/m² and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354, and having a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m².

602.4.2.2 Interior protection. Interior faces of all mass timber elements, including the inside face of exterior mass timber walls and mass timber roofs, shall be protected, as required by this section, with materials complying with Section 703.5.

602.4.2.2.1 Protection time. Noncombustible protection shall contribute a time equal to or greater than times assigned in Table 722.7.1(1), but not less than 80 minutes. The use of materials and their respective protection contributions listed in Table 722.7.1(2) shall be permitted to be used for compliance with Section 722.7.1.

602.4.2.2.2 Protected area. Interior faces of all mass timber elements, including the inside face of exterior mass timber walls and mass timber roofs, shall be protected in accordance with Section 602.4.2.2.1.

Exceptions: Unprotected portions of mass timber ceilings and walls complying with Section 602.4.2.2.4 and the following:

1. Unprotected portions of mass timber ceilings and walls complying with one of the following:

1.1 Unprotected portions of mass timber ceilings, including attached beams, shall be permitted and shall be limited to an area equal to 20 percent of the floor area in any dwelling unit or fire area.

1.2 Unprotected portions of mass timber walls, including attached columns, shall be permitted and shall be limited to an area equal to 40 percent of the floor area in any dwelling unit or fire area.

1.3 Unprotected portions of both walls and ceilings of mass timbers, including attached columns and beams, in any dwelling unit or fire area shall be permitted in accordance with Section 602.4.2.2.3.

2. Mass timber columns and beams that are not an integral portion of walls or ceilings, respectively, shall be permitted to be unprotected without restriction of either aggregate area or separation from one another.

602.4.2.2.3 Mixed unprotected areas. In each dwelling unit or fire area, where both portions of ceilings and portions of walls are unprotected, the total allowable unprotected area shall be determined in accordance with Equations 6-1.

$$(U_{tc}/U_{ac}) + (U_{tw}/U_{aw}) \leq 1 \quad \text{(Equation 6-1)}$$

where:

U_{tc} = Total unprotected mass timber ceiling areas

U_{ac} = Allowable unprotected mass timber ceiling area conforming to Exception 1.1 of Section 602.4.2.2.2.

U_{tw} = Total unprotected mass timber wall areas

U_{aw} = Allowable unprotected mass timber wall area conforming to Exception 1.2 of Section 602.4.2.2.2.

602.4.2.2.4 Separation distance between unprotected mass timber elements. In each dwelling unit or fire area, unprotected portions of mass timber walls and ceilings shall be not less than 15 feet (4572 mm) from unprotected portions of other walls and ceilings, measured horizontally along the ceiling and from other unprotected portions of walls measure horizontally along the floor.

602.4.2.3 Floors. The floor assembly shall contain a noncombustible material not less than 1 inch (25 mm) in thickness above the mass timber. Floor finishes in accordance with Section 804 shall be permitted on top of the noncombustible material. The underside of floor assemblies shall be protected in accordance with Section 602.4.1.2.

602.4.2.4 Roofs. The interior surfaces of roof assemblies shall be protected in accordance with Section 602.4.2.2 except, in nonoccupiable spaces, they shall be treated as a concealed space with no portion left unprotected. Roof coverings in accordance with Chapter 15 shall be permitted on the outside surface of the roof assembly.

602.4.2.5 Concealed spaces. Concealed spaces shall not contain combustibles other than electrical, mechanical, fire protection, or plumbing materials and equipment permitted in plenums in accordance with Section 602 of the International Mechanical Code, and shall comply with all applicable provisions of Section 718. Combustible construction forming concealed spaces shall be protected in accordance with Section 602.4.1.2.

602.4.2.6 Shafts. Shafts shall be permitted in accordance with Section 713 and Section 718. Both the shaft side and room side of mass timber elements shall be protected in accordance with Section 602.4.1.2.

602.4.3 Type IV-C. Building elements in Type IV-C construction shall be protected in accordance with Sections 602.4.3.1 through 602.4.3.6. The required fire resistance rating of building elements shall be determined in accordance with Section 703.2 or Section 703.3.

602.4.3.1 Exterior protection. The exterior side of walls of combustible construction shall be protected with noncombustible protection with a minimum assigned time of 40 minutes as determined in Table 722.7.1(1). Components of the exterior wall covering shall be of noncombustible material except water resistive barriers having a peak heat release rate of less than 150 kW/m², a total heat release of less than 20 MJ/m² and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and having a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL 723. The ASTM E1354 test shall be conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m².

602.4.3.2 Interior protection. Mass timber elements are permitted to be unprotected.

602.4.3.3 Floors. Floor finishes in accordance with Section 804 shall be permitted on top of the floor construction.

602.4.3.4 Roofs. Roof coverings in accordance with Chapter 15 shall be permitted on the outside surface of the roof assembly.

602.4.3.5 Concealed spaces. Concealed spaces shall not contain combustibles other than electrical, mechanical, fire protection, or plumbing materials and equipment permitted in plenums in accordance with Section 602 of the International Mechanical Code, and shall comply with all applicable provisions of Section 718. Combustible construction forming concealed spaces shall be protected with noncombustible protection with a minimum assigned time of 40 minutes as specified in Table 722.7.1(1).

602.4.3.6 Shafts. Shafts shall be permitted in accordance with Section 713 and 718. Shafts and elevator hoistway and interior exit stairway enclosures shall be protected with noncombustible protection with a minimum assigned time of 40 minutes as specified in Table 722.7.1(1), on both the inside of the shaft and the outside of the shaft.

602.4.4 Type IV-HT. Type IV-HT (Heavy Timber) construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of solid wood, laminated heavy timber or structural composite lumber (SCL), without concealed spaces. The minimum dimensions for permitted materials including solid timber, glued-laminated timber, structural composite lumber (SCL) and cross laminated timber (CLT) and details of Type IV construction shall comply with the provisions of this section and Section 2304.11. Exterior walls complying with Section 602.4.4.1 or 602.4.4.2 shall be permitted. Interior walls and partitions not less than 1-hour fire resistance rating or heavy timber conforming with Section 2304.11.2.2 shall be permitted.

Renumber and Revise as follows:

602.4.1 to 602.4.4.1 Fire-retardant-treated wood in exterior walls. Fire-retardant-treated wood framing and sheathing complying with Section 2303.2 shall be permitted within exterior wall assemblies not less than 6 inches (152 mm) in thickness with a 2-hour rating or less.

602.4.2 to 602.4.4.2 Cross-laminated timber in exterior walls. Cross-laminated timber complying with Section 2303.1.4 shall be permitted within exterior wall assemblies not less than 6 inches (152 mm) in thickness with a 2-hour rating or less, provided the exterior surface of the cross-laminated timber is protected by one of the following:

1. Fire-retardant-treated wood sheathing complying with Section 2303.2 and not less than ¹⁵/₃₂ inch (12 mm) thick; or
2. Gypsum board not less than ½ inch (12.7 mm) thick; or
3. A noncombustible material.

602.4.3 to 602.4.4.3 Exterior structural members. Where a horizontal separation of 20 feet (6096 mm) or more is provided, wood columns and arches conforming to heavy timber sizes complying with Section 2304.11 shall be permitted to be used externally.

Table 601

FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT	TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
	A	B	A	B	A	B	A	B	C	HT	A	B
Primary structural frame ^f (see Section 202)	3 ^{a,b}	2 ^{a,b}	1 ^b	0	1 ^b	0	<u>3</u> ^a	<u>2</u> ^a	<u>2</u> ^a	HT	1 ^b	0
Bearing walls	3	2	1	0	2	2	<u>3</u>	<u>2</u>	<u>2</u>	2	1	0
Exterior ^{e,f}	3 ^a	2 ^a	1	0	1	0	<u>3</u>	<u>2</u>	<u>2</u>	1/HT	1	0
Interior												
Nonbearing walls and partitions	See Table 602											
Exterior												
Nonbearing walls and partitions	0	0	0	0	0	0	<u>0</u>	<u>0</u>	<u>0</u>	See Section 2304.11.2	0	0
Interior ^d												

BUILDING ELEMENT	TYPE I		TYPE II		TYPE III		TYPE IV				TYPE V	
	A	B	A	B	A	B	A	B	C	HT	A	B
Floor construction and associated secondary members (see Section 202)	2	2	1	0	1	0	<u>2</u>	<u>2</u>	<u>2</u>	HT	1	0
Roof construction and associated secondary members (see Section 202)	1 ^{1/2} ^b	1 ^{b,c}	1 ^{b,c}	0 ^c	1 ^{b,c}	0	<u>1 1/2</u>	<u>1</u>	<u>1</u>	HT	1 ^{b,c}	0

For SI: 1 foot = 304.8 mm.

a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.

b. Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

c. In all occupancies, heavy timber complying with Section 2304.11 shall be allowed where a 1-hour or less fire-resistance rating is required.

d. Not less than the fire-resistance rating required by other sections of this code.

e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).

f. Not less than the fire-resistance rating as referenced in Section 704.10.

Table 602

FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE ^{a,d,g}

FIRE SEPARATION DISTANCE = X (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP H ^e	OCCUPANCY GROUP F-1, M, S-1 ^f	OCCUPANCY GROUP A, B, E, F-2, I, R ⁱ , S-2, U ^h
X < 5 ^b	All	3	2	1
5 ≤ X < 10	IA, IV-A	3	2	1
	Others	2	1	1
10 ≤ X < 30	IA, IB, IV-A, IV-B	2	1	1 ^c
	IIB, VB	1	0	0
	Others	1	1	1 ^c
X ≥ 30	All	0	0	0

For SI: 1 foot = 304.8 mm.

- a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
- b. See Section 706.1.1 for party walls.
- c. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
- d. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
- e. For special requirements for Group H occupancies, see Section 415.6.
- f. For special requirements for Group S aircraft hangers, see Section 412.3.1.
- g. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.
- h. For a building containing only a Group U occupancy private garage or carport, the exterior wall shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet (1523 mm) or greater.
- i. For a Group R-3 building of Type II-B or Type V-B construction, the exterior wall shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet (1523 mm) or greater.

CHAPTER 7

FIRE AND SMOKE PROTECTION FEATURES

Add new text as follows:

703.8 Determination of noncombustible protection time contribution. The time, in minutes, contributed to the fire resistance rating by the noncombustible protection of mass timber building elements, components, or assemblies, shall be established through a comparison of assemblies tested using procedures set forth in ASTM E119 or UL263. The test assemblies shall be identical in construction, loading, and materials, other than the noncombustible protection. The two test assemblies shall be tested to the same criteria of structural failure with the following conditions:

- 1. Test Assembly 1 shall be without protection.
- 2. Test Assembly 2 shall include the representative noncombustible protection. The protection shall be fully defined in terms of configuration details, attachment details, joint sealing details, accessories and all other relevant details.

The noncombustible protection time contribution shall be determined by subtracting the fire resistance time, in minutes, of Test Assembly 1 from the fire resistance time, in minutes, of Test Assembly 2.

Add new text as follows:

703.9 Sealing of adjacent mass timber elements. In buildings of Type IV-A, IV-B and IV-C construction, sealant or adhesive shall be provided to resist the passage of air in the following locations:

- 1. At abutting edges and intersections of mass timber building elements required to be fire-resistance rated.
- 2. At abutting intersections of mass timber building elements and building elements of other materials where both are required to be fire-resistance rated.

Sealants shall meet the requirements of ASTM C920. Adhesives shall meet the requirements of ASTM D3498.

Exception: Sealants or adhesives need not be provided where they are not a required component of a tested fire-resistance-rated assembly.

Revise as follows:

705.2.3.1 Balconies and similar projections. Balconies and similar projections of combustible construction other than fire-retardant-treated wood shall be fire-resistance rated where required by Table 601 for floor construction or shall be of heavy timber construction in accordance with Section 2304.11. The aggregate length of the projections shall not exceed 50 percent of the building's perimeter on each floor.

Exceptions:

1. On buildings of Types I and II construction, three stories or less above grade plane, fire-retardant-treated wood shall be permitted for balconies, porches, decks and exterior stairways not used as required exits.
2. Untreated wood and plastic composites that comply with ASTM D7032 and Section 2612 are permitted for pickets, rails and similar guard components that are limited to 42 inches (1067 mm) in height.
3. Balconies and similar projections on buildings of Types III, IV-HT and V construction shall be permitted to be of Type V construction and shall not be required to have a fire-resistance rating where sprinkler protection is extended to these areas.
4. Where sprinkler protection is extended to the balcony areas, the aggregate length of the balcony on each floor shall not be limited.

Revise as follows:

718.2.1 Fireblocking materials. Fireblocking shall consists of the following materials:

1. Two-inch (51 mm) nominal lumber.
2. Two thicknesses of 1-inch (25 mm) nominal lumber with broken lap joints.
3. One thickness of 0.719-inch (18.3 mm) wood structural panels with joints backed by 0.719-inch (18.3 mm) wood structural panels.
4. One thickness of 0.75-inch (19.1 mm) particleboard with joints backed by 0.75-inch (19 mm) particleboard.
5. One-half-inch (12.7 mm) gypsum board.
6. One-fourth-inch (6.4 mm) cement-based millboard.
7. Batts or blankets of mineral wood, mineral fiber or other approved materials installed in such a manner as to be securely retained in place.
8. Cellulose insulation installed as tested for the specific application.
9. Mass timber complying with Section 2304.11.

Add new text as follows:

722.7 Fire resistance rating of mass timber. The required fire resistance of mass timber elements in Section 602.4 shall be determined in accordance with Section 703.2 or Section 703.3. The fire resistance rating of building elements shall be as required in Tables 601 and 602 and as specified elsewhere in this code. The fire resistance rating of the mass timber elements shall consist of the fire resistance of the unprotected element added to the protection time of the noncombustible protection.

722.7.1 Minimum required protection. Where required by Sections 602.4.1 through 602.4.3, noncombustible protection shall be provided for mass timber building elements in accordance with Table 722.7.1(1). The rating, in minutes, contributed by the noncombustible protection of mass timber building elements, components, or assemblies, shall be established in accordance with Section 703.8. The protection contributions indicated in Table 722.7.1(2) shall be deemed to comply with this requirement where installed and fastened in accordance with Section 722.7.2.

Table 722.7.1(1)

PROTECTION REQUIRED FROM NONCOMBUSTIBLE COVERING MATERIAL

REQUIRED FIRE-RESISTANCE RATING OF BUILDING ELEMENT PER TABLE 601 AND TABLE 602 (hours)	MINIMUM PROTECTION REQUIRED FROM NONCOMBUSTIBLE PROTECTION (minutes)
1	40
2	80
3 or more	120

Table 722.7.1(2)

PROTECTION PROVIDED BY NONCOMBUSTIBLE COVERING MATERIAL

NONCOMBUSTIBLE PROTECTION	PROTECTION CONTRIBUTION (minutes)
¹ / ₂ -inch Type X gypsum board	25
⁵ / ₈ -inch Type X gypsum board	40

722.7.2 Installation of gypsum board noncombustible protection. Gypsum board complying with Table 722.7.1(2) shall be installed in accordance with this section.

722.7.2.1 Interior surfaces. Layers of Type X gypsum board serving as noncombustible protection for interior surfaces of wall and ceiling assemblies determined in accordance with Table 722.7.1(1) shall be installed in accordance with the following:

1. Each layer shall be attached with Type S drywall screws of sufficient length to penetrate the mass timber at least 1-inch (25 mm) when driven flush with the paper surface of the gypsum board.

Exception: The third layer, where determined necessary by Section 722.7, shall be permitted to be attached with 1-inch (25 mm) No. 6 Type S drywall screws to furring channels in accordance with AISI S220.

2. Screws for attaching the base layer shall be 12 inches (305 mm) on center in both directions.

3. Screws for each layer after the base layer shall be 12 inches (305 mm) on center in both directions and offset from the screws of the previous layers by 4 inches (102 mm) in both directions.

4. All panel edges of any layer shall be offset 18 inches (457 mm) from those of the previous layer.
 5. All panel edges shall be attached with screws sized and offset as in Items 1 through 4 and placed at least 1 inch (25 mm) but not more than 2 inches (51 mm) from the panel edge.
 6. All panels installed at wall-to-ceiling intersections shall be installed such that ceiling panels are installed first and the wall panels are installed after the ceiling panel has been installed and is fitted tight to the ceiling panel. Where multiple layers are required, each layer shall repeat this process.
 7. All panels installed at a wall-to-wall intersection shall be installed such that the panels covering an exterior wall or a wall with a greater fire resistance rating shall be installed first and the panels covering the other wall shall be fitted tight to the panel covering the first wall. Where multiple layers are required, each layer shall repeat this process.
 8. Panel edges of the face layer shall be taped and finished with joint compound. Fastener heads shall be covered with joint compound.
 9. Panel edges protecting mass timber elements adjacent to unprotected mass timber elements in accordance with Section 602.4.2.2 shall be covered with 1 ¼-inch (32 mm) metal corner bead and finished with joint compound.
- 722.7.2.2 **Exterior surfaces.** Layers of Type X gypsum board serving as noncombustible protection for the outside of the exterior mass timber walls determined in accordance with Table 722.7.1(1) shall be fastened 12 inches (305 mm) on center each way and 6 inches (152 mm) on center at all joints or ends. All panel edges shall be attached with fasteners located at least 1 inch (25 mm) but not more than 2 inches (51 mm) from the panel edge. Fasteners shall comply with one of the following:
1. Galvanized nails of minimum 12 gage with a 7/16-inch (11 mm) inch head of sufficient length to penetrate the mass timber a minimum of 1 inch (25 mm).
 2. Screws which comply with ASTM C1002 (Type S, W, or G) of sufficient length to penetrate the mass timber a minimum of 1 inch (25 mm).

CHAPTER 14

EXTERIOR WALLS

Revise as follows:

1405.1.1 **Types I, II, III and IV-HT construction.** On buildings of Types I, II, III and IV-HT construction, *exterior wall coverings* shall be permitted to be constructed of combustible materials, complying with the following limitations:

1. Combustible *exterior wall coverings* shall not exceed 10 percent of an *exterior wall* surface area where the *fire separation distance* is 5 feet (1524 mm) or less.
2. Combustible *exterior wall coverings* shall be limited to 40 feet (12 192 mm) in height above *grade plane*.
3. Combustible *exterior wall coverings* constructed of *fire-retardant-treated wood* complying with Section 2303.2 for exterior installation shall not be limited in wall surface area where the *fire separation distance* is 5 feet (1524 mm) or less and shall be permitted up to 60 feet (18 288 mm) in height above *grade plane* regardless of the *fire separation distance*.

4. Wood *veneers* shall comply with Section 1404.5.

CHAPTER 17

SPECIAL INSPECTIONS AND TESTS

Add new text as follows:

1705.5.3 Mass Timber construction. Special inspections of mass timber elements in Types IVA, IV-B and IV-C construction shall be in accordance with Table 1705.5.3.

Add new table as follows:

TABLE 1705.5.3

REQUIRED SPECIAL INSPECTION OF MASS TIMBER CONSTRUCTION

TYPE		CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1.	Inspection of anchorage and connections of mass timber construction to timber deep foundation systems.	—	X
2.	Inspect erection of mass timber construction.	—	X
3.	Inspection of connections where installation methods are required to meet design loads.		
	Threaded fasteners	Verify use of proper installation equipment.	X
		Verify use of pre-drilled holes where required.	X
		Inspect screws, including diameter, length, head type, spacing, installation angle and depth.	X
	Adhesive anchors installed in horizontal or upwardly inclined orientation to resist sustained tension loads.		—
	Adhesive anchors not defined in preceding cell.		X
	Bolted connections.		X
	Concealed connections.		X

Add new text as follows:

1705.19 Sealing of mass timber Periodic special inspections of sealants or adhesives shall be conducted where sealant or adhesive required by Section 703.9 is applied to mass timber building elements as designated in the approved construction documents.

CHAPTER 23

WOOD

Add new text as follows:

2304.10.1 **Connection fire-resistance rating.** Fire resistance ratings for connections in Type IVA, IV-B, or IV-C construction shall be determined by one of the following:

1. Testing in accordance with Section 703.2 where the connection is part of the fire resistance test.
2. Engineering analysis that demonstrates that the temperature rise at any portion of the connection is limited to an average temperature rise of 250°F (139° C), and a maximum temperature rise of 325°F (181° C), for a time corresponding to the required fire resistance rating of the structural element being connected. For the purposes of this analysis, the connection includes connectors, fasteners, and portions of wood members included in the structural design of the connection.

CHAPTER 31

SPECIAL CONSTRUCTION

Revise as follows:

3102.3 **Type of construction.** Noncombustible membrane structures shall be classified as Type II B construction. Noncombustible frame or cable-supported structures covered by an approved membrane in accordance with Section 3102.3.1 shall be classified as Type II B construction. Heavy timber frame-supported structures covered by an approved membrane in accordance with Section 3102.3.1 shall be classified as Type IV-HT construction. Other membrane structures shall be classified as Type V construction.

Exception: Plastic less than 30 feet (9144 mm) above any floor used in greenhouses, where occupancy by the general public is not authorized, and for aquaculture pond covers is not required to meet the fire propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701.

Revise as follows:

3102.6.1.1 **Membrane.** A membrane meeting the fire propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 710 shall be permitted to be used as the roof or as a skylight on buildings of Type II B, III, IV-HT and V construction, provided that the membrane is not less than 20 feet (6096 mm) above and floor, balcony or gallery.

CHAPTER 35

REFERENCED STANDARDS

Revise as follows:

APA

APA - Engineered Wood Association
7011 South 19th Street
Tacoma WA 98466-7400

ANSI/APA PRG 320 - 19: Standard for Performance-rated Cross-laminated Timber
602. 4, 2303.1.4

Add new text as follows:

ASTM

ASTM International
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken PA 19428-2959

D3498-03(2011): Standard Specification for Adhesives for Field-Gluing Plywood to Lumber Framing for Floor Systems
703.9

AWC

American Wood Council
222 Catoctin Circle SE, Suite 201
Leesburg, VA 20175

ANSI/AWC SDPWS-2021: Special Design Provisions for Wind and Seismic

202, 2305.1, 2305.2, 2305.3, 2306.1, 2306.2, 2306.3, Table 2306.3(1), Table 2306.3(3), 2307.1

AWC

American Wood Council
222 Catoctin Circle SE, Suite 201
Leesburg, VA 20175

APPENDIX D

FIRE DISTRICTS

Revise Appendix D as follows:

D102.2.5 **Structural fire rating.** Walls, floors, roofs and their supporting structural members shall be not less than 1-hour fire-resistance-rated construction.

Exceptions:

1. Buildings of Type IV-HT construction.
2. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
3. Automobile parking structures.
4. Buildings surrounded on all sides by a permanently open space of not less than 30 feet (9144 mm).
5. Partitions complying with Section 603.1, Item 11.



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



Georgia Department of Community Affairs
Local Government Assistance Division
60 Executive Park South, N.E.
Atlanta, Georgia 30329-2231
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Revised January 1, 2020

GEORGIA STATE MINIMUM STANDARD BUILDING CODE

(INTERNATIONAL BUILDING CODE WITH GEORGIA STATE AMENDMENTS)

The **INTERNATIONAL BUILDING 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 Building 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 equipment.

(c) Replace all references to the *International Existing Building Code (IEBC)* with references to Chapter 34 'Existing Buildings' of these Georgia State Amendments.

Note: By Georgia law, the *International Existing Building Code* is a permissive or optional State Minimum Standard Code. Consequently, the provisions contained in the *International Existing Building Code* are not mandatory or applicable unless specifically referenced in the adopting ordinance of local governments.

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 Building Code* shall apply to the construction, *alteration*, relocation, enlargement, replacement, *repair*, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exception #1: Detached one- and two-family *dwelling*s and multiple single-family *dwelling*s (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		
Area	Primary	Supplement
Occupancy Classification	LSC	IBC
Building Construction Types including allowable height, allowable building areas, and the requirements for	IBC	LSC

CODES REFERENCE GUIDE		
Area	Primary	Supplement
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 construction standard	LSC	NONE
Fire Alarm Systems	LSC	NONE
Smoke Alarms and Smoke Detection Systems	State Statute and LSC	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

**Revise the International Building Code, 2018 Edition, to read as follows:*

CHAPTER 1

SCOPE AND ADMINISTRATION

**Delete Chapter 1 'Scope and Administration' entirely without substitution. Chapter 1 to remain in the Code as a reference guide for local governments to use in development of their own *Administrative Procedures*.*

(Effective January 1, 2020)

CHAPTER 2

DEFINITIONS

SECTION 202

DEFINITIONS

**Add definition of 'Elevator Door Opening Protective Device' to read as follows:*

ELEVATOR DOOR OPENING PROTECTIVE DEVICE. Any device that either independently or in conjunction with the (elevator) door assembly allows the device(s) to meet the requirements of Sections 716.5.3 716, 716.2.2.1 and 3008.6.3.

(Effective January 1, 2020)

CHAPTER 3

OCCUPANCY AND USE CLASSIFICATION

SECTION 308

INSTITUTIONAL GROUP I

*Add a new Section 308.3.3 'Assisted living communities' to read as follows:

308.3.3 Assisted living communities. Assisted living communities, licensed by the State, housing twenty-five or more persons, meeting the Georgia State Fire Marshal's Office Life Safety Code requirements shall be deemed as equivalent compliance to the *International Building Code* Chapters 3, 4, 8, 9, and 10.

(Effective January 1, 2020)

CHAPTER 4

SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

SECTION 415

GROUPS H-1, H-2, H-3, H-4 AND H-5

*Revise Section [F] 415.9.2 'Liquefied petroleum gas facilities' to read as follows:

[F] 415.9.2 **Liquefied petroleum gas facilities.** The construction and installation of liquefied petroleum gas facilities shall be in accordance with the requirements of this code, the *International Mechanical Code*, NFPA 58 and NFPA 54 as adopted by the Rules and Regulations of the Safety Fire Commissioner Chapter 120-3-16, "*Rules and Regulations for Liquefied Petroleum Gases*".

(Effective January 1, 2020)

CHAPTER 5

GENERAL BUILDING HEIGHTS AND AREAS

SECTION 504

BUILDING HEIGHT AND NUMBER OF STORIES

*Revise Table 504.4 'Allowable Number of Stories Above Grade Plane^{a,b}' for the Occupancy Classification "I-1 Condition 2" as shown and add a new footnote "i" to read as follows:

Table 504.4

ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE ^{a, b}

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION									
	SEE FOOTNOTES	TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
I-1 Condition 2	NS ^{d, e}	NP	NP	NP	NP	NP	NP	NP	NP	NP
	S ^j	UL	10	3	2	2	1	2	2	1

i. For all I-1 Condition 2, the building shall be protected throughout with an approved automatic sprinkler system, installed in accordance with NFPA 13 as adopted by the Rules and Regulations of the Safety Fire Commissioner. No increase in story height shall be permitted.

(Remainder of table unchanged)

(Effective January 1, 2020)

CHAPTER 7

FIRE AND SMOKE PROTECTION FEATURES

SECTION 706

FIRE WALLS

*Revise Section 706.2 'Structural stability' to read as follows:

706.2 Structural stability. *Fire walls* shall be designed and constructed to allow collapse of construction on either side without collapse of the wall under fire conditions and loading per Section 1607.15.2. *Fire walls* designed and constructed in accordance with NFPA 221 shall be deemed to comply with this section.

Exception: In Seismic Design Categories D through F, where double *fire walls* are used in accordance with NFPA 221, floor and roof sheathing not exceeding 3/4 inch (19.05 mm) thickness shall be permitted to be continuous through the wall assemblies of light frame construction.

(Effective January 1, 2020)

*Delete Exception to Section 706.3 'Materials' without substitution.

(Effective January 1, 2020)

SECTION 713

SHAFT ENCLOSURES

*Add new Section 713.14.1 'Designated floor lobbies for elevator return' to read as follows:

713.14.1 Designated floor lobbies for elevator return. New elevators, escalators, dumbwaiters, and moving walks shall be installed in accordance with the requirements of ASME A17.1, Safety Code for Elevators and Escalators. The designated elevator lobby of the designated floor and the designated alternate floor specified by ASME A17.1 Section 2.27.3 shall be separated from the remainder of the building by 1-hour fire-rated construction. In buildings equipped with automatic sprinkler protection, smoke partitions in accordance with the 'Rules and Regulations of the Safety Fire Commissioner Chapter 120-3-3 Rules and Regulations for the State Minimum Fire Safety Standards' may be used in lieu of 1-hour fire-rated construction. Except health care occupancies, openings in the elevator lobby shall be limited to those required for access to the elevators from exit access corridors only. Elevator lobbies may be used as part of the means of egress from the building.

Exceptions:

1. Designated floor elevator lobbies are not required within an atrium.
2. Designated floor elevator lobbies are not required where elevators are installed on open exterior walls.

3. Designated floor elevator lobbies are not required where elevators are installed in open air parking structures.
4. Designated floor elevator lobbies are not required in buildings three stories or less with vertical openings protected in accordance with the applicable occupancy chapter.
5. Existing installations acceptable to the authority having jurisdiction.
6. For existing buildings or existing structures, reference Section 3401.7 (GA Amendments).

(Effective January 1, 2020)

CHAPTER 9

FIRE PROTECTION AND LIFE SAFETY SYSTEMS

SECTION 903

AUTOMATIC SPRINKLER SYSTEMS

*Revise Section [F] 903.2.8 'Group R' to add exception to read as follows:

[F] 903.2.8 **Group R.**

Exception: Group R-1 and R-2 occupancies which meet the exceptions allowed by the Rules and Regulations of the Safety Fire Commissioner Chapter 120-3-3 'Rules and Regulations for the State Minimum Fire Safety Standards' are exempt from this requirement.

(Effective January 1, 2020)

*Revise Section [F] 903.2.8.1 'Group R-3' to read as follows:

[F] 903.2.8.1 **Group R-3.** An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group R-3 occupancies.

(Effective January 1, 2020)

*Revise Section [F] 903.2.8.2 'Group R-4, Condition 1' to read as follows:

[F] 903.2.8.2 **Group R-4, Condition 1.** An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group R-4, Condition 1 occupancies.

(Effective January 1, 2020)

*Revise Section [F] 903.2.8.4 'Care facilities' to read as follows:

[F] 903.2.8.4 **Care facilities.** An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in care facilities with five or fewer individuals in a single-family dwelling.

(Effective January 1, 2020)

*Revise Section [F] 903.3.1.3 'NFPA 13D sprinkler systems' to read as follows:

[F] 903.3.1.3 **NFPA 13D sprinkler systems.** *Automatic sprinkler systems* installed in one- and two-family dwellings; and townhouses separated by 2 hour firewalls shall be permitted to be installed throughout in accordance with NFPA 13D.

(Effective January 1, 2020)

SECTION 909

SMOKE CONTROL SYSTEMS

*Delete Section 909.21.1 'Pressurization requirements' entirely and substitute to read as follows:

909.21.1 **Pressurization requirements.** The system shall be designed such that the maximum pressure differential shall not restrict or prohibit the free operation of the elevated cab and all hoistway doors serving all levels of the building. The air shall not be introduced into the hoistway in such a manner as to cause erratic operation by impingement of traveling cables, selector tapes, governor ropes, compensating ropes, and other components sensitive to excessive movement or deflection.

Exception: In existing buildings, when testing existing elevator pressurization systems, they shall be certified to ensure a minimum positive pressure, subject to the approval of the authority having jurisdiction. This pressure shall be measured at the midpoint of each hoistway door, with all elevator cars at the floor of recall and all hoistway doors on the floor of recall open and all other hoistway doors closed. The opening and closing of hoistway doors at each level must be demonstrated during this test. The supply air intake shall be from an outside, uncontaminated source.

(Effective January 1, 2020)

CHAPTER 11

ACCESSIBILITY

*Delete Chapter 11 'Accessibility' entirely without substitution.

{Cross-reference in State law: Title 30, Chapter 3 of the Official Code of Georgia Annotated (O.C.G.A) and the Rules and Regulations of the Georgia Safety Fire Commissioner.} (Effective January 1, 2020)

CHAPTER 14

EXTERIOR WALLS

SECTION 1404

INSTALLATION OF WALL COVERINGS

*Add new Section [BS] 1404.19 'Installation of wall coverings' to read as follows:

[BS] 1404.19 Installation of wall coverings. Except masonry veneer, wall cladding shall be installed a minimum of 6 inches above the finished earth grade, or a minimum of 2 inches above paved areas to provide a clear, visible inspection gap.

(Effective January 1, 2020)

CHAPTER 17

SPECIAL INSPECTIONS AND TESTS

SECTION 1701

GENERAL

*Add new Section 1701.2 'Construction documents' to read as follows:

1701.2 **Construction documents.** The *construction documents* for special inspections shall include:

1. The statement of special inspections in accordance with Section 1704.3.
2. The following statement:

"Special inspection reports and a final report in accordance with Section 1704.2.4 shall be submitted to the building official prior to the time that phase of the work is approved for occupancy."

(Effective January 1, 2020)

*Add new Section 1701.3 'Guidelines' to read as follows:

1701.3 **Guidelines.** The local building official or authority having jurisdiction shall be authorized to use ACEC/SEAOG SI GL 01, Georgia Special Inspections Guidelines, in part or in whole for the purposes of implementing and enforcing the provisions of Chapter 17, 'Special Inspections and Tests', and/or establishing a Special Inspections program for their jurisdiction. (Effective January 1, 2020)

SECTION 1704

SPECIAL INSPECTIONS AND TESTS, CONTRACTOR RESPONSIBILITY AND STRUCTURAL OBSERVATION

*Revise Section 1704.2 'Special inspections and tests' to read as follows:

1704.2 **Special inspections and tests.** Where application is made to the *building official* for construction as described in this section, the owner or the *registered design professional in responsible charge* acting as the owner's agent, other than the contractor, shall employ one or more *approved agencies* to provide *special inspections* and tests during construction on the types of work specified in Section 1705. These inspections are in addition to the inspections by the *building official* identified in Section 110.

Exceptions:

1. *Special inspections* are not required for construction of a minor nature that does not require the practice of professional engineering or architecture, as defined by Georgia statutes and regulations governing the professional registration and certification of engineers or architects or as warranted by conditions in the jurisdiction as *approved* by the *building official*.
2. Unless otherwise required by the *building official*, *special inspections* and tests are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
3. *Special inspections* and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.1.2 or the conventional light-frame construction provisions of Section 2308.

(Effective January 1, 2020)

*Revise Section 1704.2.1 'Special inspector qualifications' to read as follows:

1704.2.1 Special inspector qualifications. The special inspector shall provide written documentation to the *building official* demonstrating his or her competence and relevant experience or training. Experience or training shall be considered relevant when the documented experience or training is related in complexity to the same type of *special inspection* activities for projects of similar complexity and material qualities. The special inspector shall be qualified in accordance with Table 1704.2. These qualifications are in addition to qualifications specified in other sections of this code.

The *registered design professional in responsible charge* and engineers of record involved in the design of the project are permitted to act as the *approved agency* and their personnel are permitted to act as the special inspector for the work designed by them, provided they qualify as special inspectors.

(Effective January 1, 2020)

*Add new Table 1704.2 'Minimum Special Inspector Qualifications' to read as follows:

Table 1704.2 MINIMUM SPECIAL INSPECTOR QUALIFICATIONS			
Category of Testing and Inspection	Minimum Qualifications (refer to key at end of Table)		
	Shop Testing or Inspection	Field Testing or Inspection	Review Testing, Certification & Lab Reports
1704.2.5 Inspection of Fabricators			
Pre-cast concrete	A, C, E		
Structural steel construction	C, F, G		
Wood construction	A		
Cold formed metal construction	A		
1705.2, 1705.10, 1705.11 & 1705.12 Steel Construction			
Verification of welding consumables, filler metals, procedure specifications, procedure qualification records and personnel performance qualification records			C, F
Nondestructive testing of welding	G	G	
Inspection of welding	C, F	C, F	
Verification of fabricator and erector documents as listed in AISC 360, chapter N, paragraph 3.2			A, C
Material verification of weld filler materials			C, F
Inspection of high strength bolting and steel frame joint details		A, C	
Inspection of embedment		A, C, F	
Inspection of steel elements of composite construction		A, C, F	

Table 1704.2 MINIMUM SPECIAL INSPECTOR QUALIFICATIONS			
Category of Testing and Inspection	Minimum Qualifications (refer to key at end of Table)		
	Shop Testing or Inspection	Field Testing or Inspection	Review Testing, Certification & Lab Reports
Verification of reinforcing steel, cold formed steel deck and truss materials			A, C, F
Inspection of reinforcing steel, cold formed steel deck and trusses		A, C	
1705.3 & 1705.12 Concrete Construction			
Reinforcing placement, cast-in-place bolts, post installed anchors concrete and shotcrete placement and curing operations. Inspection of formwork for shape, location and dimensions		A, C, H	
Pre-stressing steel installation		A, C, D, E	
Erection of pre-cast concrete members		A, C, H	
Concrete field sampling and field testing		A, J	
Concrete strength testing		P	
Review certified mill reports			A, C
Verify use of required design mix		A, I, J, H, C	
Pre-stressed (pre-tensioned) concrete force application	A, C, E		
Post-tensioned concrete force application		A, C, D	
Review of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs		A, C, D, H	
Reinforcing steel weldability, reinforcing welding, weld filler material		C, F	
Testing of welding of reinforcing steel		G	
1705.4 Masonry			
Verification of f'_m and f'_c AAC		A, C, L, M	
Mortar joint construction, grout protection and placement, materials proportion, type/size/location of reinforcement, structural elements, anchorage, and connectors		A, C, K	

Table 1704.2 MINIMUM SPECIAL INSPECTOR QUALIFICATIONS			
Category of Testing and Inspection	Minimum Qualifications (refer to key at end of Table)		
	Shop Testing or Inspection	Field Testing or Inspection	Review Testing, Certification & Lab Reports
Sampling/testing of grout/mortar specimens		A, C, L, M	
Observe preparation of masonry prisms for testing of compressive strength of masonry, f'_m and f'_{AAC}		A, C, K, L, M	
Inspection of welding of reinforcing steel		C, F	
Testing of welding of reinforcing steel		G	
1705.6 & 1804 Soils			
Observe site preparation, fill placement testing of compaction for compliance with the construction documents for the project		A, C, I, N	
Observe test bearing materials below shallow foundations for ability to achieve design bearing capacity		A, C, N, I (Level III)	
Review compaction testing for compliance with the construction documents for the project			A
1705.5, 1705.10, 1705.11 & 1705.12 Wood Construction			
Observe structural panel sheathing, size of framing members, nail or staple diameter and length, number of fastener lines, and spacing of fastener lines and fasteners for compliance with construction documents for the project		A	
Observe temporary and permanent truss member restraint/bracing, field gluing of elements. Observe bolting, anchoring or other fastening of: shear walls, diaphragms, drag struts, braces and hold-downs		A	
1705.7, 1705.8, 1705.9 & 1810 Pile and Pier Foundations			
Observe installation		A, N	
Observe load tests		A	
1705.13 Sprayed Fire-Resistant Materials			
Observe surface conditions, application, average thickness and density of applied material, and cohesive/adhesive bond		A, C	

Table 1704.2 MINIMUM SPECIAL INSPECTOR QUALIFICATIONS			
Category of Testing and Inspection	Minimum Qualifications (refer to key at end of Table)		
	Shop Testing or Inspection	Field Testing or Inspection	Review Testing, Certification & Lab Reports
1705.14 Mastic and Intumescent Fire-Resistant Coatings			
Observe application compliance with AWCI 12-B		A, C	
1705.15 Exterior Insulation and Finish Systems			
Inspect EIFS systems		A, B, C, O	
1705.1 Special Cases			
Work of unusual or special nature		A, B, O	
1705.16 Fire-Resistant Penetrations and Joints	See Requirements of IBC Sections 1705.16.1 and 1705.16.2		
1705.17 Smoke Control	See Requirements of IBC Section 1705.17.2		
1705.10, 1705.11 & 1705.12 Seismic and Wind Resistance			
Periodic inspection of fabrication, installation and/or anchorage of building systems and components		A	
KEY:			
A. Georgia Professional Engineer (GA PE) competent in the specific task area or graduate of accredited engineering/engineering technology program under the direct supervision of a GA PE.			
B. Georgia Registered Architect (GA RA) or graduate of accredited architecture/architecture technology program under the direction of a GA RA.			
C. International Code Council (ICC) Special Inspector Certification specific to the particular material and testing methodology applicable to each Category of Testing and Inspection listed in the table.			
D. Post-tensioning Institute (PTI) Certification, Level 2, bonded or unbonded as applicable.			
E. Pre-stressed Concrete Institute (PCI) Certified Inspector.			
F. American Welding Society (AWS) Certified Welding Inspector (CWI) or AWS Certified Associate Welding Inspector working under the direct on-site supervision of a CWI.			
G. American Society for Nondestructive Testing (ASNT) Level II certification, or a Level III certification if previously certified as a Level II in the particular material and testing methodology applicable to each Category of Testing and Inspection listed in the table.			
H. American Concrete Institute (ACI) Concrete Construction Special Inspector.			
I. National Institute for Certification in Engineering Technologies (NICET) Level II or higher certification specific to the particular material and testing methodology applicable to each Category of Testing and Inspection listed in the table.			
J. ACI Concrete Field Testing Technician with Grade 1 certification.			
K. Georgia Concrete and Products Association (GC&PA) - Masonry Association of Georgia (MAG) Masonry Construction Inspector Certification.			
L. National Concrete Masonry Association (NCMA) Concrete Masonry Testing Procedures certification.			
M. GC&PA - MAG Masonry Testing Technician certification.			
N. NICET Certified Engineering Technologist (CT).			
O. Other Qualified Special Inspector as approved by the Building Official.			
P. American Concrete Institute (ACI) Strength Testing Technician.			
Notes:			
1. The Special Inspector shall meet one of the minimum qualifications listed for the applicable Category of Testing and Inspection.			
2. Materials testing shall be done by an Approved Testing Agency meeting the requirements of IBC Section 1703 and ASTM E 329.			

(Effective January 1, 2020)

*Revise Section 1704.2.4 'Report requirement' to read as follows:

1704.2.4 Report Requirement. *Approved agencies* shall keep records of inspections and tests. The *approved agency* shall submit reports of special inspections and tests to the *building official* and to the *registered design professional in responsible charge*. Reports shall indicate that work inspected was or was not completed in conformance to *approved construction documents*. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the *building official* and to the *registered design professional in responsible charge* prior to the completion of that phase of the work. A final report documenting required *special inspections* and correction of any discrepancies noted in the inspections or tests, shall be submitted to the *building official* prior to the time that phase of the work is approved for occupancy.

(Effective January 1, 2020)

CHAPTER 18

SOILS AND FOUNDATIONS

SECTION 1810

DEEP FOUNDATIONS

*Revise Section 1810.3.2.6 'Allowable stresses' title to read as follows:

1810.3.2.6 Allowable axial stresses. The allowable stresses for materials used in deep foundation elements shall not exceed those specified in Table 1810.3.2.6.

(Effective January 1, 2020)

*Revise Table 1810.3.2.6 'Allowable Stresses for Materials Used in Deep Foundation Elements' title and item 4 'Other conditions' to read as follows:

Table 1810.3.2.6

ALLOWABLE AXIAL STRESSES FOR MATERIALS USED IN DEEP FOUNDATION ELEMENTS

MATERIAL TYPE AND CONDITION	MAXIMUM ALLOWABLE <u>AXIAL</u> STRESS ^a
4. Non-prestressed reinforcement in tension	
Within micropiles	$0.6 f_y$
Other conditions	
For load combinations not including wind or seismic loads	$0.5 f_y \leq 24,000 \text{ } 30,000 \text{ psi}$
For load combinations including wind or seismic loads	$0.5 f_y \leq 40,000 \text{ psi}$

Remainder of table and footnotes remain unchanged.

(Effective January 1, 2020)

CHAPTER 29

PLUMBING SYSTEMS

SECTION 2902

MINIMUM PLUMBING FACILITIES

*Delete the requirements for "service sinks" from Table [P] 2902.1 'Minimum Number of Required Plumbing Fixtures^a' without substitution.

(Effective January 1, 2020)

CHAPTER 30

ELEVATORS AND CONVEYING SYSTEMS

SECTION 3001

GENERAL

*Revise Table 3001.3 'Elevators and Conveying Systems and Components' under 'STANDARDS' for Elevators, escalators, dumbwaiters, moving walks, material lifts to add the following new standards to read as follows:

Table 3001.3

ELEVATORS AND CONVEYING SYSTEMS AND COMPONENTS

TYPE	STANDARDS
Elevators, escalators, dumbwaiters, moving walks, material lifts	ANSI/ASSE A10.4, ANSI/ASSE A10.5

(Effective January 1, 2020)

SECTION 3002

HOISTWAY ENCLOSURES

*Revise Section 3002.4 'Elevator car to accommodate ambulance stretcher' to add a new exception at the end of the section to read as follows:

3002.4 Elevator car to accommodate ambulance stretcher.

Exception: Elevators with 50 feet or less of travel serving only one residence of a one- or two-family dwelling or townhouse shall be in compliance with ASME A17.1 as currently adopted and amended by the Georgia Office of Safety Fire Commissioner.

(Effective January 1, 2020)

SECTION 3005

MACHINE ROOMS

*Delete Section 3005.4 'Machine rooms, control rooms, machinery spaces and control spaces' and substitute to read as follows:

3005.4 Machine rooms and machinery spaces. Elevator machine rooms and machinery spaces shall be enclosed with *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. The *fire-resistance rating* shall be not less two hours. Openings in the *fire barriers* shall be protected with assemblies having a *fire protection rating* not less than that required for the hoistway enclosure doors.

Exception: Where machine rooms and machinery spaces do not meet the required *fire-resistance rating*, they shall require sprinklers and shunt trip breaker in accordance with NFPA 72.

(Effective January 1, 2020)

*Revise Section 3005.5 'Shunt trip' to read as follows:

3005.5 Shunt trip. Where elevator hoistways or elevator machine rooms containing elevator control equipment are protected with automatic sprinklers, a means installed in accordance with NFPA 72, Section 6.16.4, Elevator Shutdown, shall be provided to disconnect automatically the main line power supply to the affected elevator prior to the application of water. If the means is located in the affected elevator machine room, it shall be in a water resistant enclosure. This means shall not be self-resetting. The activation of sprinklers outside the hoistway or machine room shall not disconnect the main line power supply. Machine rooms having a two-hour fire separation from the building and provided with smoke detection interconnected to the building fire alarm system are not required to be sprinklered.

(Effective January 1, 2020)

CHAPTER 34

EXISTING STRUCTURES

*Revise the title of Chapter 34 'Reserved' to read as 'Existing Buildings' and carry forward all the provisions from Chapter 34 'Existing Buildings' of the 2012 *International Building Code*. (Effective January 1, 2020)

SECTION 3401

GENERAL

*Add new Section 3401.7 'Existing system conformance' to read as follows:

3401.7 Existing system conformance. The extent to which the existing mechanical, electrical, plumbing and life safety systems shall be made to conform to the requirements of the State Minimum Standard Codes for new construction shall be as follows unless otherwise required by this section:

1. When the estimated cost of the new work is less than fifty percent (50%) of the replacement cost of the existing system, the new work shall be brought in to conformance with the requirements of the State Minimum Standard Codes for new construction.
2. When the estimated cost of the new work is equal to or greater than fifty percent (50%) of the replacement cost of the existing system, the entire system shall be made to conform to the requirements of the State Minimum Standard Codes for new construction.

3. For essential service facilities Occupancy Category IV type buildings as defined by Table 1604.5, when the estimated cost of the new work is equal to or greater than thirty percent (30%) of the replacement cost of the existing system, the entire system shall be made to conform to the requirements of the State Minimum Standard Codes for new construction.

(Effective January 1, 2020)

SECTION 3408

CHANGE OF OCCUPANCY

*Add new Section 3408.2.1 'Assisted living communities' to read as follows:

3408.2.1 Assisted living communities. Existing buildings or portions of buildings proposed as a change of occupancy to Assisted Living Communities, licensed by the State, housing twenty-five or more persons, shall be allowed to meet the Georgia State Fire Marshal's Office Life Safety Code requirements for primary equivalent compliance to the *International Building Code* Chapters 3, 4, 8, 9, and 10.

(Effective January 1, 2020)

CHAPTER 35

REFERENCED STANDARDS

*Revise Chapter 35 'Referenced Standards' to add the following new reference standards to read

ACEC/GA

American Council of Engineering
Companies of Georgia
Peachtree Center, Harris Tower, Suite
700
233 Peachtree Street
Atlanta, GA 30303

Standard reference number	Title	Referenced in code section number
ACEC/SEAOG SI GL 01-19	Georgia Special Inspections Guidelines (http://www.seaog.org/si.html)	1704.2.1, GA Amendments

ASTM

ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428-2859

Standard reference number	Title	Referenced in code section number
E 329-11c	Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection	1704.2.1, GA Amendments

ANSI/ASSE

American Society of Safety
Engineers
520 N. Northwest Highway
Park Ridge, IL 60068

Standard reference number	Title	Referenced in code section number
A10.4-2016	Safety Requirements for Personnel Hoist and Employee Elevators on Construction and Demolition Sites	Table 3001.3, GA Amendments

A10.5-2013	Safety Requirements for Material Hoists	Table 3001.3, GA Amendments
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Remainder of reference standards remain unchanged.

(Effective January 1, 2020)

APPENDIX O

DISASTER RESILIENT CONSTRUCTION

*The Department of Community Affairs hereby adopts Appendix O 'Disaster Resilient Construction' as optional. This document can be downloaded at <https://dca.ga.gov/local-government-assistance/construction-codes-industrialized-buildings/construction-codes>.

(Effective: January 1, 2020)



Georgia State International Building Code

Appendix O Disaster Resilient Construction (2020 Edition)



Georgia Department of Community Affairs
Local Government Assistance Division
60 Executive Park South, N.E.
Atlanta, Georgia 30329-2231
(404) 679-3118
www.dca.ga.gov

January 1, 2020

GEORGIA STATE INTERNATIONAL BUILDING CODE

APPENDIX O

DISASTER RESILIENT CONSTRUCTION

**The INTERNATIONAL BUILDING CODE, 2018 Edition, published by the International Code Council,
when used in conjunction with the Georgia State Amendments to the INTERNATIONAL BUILDING CODE,**

2028 Edition and Appendix O Disaster Resilient Construction, shall constitute the official *Georgia State Minimum Standard Building Code*.

FORWARD

Introduction

The Department of Community Affairs (DCA) was awarded a grant through the U.S. Department of Housing and Urban Development (HUD) to develop Disaster Resilient Building Code (DRBC) Appendices for the International Building Code (IBC) and the International Residential Code (IRC). The DRBC Appendices are optional regulations that local jurisdictions may adopt, in whole or in part, through local ordinance. A task force of stakeholders was appointed to look for opportunities to improve any code provisions relating to damage from hurricane, flood, and tornado disasters. In addition to the approved recommendations from the task force, the state has developed and will conduct a comprehensive training program for code enforcement officials on the importance, implementation and enforcement of the Disaster Resilient Construction Appendices.

The meetings for the Disaster Resilient Building Code Appendices Task Force were open to the public, interested individuals and organizations that desired participation. The technical content of currently published documents on flooding, high-wind construction, and storm shelters, were used and referenced. Those publications included documents of the International Code Council (ICC), American Society of Civil Engineers (ASCE), the Federal Emergency Management Agency (FEMA), Mitigation Assessment Team (MAT) Program, Georgia Emergency Management Agency/Homeland Security (GEMA), APA - The Engineered Wood Association, National Institute of Standards and Technology (NIST), National Oceanic and Atmospheric Administration (NOAA), National Science Foundation (NSF), The State of Florida, American Forest & Paper Association's American Wood Council, Southern Forest Products Association, NAHB Research Center, Insurance Institute for Business & Home Safety, and the Federal Alliance for Safe Homes.

Adoption

Local jurisdictions may adopt this entire appendix with chosen options or specific sections that apply to their communities through a local ordinance. The adopting ordinance must also be filed on record with DCA. A sample ordinance has been included in this document to assist the local jurisdictions with the adoption process. Recommended training is being offered to assist code enforcement officials in the implementation and enforcement of the appendices documents. Contact DCA at (404) 679-3118 or www.dca.ga.gov for more information.

Neither The Disaster Resilient Building Code Appendices Task Force, its members nor those participating in the development of Appendix O Disaster Resilient Construction accept any liability resulting from compliance or noncompliance with the provisions of Appendix O Disaster Resilient Construction.

The 2012 Disaster Resilient Building Code (DRBC) Appendices Task Force was charged with the development of two appendices. One appendix is for the International Residential Code and the other appendix is for the International Building Code. These two appendices look for opportunities to improve any provisions relating to hurricane, flood, and tornado disasters. In addition to improving existing provisions in the codes, the task force also developed new provisions to be included in the appendices that address these issues. These appendices contain increased construction requirements for disaster resilience and are intended to be made available for adoption by local jurisdictions in the State of Georgia.

These appendices have reasonable and substantial connection with the public health, safety, and general welfare. In addition, the financial impact and costs associated with these appendices have been taken into consideration.

Members:

Mr. Gregori Anderson, Chairman, States Codes Advisory Committee (SCAC)

Mr. David L. Adams, Vice Chairman, States Codes Advisory Committee (SCAC)

Mr. Bill Abballe, AIA, American Institute of Architects (AIA) - Georgia Chapter

Mr. John Hutton, P.E., S.E., American Council of Engineering Companies of Georgia (ACEC/G)

Mr. Ron Anderson, Code Consultant

Mr. Lamar Smith, Home Builders Association of Georgia (HBAG)

Mr. Thomas Harper, Georgia State Inspectors Association (GSIA)

Mr. Tom Buttram, Building Officials Association of Georgia (BOAG)

Capt. Zane Newman, Georgia State Fire Marshal's Office (Local Fire Official)

Mr. Terry Lunn, Georgia Emergency Management Agency (GEMA)

Mr. Alan Giles, CFM, Georgia Department of Natural Resources (EPD / Floodplain Management Unit)

Mr. Tony Hebert, HUD Georgia State Representative (Region IV Office)

Mr. Jim C. Beck, Sr., Georgia Underwriting Association

Mr. Tim Thornton, Georgia Association of Realtors (GAR)

Mr. Steve Harrison, Building Owners and Managers Association - Georgia (BOMA)

Mr. Tom Aderhold, Georgia Apartment Association (GAA)

Mr. Tim Bromley, Accessibility Consultant - Georgia State ADA Coordinator's Office

Mayor Mark Mathews, Georgia Municipal Association (GMA)

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Mr. Ron Anderson, Vice Chairman, Code Consultant

Mr. Stephen V. Skalko, Concrete Industry

Mr. Jeffrey B. Stone, Wood Industry (AWC)

Mr. Robert Wills, Steel Industry (AISC)

Mr. Tom Cunningham, PhD., Residential Building Design

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How to Use Appendix O Disaster Resilient Construction

The appendix may be adopted in whole or in part by Local Jurisdictions to fit the needs of their community. The following sample ordinance has been provided to aid in the process of identifying Chapters and Sections of the appendix that may be adopted. The format easily allows for choosing to adopt, revise or delete individual Chapters and Sections. Download the MS Word (.doc) version from the DCA website to take advantage of the dropdown menu choices and edit ability features of the document. Note that in Chapter 3, choose one of three options for flood elevation. Only one option may be chosen and that option must be higher than what has been previously adopted and enforced by the jurisdiction. Also note that in Chapter 4, choose one of three options for increased wind load. Only one option may be chosen and that option must be higher than what has been previously adopted and enforced by the jurisdiction. The Sample Ordinance document takes into account the flood elevation option in Chapter 3 and the wind load option in Chapter 4 of this appendix.

SAMPLE ORDINANCE FOR ADOPTION OF

GEORGIA STATE INTERNATIONAL BUILDING CODE

APPENDIX O

DISASTER RESILIENT CONSTRUCTION

ORDINANCE NO. _____

An ordinance of the [JURISDICTION] adopting the latest edition as adopted and amended by the Georgia Department of Community Affairs of *Appendix O Disaster Resilient Construction* regulating and governing the mitigation of hazard to life and property from natural weather related disasters, high-wind damages, flooding, and establishing construction standards for storm shelters in the [JURISDICTION]; providing for the issuance of permits and collection of fees therefore; repealing Ordinance No. of the [JURISDICTION] and all other ordinances or parts of the laws 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 *Appendix O Disaster Resilient Construction* to the International Building Code, the latest edition as adopted and amended by the Georgia Department of Community Affairs, be and is adopted as the *Appendix O Disaster Resilient Construction* of the [JURISDICTION], in the State of Georgia for regulating and governing the mitigation of hazard to life and property from natural weather related disasters, high-wind damages, flooding, and establishing construction standards for storm shelters; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said *Appendix O Disaster Resilient Construction* 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. [NAME Of JURISDICTION] hereby:

Choose an item. CHAPTER AO1 SCOPE AND ADMINISTRATION Choose an item.

Choose an item. SECTION AO101 ADMINISTRATION Choose an item.

Choose an item. AO101.1 Purpose Choose an item.

Choose an item. AO101.2 Objectives Choose an item.

Choose an item. AO101.3 Scope Choose an item.

AO101.3.1 Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Choose an item. AO101.4 Violations Choose an item.

Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Choose an item. SECTION AO102 APPLICABILITY Choose an item.

Choose an item. AO102.1 General Choose an item.

Choose an item. AO102.2 Other laws Choose an item.

Choose an item. AO102.3 Referenced codes and standards Choose an item.

Choose an item. SECTION AO103 POST DISASTER EVENT INSPECTIONS GUIDLINES Choose an item.

Choose an item. AO103.1 Inspections Choose an item.

Choose an item. AO103.1.1 Right of entry Choose an item.

Choose an item. AO103.2 Types of inspections Choose an item.

Choose an item. AO103.3 Post disaster building safety evaluation chart Choose an item.

Choose an item. Figure AO103.3 Post Disaster Building Safety Evaluation Chart Choose an item.

Choose an item. AO103.4 Evaluation Forms Choose an item.

Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Choose an item. AO103.5 Placement and remove of placards Choose an item.

Choose an item. CHAPTER AO2 DEFINITIONS Choose an item.

Choose an item. SECTION AO201 GENERAL Choose an item.

Choose an item. AO201.1 Scope Choose an item.

Choose an item. AO201.2 Terms defined in other codes Choose an item.

Choose an item. AO201.3 Terms not defined Choose an item.

Choose an item. SECTION AO202 DEFINITIONS Choose an item.

Choose an item. CHAPTER AO3 FLOOD-RESISTANT CONSTRUCTION Choose an item.

Choose an item. SECTION AO301 HAZARD IDENTIFICATION Choose an item.

Choose an item. AO301.1 Identification of flood hazard areas Choose an item.

Insert [Name Of Jurisdiction] for [NAME OF JURISDICTION].

Insert [Date of Issuance] for [DATE OF ISSUANCE].

Choose an item. SECTION AO302 SCOPE Choose an item.

Choose an item. AO301.1 Flood Loads Choose an item.

Choose an item. FLOOD ELEVATION OPTION Choose an item. Choose an item.

Choose an item. SECTION AO303 FLOOD DAMAGE-RESISTANT MATERIALS Choose an item.

Choose an item. AO303.1 Flood damage-resistant materials Choose an item.

Choose an item. AO303.2 Location of flood damage-resistant materials Choose an item.

Choose an item. AO303.3 Fasteners and connectors used for flood-resistant materials Choose an item.

Choose an item. CHAPTER AO4 HIGH-WIND RESISTIVE CONSTRUCTION Choose an item.

Choose an item. SECTION AO401 GENERAL Choose an item.

Choose an item. AO401.1 Applications Choose an item.

Choose an item. AO401.2 Limitations Choose an item.

Choose an item. AO402 DEFINITIONS AND NOTATIONS Choose an item.

Choose an item. AO403 WIND LOADS Choose an item.

Choose an item. AO403.1 Wind Directionality Factor Choose an item.
 Choose an item. AO403.2 Exposure Choose an item.
 Choose an item. AO403.3 Enclosure classification Choose an item.
 Choose an item. AO403.4 Continuous operation of Risk Category IV buildings Choose an item.
 Choose an item. SECTION Choose an item. Choose an item.
 Choose an item. CHAPTER AO5 STORM SHELTERS, SAFE ROOMS AND BEST AVAILABLE REFUGE AREAS Choose an item.
 Choose an item. SECTION AO501 GENERAL Choose an item.
 Choose an item. AO501.1 General Choose an item.
 Choose an item. AO501.2 Occupant load Choose an item.
 Choose an item. AO501.3 Construction documents Choose an item.
 Choose an item. AO501.4 Signage Choose an item.
 Choose an item. SECTION AO502 DEFINITIONS AND NOTATIONS Choose an item.
 Choose an item. AO502.1 Definitions Choose an item.
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 Choose an item. AO503.1 General Choose an item.
 Choose an item. AO503.2 Occupant Density Choose an item.
 Choose an item. AO503.3 Identification of best available refuge areas Choose an item.
 Choose an item. SECTION AO504 APPLICABILITY Choose an item.
 Choose an item. AO504.1 Required storm shelters or safe rooms Choose an item.

Section 3. That Ordinance No. _____ of [JURISDICTION] entitled [FILL IN HERE THE COMPLETE TITLE OF THE LEGISLATION OR LAWS IN EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY DEFINITE MENTION] and all other ordinances or parts of laws 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 law, 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 *Appendix O Disaster Resilient Construction* 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.

Section 8. Chapter AO6 Resources, of this document is intended to be used by the building officials as a resource guide.

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APPENDIX O

DISASTER RESILIENT CONSTRUCTION

CHAPTER AO1

SCOPE AND ADMINISTRATION

SECTION AO101

ADMINISTRATION

AO101.1 **Purpose.** The scope of this appendix is to promote enhanced public health, safety and general welfare and to reduce public and private property losses due to hazards and natural disasters associated with flooding, high-winds, and windborne debris above that which is provided in the general provisions of this appendix.

AO101.2 **Objectives.** The objectives of this appendix are to:

1. Protect human life, to minimize property loss and to minimize the expenditures of public money associated with natural weather related disasters, including flooding, tornadoes and other high-wind events.
2. Establish enhanced design and construction regulations consistent with nationally recognized good practices for the safeguarding of life and property.

AO101.3 **Scope.**

AO101.3.1 The provisions of this appendix are not mandatory unless specifically referenced in an adopting ordinance of [NAME OF JURISDICTION]. If adopted, the provisions shall apply to all new development and to substantial improvements to existing development.

AO101.3.2 The provisions of this appendix supplement the jurisdiction's building and fire codes to provide for enhanced provisions to mitigate the hazard to life and property from natural weather related disasters, including flooding, tornadoes and other high-wind events.

AO101.3.3 The provisions of this appendix establish design and construction standards for storm shelters.

AO101.4 **Violations.** Any violation of a provision of this appendix or failure to comply with a permit of variance issued pursuant to this appendix or any requirement of this appendix shall be handled in accordance with the ordinances of [NAME OF JURISDICTION].

SECTION AO102

APPLICABILITY

AO102.1 **General.** This appendix provides enhanced minimum requirements for development of new construction and substantial improvement of existing development above that contained in the *International Building Code (IBC)*.

AO102.1.1 The provisions of this appendix shall apply to all new construction and additions, and shall apply to substantial alterations in flood hazard areas unless it is technically infeasible or otherwise exempted in Section 3403.2 of the *International Building Code*.

AO102.1.2 Regardless of the category of work being performed, the work shall not cause the structure to become unsafe or adversely affect the performance of the building; shall not cause an existing mechanical or plumbing system to become unsafe, hazardous, insanitary or overloaded; and unless expressly permitted by these provisions, shall not make the building any less compliant with this appendix or to any previously approved alternative arrangements than it was before the work was undertaken.

AO102.1.3 Where there is a conflict between a requirement of the *International Building Code* and a requirement of this appendix, the requirement of this appendix shall govern. Where there is a conflict between a general requirement of this appendix and a specific requirement of this appendix, the specific requirement shall govern. Where, in any specific case, different sections of this appendix specify different materials, methods of construction or other requirements, the most restrictive shall govern.

AO102.2 **Other laws.** The provisions of this appendix shall not be deemed to nullify any provisions of local, state or federal law.

AO102.3 **Referenced codes and standards.** The codes and standards referenced in this appendix shall be those that are listed in Chapter AO7 and such codes and standards shall be considered as part of the requirements of this appendix to the prescribed extent of each such reference. Where differences occur between provisions this appendix and referenced codes and standards, the provisions of this appendix shall apply.

SECTION AO103

POST DISASTER EVENT INSPECTIONS GUIDELINES

AO103.1 **Inspections.** The building official or agents shall inspect buildings and structures to determine the habitability of each with the goal of getting the community back into their residences quickly and safely. Inspections shall always be performed by teams of at least two individuals, also known as disaster assessment teams.

AO103.1.1 **Right of entry.** Unless permitted under the exigent circumstances provisions or from an order from State or Federal Authorities, disaster assessment teams shall confirm the right of entry requirements with the incident commander. Upon approval, the assessment teams shall be authorized to enter the structure or premises at reasonable times to inspect or perform duties as provided by this code, provided that the structure or premises be occupied, that credentials are presented, that entry is requested, and that entry is granted by the owner or person having charge over the structure or premises.

AO103.2 **Types of inspections.**

AO103.2.1 **Rapid evaluation.** Rapid evaluation is performed after a disaster event to determine if a building is apparently safe or obviously unsafe. The evaluation should last 10 to 30 minutes per building and shall be performed by the building official and/or their designated responders. Evaluation shall determine if a detailed evaluation is necessary. Placards are posted on buildings indicating status as one of the following:

1. INSPECTED
2. RESTRICTED USE
3. UNSAFE

See Section AO605 for Placards that may be reproduced for use in the field during evaluations. The jurisdiction shall alter placards to meet the jurisdiction and building department's requirements.

AO103.2.2 **Detailed evaluation.** Detailed evaluation is a thorough visual examination of a damaged building performed by a team of two, including an inspector and a design professional. Evaluation should last 30 minutes to 4

hours per building. Evaluation shall determine necessary restrictions on a damaged building's use, the need for an engineering evaluation or to evaluate postings.

AO103.2.3 Engineering evaluation. When indicated by the building official as necessary, engineering evaluations shall be completed by a registered design professional hired by the building owner.

AO103.3 Post disaster building safety evaluation chart. See Figure AO103.3 for Post Disaster Building Safety Evaluation Chart.

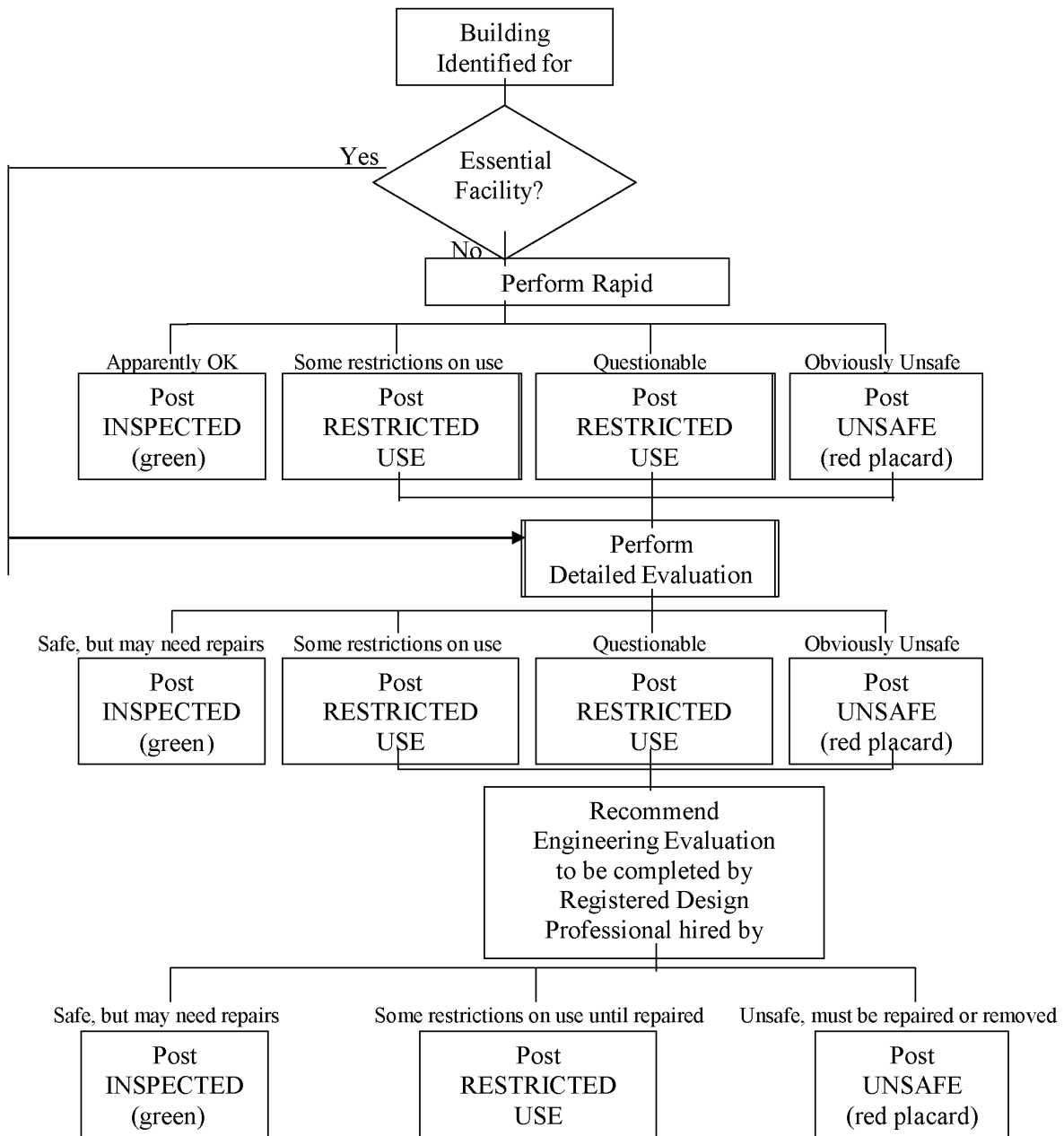
AO103.4 Evaluation Forms. *ATC-45 Rapid Evaluation Safety Assessment Form* and *ATC-45 Detailed Evaluation Safety Assessment Form* shall be used by [Name of Jurisdiction]'s Building Official for post disaster inspections. See Section AO605 for copies of the Safety Assessment Forms.

AO103.5 Placement and removal of placards.

AO103.5.1 Placement. Placards are to be posted in a clearly visible location near the main entrance and shall be visible from the public right-of-way. RESTRICTED USE or UNSAFE placards shall be placed at all entrances.

AO103.5.2 Removal. Placards shall not be removed or replaced, except by the authorized representatives of the local jurisdiction.

Figure AO103.3 Post Disaster Building Safety Evaluation Chart ^a



^(a)*When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

CHAPTER AO2

DEFINITIONS

SECTION AO201

GENERAL

AO201.1 **Scope.** Unless otherwise expressly stated the following words and terms shall, for the purposes of this appendix, have the meanings shown in this chapter.

AO201.2 **Terms defined in other codes.** Where terms are not defined in this appendix and are defined in other *International Codes*, such terms shall have the meanings ascribed to them as in those codes.

AO201.3 **Terms not defined.** Where terms are not defined through the methods authorized by this section, such terms shall have their ordinarily accepted meanings such as the context implies.

SECTION AO202

DEFINITIONS

500-YEAR FLOOD. Flood having a 0.2% annual probability of being equaled or exceeded.

ADVISORY BASE FLOOD ELEVATION (ABFE).

An advisory base flood elevation (BFE) issued by the Federal Emergency Management Agency (FEMA) that reflects post-storm conditions and vulnerability to damages from future flooding.

BASE FLOOD. Flood having a 1% chance of being equaled or exceeded in any given year, also referred to as the 100-year flood.

BASE FLOOD ELEVATION (BFE). The elevation of flooding, including wave height, having a 1% chance of being equaled or exceeded in any given year established relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the *Flood Insurance Rate Map* (FIRM).

BUILDING OFFICIAL. The officer or other designated authority charged with the administration and enforcement of the *International Building Code*, or the building official's duly authorized representative.

DESIGN FLOOD. The greater of the following two flood events:

- (1) The *base flood*, affecting those areas identified as *special flood hazard areas* on the community's FIRM;
- (2) The flood corresponding to the area designated as a *flood hazard area* on a community's *flood hazard map* or otherwise legally designated.

DESIGN FLOOD ELEVATION (DFE). The elevation of the *design flood*, including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the *design flood elevation* shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map.

FLOOD [DAMAGE]-RESISTANT MATERIAL. Any building product [material, component or system] capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage.

FLOOD HAZARD MAP. Map delineating *flood hazard areas* adopted by the authority having jurisdiction.

FLOOD INSURANCE RATE MAP (FIRM). An official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the *special flood hazard areas* and the risk premium zones applicable to the community.

FREEBOARD. A factor of safety expressed in feet above a flood level for purposes of floodplain management.

FUTURE-CONDITIONS FLOOD. The flood having a 1% chance of being equaled or exceeded in any given year based on future-conditions hydrology. Also known as the 100-year future-conditions flood.

FUTURE-CONDITIONS FLOOD ELEVATION. The flood standard equal to or higher than the Base Flood Elevation. The future-conditions flood elevation is defined as the highest water surface anticipated at any given point during the future-conditions flood.

CHAPTER AO3

FLOOD-RESISTANT CONSTRUCTION

Forward: This appendix provides three different options for increased freeboard. The jurisdiction may pick only one option that is higher than previously adopted and enforced by the jurisdiction. The National Flood Insurance Program (NFIP) minimum standards reference Base Flood Elevation without any freeboard in high risk flood hazard areas. Due to the flood damage prevention updates performed during the Map Modernization initiative that led to flood risks being digitally identified in all 159 Georgia counties, all Georgia NFIP participating communities have freeboard standards that meet or exceed the 1 foot standard used in the State model ordinances for areas where BFEs have been established.

SECTION AO301

HAZARD IDENTIFICATION

AO301.1 Identification of flood hazard areas. To establish flood hazard areas:

(a) flood hazard map adopted by jurisdiction based on areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study of **[INSERT NAME OF JURISDICTION]**," dated **[INSERT DATE ISSUANCE]**, and amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto.

(b) FIRM maps provided by the Federal Emergency Management Agency.

SECTION AO302

SCOPE

AO302.1 Flood loads. Buildings designed and constructed in flood hazard areas defined in IBC Section 1612.3 shall comply with the following:

AO302.1.1 Flood hazard areas without base flood elevations. In flood hazard areas without base flood or future-conditions flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three (3) feet above the highest adjacent grade to the building foundation.

OPTION A - FLOOD ELEVATION AO302.1.2 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

- (a) Design flood elevation plus one (1) foot, or
- (b) Base flood elevation plus one (1) foot, or
- (c) Advisory base flood elevation, or
- (d) Future-conditions plus one (1) foot, if known or
- (e) 500-year flood, if known

OPTION B - FLOOD ELEVATION

AO302.1.3 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

- (a) Design flood elevation plus two (2) feet, or
- (b) Base flood elevation plus two (2) feet, or
- (c) Advisory base flood elevation, or
- (d) Future-conditions plus one (1) foot, if known or
- (e) 500-year flood, if known

OPTION C - FLOOD ELEVATION

AO302.1.4 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

- (a) Design flood elevation plus three (3) feet, or
- (b) Base flood elevation plus three (3) feet, or
- (c) Advisory base flood elevation, or
- (d) Future-conditions plus one (1) foot, if known or
- (e) 500-year flood, if known

SECTION AO303

FLOOD DAMAGE-RESISTANT MATERIALS

AO303.1 **Flood damage-resistant materials.** Flood damage-resistant materials comply with FEMA Technical Bulletin 2, Table 2. Types, Uses, and Classifications of Materials.

AO303.2 **Location of flood damage-resistant materials.** Building components and materials located below the increase to base flood elevation as determined by the local jurisdiction in accordance with AO302.1 shall be flood damage-resistant as defined by Section AO303.1.

AO303.3 **Fasteners and connectors used for flood damage-resistant materials.** Fasteners and connectors used for flood damage-resistant materials to be made of stainless steel, hot-dipped zinc-coated galvanized steel, mechanically deposited-zinc coated, silicon bronze or copper. Copper fasteners shall not be permitted for use in conjunction with steel.

CHAPTER AO4

HIGH-WIND RESISTIVE CONSTRUCTION

SECTION AO401

GENERAL

AO401.1 **Applications.** Buildings, and parts thereof shall be designed to withstand the minimum wind loads and meet the opening protection requirements of IBC Section 1609 as modified in this chapter. **Wind Load Option A, B or C shall be selected. Table AO401.1 may be used to assist in the selection of an appropriate Wind Load Option.**

AO401.2 **Limitations.** The following limitations shall apply to the design and construction of buildings with respect to winds.

AO401.2.1 **Empirical masonry.** The empirical masonry provisions in IBC Section 2109 or Chapter 5 of TMS 402/ACI 530/ASCE 5 shall not be permitted to be used for the wind load resisting elements of buildings, or parts of buildings or other structures.

AO401.2.2 **Unreinforced (plain) masonry.** The unreinforced masonry provisions in IBC Section 2109 or sections 2.2, 3.2 or 8.2 of TMS 402/ACI 530/ASCE 5 shall not be permitted to be used for the wind load resisting elements of buildings, or parts of buildings or other structures.

AO401.2.3 **Conventional light-frame construction.** The *conventional light-frame construction* provisions in IBC Section 2308 shall not be permitted to be used for the wind load resisting elements of buildings, or parts of buildings or other structures.

Exception: Compliance with AF&PA WFCM shall be permitted subject to the limitations therein and the limitations of this appendix.

SECTION AO402

DEFINITIONS AND NOTATIONS

AO402.1 **General.** The following terms are defined in Chapter 2 of the International Building Code:

CONVENTIONAL LIGHT-FRAME

CONSTRUCTION.

MASONRY.

Unreinforced (plain) masonry.

WIND-BORNE DEBRIS REGION.

WIND SPEED, V_{ult} .

SECTION AO403

WIND LOADS

AO403.1 Wind Directionality Factor. The directionality factor for Wind Option B and C shall be taken as 1.0.

AO403.2 Exposure. Wind pressures for Wind Option B and C shall be based on exposure category C or D in accordance with IBC Section 1609.4 or ASCE 7.

AO403.3 Enclosure classification. The enclosure classification shall be determined in accordance with ASCE 7 with the largest door or window on a wall that receives positive external pressure considered as an opening.

AO403.4 Continuous operation of Risk Category IV buildings. When a building or an internal area within a building in Risk Category IV is required to remain operational during a design wind event (target performance level OB), that building or that internal area shall be designed in accordance with ICC-500 or FEMA-361.

SECTION AO404

WIND LOAD OPTION A

AO404.1 Basic wind speed. The ultimate design wind speed, V_{ult} , for use in the design of buildings and structures shall be obtained from IBC Section 1609.3.

AO404.2 Debris Hazard and Protection of Openings. Buildings shall be designed for impact resistance in accordance with IBC Section 1609.2 or ASCE 7.

Exception:

1. For Risk Category III buildings with a Life Safety target performance level for the entire building, the exterior glazing shall be impact resistant or be protected with an impact resistant covering meeting the requirements of ASTM E1996.
2. For Risk Category IV buildings with an Immediate Occupancy target performance level for the entire building, the exterior glazing shall be impact resistant or be protected with an impact resistant covering meeting the requirements of ASTM E1996 for *Enhanced Protection*.

SECTION AO405

WIND LOAD OPTION B

AO405.1 Basic wind speed. The ultimate design wind speed, V_{ult} , for use in the design of Risk Category I buildings and structures shall be obtained from IBC Section 1609.3. The ultimate design wind speed, V_{ult} , for use in the design of Risk Category II buildings and structures shall be obtained from IBC Figure 1609.3(1). The ultimate design wind speed, V_{ult} , for use in the design of Risk Category III and IV buildings and structures shall be obtained from IBC Figure 1609.3(1) or 135 mph, whichever is greater.

AO405.2 **Debris Hazard and Protection of Openings.** Buildings shall be designed for impact resistance in accordance with this Section in addition to IBC Section 1609.2 or ASCE 7.

Exception:

1. For Risk Category IV buildings, all components of the exterior envelope shall be impact resistant or be protected with an impact resistant covering meeting the requirements of ASTM E1996 for *Enhanced Protection*.

SECTION AO406

WIND LOAD OPTION C

AO406.1 **Basic wind speed.** The ultimate design wind speed, V_{ult} , for use in the design of Risk Category I buildings and structures shall be obtained from IBC Section 1609.3. The ultimate design wind speed, V_{ult} , for use in the design of Risk Category II buildings and structures shall be obtained from IBC Figure 1609.3(1). The ultimate design wind speed, V_{ult} , for use in the design of Risk Category III and IV buildings and structures shall be obtained from IBC Figure 1609.3(1) or 170 mph, whichever is greater.

AO406.2 **Debris Hazard and Protection of Openings.** Buildings shall be designed for impact resistance in accordance with this Section in addition to IBC Section 1609.2 or ASCE 7.

Exception:

1. For Risk Category IV buildings, all components of the exterior envelope shall be impact resistant or be protected with an impact resistant covering meeting the requirements of ASTM E1996 for *Enhanced Protection*.

Table AO401.1

WIND LOAD OPTIONS:

TARGET PERFORMANCE LEVELS AND DESIGN CRITERIA⁴

OPTION	DESIGN WIND EVENT	Risk Category II ¹			Risk Category III ¹			Risk Category IV ¹		
		Target Performance Level ²	Min Wind Speed V_{ult}	Wind-Borne Debris	Target Performance Level ²	Min Wind Speed V_{ult}	Wind-Borne Debris	Target Performance Level ²	Min Wind Speed V_{ult}	Wind-Borne Debris
A	EF0 & 1 Tornado - IBC level Hurricane	CP ³	IBC 1609.3	IBC 1609.2 or ASCE 7	CP ³	IBC 1609.3	IBC 1609.2 or ASCE 7	CP ³	IBC 1609.3	IBC 1609.2 or ASCE 7
				LS			Glazing	IO ⁵		Glazing
B	EF2 Tornado - Cat 3 Hurricane	CP ³ for EF0-EF1-IBC Hurricane for Risk Cat. III/IV	IBC 1609.3 for Risk Cat. III/IV	IBC 1609.2 or ASCE 7	LS	145 mph	Req'd for glazing per IBC 1609.2 and ASCE 7	IO ⁵	145 mph	Exterior Envelope
C	EF3 Tornado - Cat 4 Hurricane	CP ³ for EF0-EF1-IBC Hurricane for Risk Cat. III/IV	IBC 1609.3 for Risk Cat. III/IV	IBC 1609.2 or ASCE 7	LS	170 mph	Req'd for glazing per IBC 1609.2 and ASCE 7	IO ⁵	170 mph	Exterior Envelope

Notes:

1. Risk Category per IBC Section 1604.5

2. Performance Levels:

CP: Collapse Prevention

LS: Life Safety

IO: Immediate Occupancy

OB: Operational Building

3. LS for occupants away from exterior envelope. IO for storm shelters or safe rooms.

4. See Section AO401 and Section AO403 for additional limitations and criteria.

5. OB for building or an internal area within a building designed to ICC-500 or FEMA 361.

CHAPTER AO5

STORM SHELTERS, SAFE ROOMS AND BEST AVAILABLE REFUGE AREAS

SECTION AO501

GENERAL

AO501.1 General. This section applies to the location and construction of storm shelters and safe rooms when constructed as separate detached buildings or as internal areas within buildings for the purpose of providing safe refuge for storms that produce high winds, such as tornados and hurricanes, and to the selection of best available refuge areas. Storm shelters shall be designed and constructed in accordance with IBC Section 423. Safe rooms shall be designed and constructed in accordance with FEMA 361. Storm shelters, safe rooms, and best available refuge areas shall be located on an accessible route.

Exception: *Residential Safe Rooms* and safe rooms serving a Business Group B Occupancy and having an *occupant load* not exceeding 16 persons may be constructed in accordance with FEMA 320.

AO501.2 Occupant load. The occupant load for storm shelters and safe rooms shall be determined by ICC 500 and FEMA 361 respectively.

AO501.3 Construction documents. Construction documents for buildings containing a storm shelter or safe room shall include the information required in ICC 500 or FEMA 361 respectively. Construction documents for buildings with access to a remote community storm shelter or safe room shall indicate the location of and access to the community storm shelter or safe room. Construction documents for buildings not containing or without access to a remote storm shelter or safe room, shall indicate the best available refuge area.

AO501.4 Signage. The location(s) of storm shelters, safe rooms or the best available refuge area(s) shall be clearly marked with a permanent sign.

SECTION AO502

DEFINITIONS AND NOTATIONS

AO502.1 Definitions. The following terms are defined in Chapter 2 of the International Building Code:

DWELLING UNITS.

OCCUPANT LOAD.

STORM SHELTER.

Community Storm Shelter.

Residential Storm Shelter.

AO502.2 Additional definitions.

BEST AVAILABLE REFUGE AREAS. Areas in a building that have been deemed by a registered design professional to likely offer the greatest safety for building occupants during a tornado or hurricane. Because these areas were not specifically designed as storm shelters or safe rooms, their occupants may be injured or killed during a tornado or hurricane. However, people in the best available refuge areas are less likely to be injured or killed than people in other areas of a building.

SAFE ROOM. A building, structure or portions thereof, constructed in accordance with FEMA 361 and designed for use during a severe wind storm event, such as a hurricane or tornado.

Community Safe Room. A safe room not defined as a "Residential Safe Room"

Residential Safe Room. A safe room serving occupants of *dwelling units* and having an *occupant load* not exceeding 16 persons.

SECTION AO503

BEST AVAILABLE REFUGE AREAS

AO503.1 **General.** Best available refuge area occupants may be injured or killed during a tornado or hurricane. However, people in the best available refuge areas are less likely to be injured or killed than people in other areas of a building.

AO503.2 **Occupant Density.** The minimum required floor area per occupant for best available refuge area(s) shall be determined in accordance with ICC 500 Table 501.1.1.

AO503.3 **Identification of best available refuge areas.** Best available refuge areas shall be identified by a registered design professional in accordance with the Wind Hazard Checklist of FEMA 361, Appendix B and FEMA P-431.

SECTION AO504

APPLICABILITY

AO504.1 **Required storm shelters or safe rooms.**

1. All new kindergarten through 12th grade schools with 50 or more occupants in total, per school, shall have a storm shelter or safe room.
2. All new 911 call stations, emergency operation centers, and fire, rescue, ambulance, and police stations shall have a storm shelter or safe room.

CHAPTER AO6

RESOURCES

SECTION AO601

CONTACTS

Georgia Department of Community Affairs (DCA)
Construction Codes

Georgia State Amendments to the State Minimum
Standard Codes

dca.ga.gov/local-government-assistance/construction-codes-industrialized-buildings/construction-codes

Phone: 404-679-3118

Georgia Department of Natural Resources (DNR)
Floodplain Management

4220 International Parkway, Ste. 101

Atlanta, GA 30354-3902
www.georgiadfirm.com
Phone: 404-675-1757

Federal Emergency Management Agency (FEMA)

www.fema.gov; www.floodsmart.gov
www.fema.gov/rebuild/buildingscience/
FEMA Publications and Technical Bulletins:
(www.fema.gov/library/index.jsp)
(www.fema.gov/plan/prevent/floodplain/techbul.shtm)

Georgia Emergency Management Agency (GEMA)

Georgia Office of Homeland Security
P.O. Box 18055
Atlanta, GA 30316-0055
www.gema.ga.gov
www.ready.ga.gov
Phone: 404-635-7000

Georgia Association of Regional Commissions (GARC)

www.garc.ga.gov (<http://garc.ga.gov/main.php?regional-Commissions-2>) (for assistance in identifying Flood Hazard Areas)

International Code Council (ICC)

www.iccsafe.org

National Weather Service

www.weather.gov

State Fire Marshal's Office

2 Martin Luther King Jr. Drive
Suite 920 / West Tower
Atlanta, Georgia 30334
www.oci.ga.gov
Phone: 404-656-7087

SECTION AO602

EMERGENCY INSPECTION KIT ^b

- | | | |
|--|---|--|
| <input type="checkbox"/> Staff's disaster response management plan | <input type="checkbox"/> Safety glasses | <input type="checkbox"/> Duct tape |
| <input type="checkbox"/> Team contact list | <input type="checkbox"/> Sunglasses | <input type="checkbox"/> Staples & stapler |
| <input type="checkbox"/> Area maps | <input type="checkbox"/> Pocket knife | <input type="checkbox"/> Staple gun |
| <input type="checkbox"/> Official identification | <input type="checkbox"/> Matches | <input type="checkbox"/> Calculator |
| <input type="checkbox"/> Personal identification | <input type="checkbox"/> Antibacterial hand wipes or alcohol-based hand sanitizer | <input type="checkbox"/> Tire repair kit |
| <input type="checkbox"/> Inspection forms and placards | <input type="checkbox"/> Insect repellant (w/ Deet or Picaridin) | <i>Remember to grab:</i> |
| <input type="checkbox"/> Communication equipment | <input type="checkbox"/> Sunscreen (SPF 15 or greater) | <input type="checkbox"/> Personal identification |
| <input type="checkbox"/> Clipboard | <input type="checkbox"/> Camera | <input type="checkbox"/> Rain gear, extra clothing |
| <input type="checkbox"/> Hard hat | <input type="checkbox"/> Black markers | <input type="checkbox"/> Water bottle |

- | | | |
|--|---|---|
| <input type="checkbox"/> Staff's disaster response management plan | <input type="checkbox"/> Safety glasses | <input type="checkbox"/> Duct tape |
| <input type="checkbox"/> Orange safety vest | <input type="checkbox"/> Pens & pencils | <input type="checkbox"/> Prescription medication |
| <input type="checkbox"/> Dust mask | <input type="checkbox"/> Envelope for expense receipts | <input type="checkbox"/> Cell phone and charger |
| <input type="checkbox"/> Work gloves | <input type="checkbox"/> Compass, GPS unit | <input type="checkbox"/> Cash for personal expenses |
| <input type="checkbox"/> Steel toe and waterproof boots | <input type="checkbox"/> Backpack, waistpack | <input type="checkbox"/> Toiletries |
| <input type="checkbox"/> Whistle | <input type="checkbox"/> Flashlight and extra batteries | |
| <input type="checkbox"/> First aid kit | <input type="checkbox"/> Battery-operated radio | |
| <input type="checkbox"/> Latex gloves | | |

(b) *Disaster Mitigation: A Guide for Building Departments* by the International Code Council, Inc., copyright 2009

SECTION AO603

SAFETY TIPS ^a

1. Always travel in teams of at least two people.
2. Always wear a hard hat, gloves, goggles, safety vest, and dust masks.
3. Always wear safety shoes capable of protecting the toes and bottom of the foot.
4. Survey the building exterior completely before entering.
5. Enter building only if authorized and if deemed safe to do so.
6. Be alert for falling objects.
7. In case of fire, injuries or victims, evacuate the area and alert the fire department immediately.
8. Avoid downed power lines and buildings under them or water surrounding them.
9. In case of gas leaks, shut off the gas (if possible) and report the leak.
10. In a flood situation, have a "walking stick."

(a) *When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

SECTION AO604

MAJOR DISASTER PROCESS

(from link <https://www.fema.gov/disaster-declaration-process>)

A Major Disaster Declaration usually follows these steps:

- Incident occurs and local government responds, supplemented by neighboring communities and volunteer agencies. If overwhelmed, turn to the state for assistance;

Generally the local government will issue a local state of emergency

- The State responds with state resources, such as the National Guard and state agencies;

Prior to committing state resources, the Governor will declare a state of emergency in the counties impacted by the event for which assistance is needed.

- Damage assessment by local, state, federal, and volunteer organizations determine losses and recovery needs;

Generally the locals will submit a preliminary damage assessment to the state and the state will review and determine if state and/or federal assistance is needed. If federal assistance is needed, the state will request FEMA perform a preliminary joint damage assessment. If the Governor determines that the incident is of such severity and magnitude that effective response is beyond the capabilities of the state and the affected local governments then supplementary Federal assistance is requested (next step).

- A Major Disaster Declaration is requested by the Governor, based on the damage assessment, and agreement to commit state funds and resources to the long-term recovery;
- FEMA evaluates the request and recommends action to the White House based on the disaster, the local community and the state's ability to recover;
- The President approves the request or FEMA informs the Governor it has been denied. This decision process could take a few hours or several weeks depending on the nature of the disaster.

SECTION AO605

SAMPLE EVALUATION FORMS AND INSPECTION PLACARDS^b (following pages)

Figure AO605.1^b

ATC-45 Rapid Evaluation Safety Assessment Form																																												
Inspection Inspector ID: _____ Inspection date: _____ Affiliation: _____ Inspection time: _____ <input type="checkbox"/> AM <input type="checkbox"/> PM Areas inspected: <input type="checkbox"/> Exterior only <input type="checkbox"/> Exterior and interior																																												
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Building Description Building name: _____ Address: _____ Building contact/phone: _____ Number of stories: _____ "Footprint area" (square feet): _____ Number of residential units: _____ </div> <div style="width: 50%;"> Type of Building <input type="checkbox"/> Mid-rise or high-rise <input type="checkbox"/> Pre-fabricated <input type="checkbox"/> Low-rise multi-family <input type="checkbox"/> One- or two-family dwelling <input type="checkbox"/> Low-rise commercial Primary Occupancy <input type="checkbox"/> Dwelling <input type="checkbox"/> Commercial <input type="checkbox"/> Government <input type="checkbox"/> Other residential <input type="checkbox"/> Offices <input type="checkbox"/> Historic <input type="checkbox"/> Public assembly <input type="checkbox"/> Industrial <input type="checkbox"/> School <input type="checkbox"/> Emergency services <input type="checkbox"/> Other: _____ </div> </div>																																												
Evaluation Investigate the building for the conditions below and check the appropriate column. <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Observed Conditions:</th> <th style="text-align: center; border-bottom: 1px solid black;">Minor/None</th> <th style="text-align: center; border-bottom: 1px solid black;">Moderate</th> <th style="text-align: center; border-bottom: 1px solid black;">Severe</th> <th style="text-align: left; border-bottom: 1px solid black;">Estimated Building Damage (excluding contents)</th> </tr> </thead> <tbody> <tr> <td>Collapse, partial collapse, or building off foundation</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> None</td> </tr> <tr> <td>Building significantly out of plumb or in danger</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> > 0 to < 1%</td> </tr> <tr> <td>Damage to primary structural members, racking of walls</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 1 to < 10%</td> </tr> <tr> <td>Falling hazard due to nonstructural damage</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 10 to < 30%</td> </tr> <tr> <td>Geotechnical hazard, scour, erosion, slope failure, etc.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 30 to < 70%</td> </tr> <tr> <td>Electrical lines / fixtures submerged / leaning trees</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 70 to < 100%</td> </tr> <tr> <td>Other (specify) _____</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 100%</td> </tr> </tbody> </table> <input type="checkbox"/> See back of form for further comments.					Observed Conditions:	Minor/None	Moderate	Severe	Estimated Building Damage (excluding contents)	Collapse, partial collapse, or building off foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None	Building significantly out of plumb or in danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> > 0 to < 1%	Damage to primary structural members, racking of walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 to < 10%	Falling hazard due to nonstructural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 to < 30%	Geotechnical hazard, scour, erosion, slope failure, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 30 to < 70%	Electrical lines / fixtures submerged / leaning trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 70 to < 100%	Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 100%
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Building significantly out of plumb or in danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> > 0 to < 1%																																								
Damage to primary structural members, racking of walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 to < 10%																																								
Falling hazard due to nonstructural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 to < 30%																																								
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Electrical lines / fixtures submerged / leaning trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 70 to < 100%																																								
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 100%																																								
Posting Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting. <input type="checkbox"/> INSPECTED (Green placard) <input type="checkbox"/> RESTRICTED USE (Yellow placard) <input type="checkbox"/> UNSAFE (Red placard) Record any use and entry restrictions exactly as written on placard: _____ _____ _____ Number of residential units vacated: _____																																												
Further Actions Check the boxes below only if further actions are needed. <input type="checkbox"/> Barricades needed in the following areas: _____ <input type="checkbox"/> Detailed Evaluation recommended: <input type="checkbox"/> Structural <input type="checkbox"/> Geotechnical <input type="checkbox"/> Other: _____ <input type="checkbox"/> Substantial Damage determination recommended <input type="checkbox"/> Other recommendations: _____ <input type="checkbox"/> See back of form for further comments.																																												

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Figure AO605.2 ^b

ATC-45 Detailed Evaluation Safety Assessment Form						
Inspection Inspector ID: _____ Inspection date: _____ Affiliation: _____ Inspection time: _____ <input type="checkbox"/> AM <input type="checkbox"/> PM			Final Posting from page 2 <input type="checkbox"/> Inspected <input type="checkbox"/> Restricted Use <input type="checkbox"/> Unsafe			
<table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Building Description Building name: _____ Address: _____ Building contact/phone: _____ Number of stories: _____ "Footprint area" (square feet): _____ Number of residential units: _____ </td> <td style="width: 50%; vertical-align: top;"> Type of Building <input type="checkbox"/> Mid-rise or High-rise <input type="checkbox"/> Low-rise multi-family <input type="checkbox"/> Low-rise commercial <input type="checkbox"/> Pre-fabricated <input type="checkbox"/> One- or two-family dwelling <input type="checkbox"/> Other: _____ Primary Occupancy <input type="checkbox"/> Dwelling <input type="checkbox"/> Other residential <input type="checkbox"/> Public assembly <input type="checkbox"/> Emergency services <input type="checkbox"/> Commercial <input type="checkbox"/> Offices <input type="checkbox"/> Industrial <input type="checkbox"/> Other: _____ <input type="checkbox"/> Government <input type="checkbox"/> Historic <input type="checkbox"/> School </td> </tr> </table>					Building Description Building name: _____ Address: _____ Building contact/phone: _____ Number of stories: _____ "Footprint area" (square feet): _____ Number of residential units: _____	Type of Building <input type="checkbox"/> Mid-rise or High-rise <input type="checkbox"/> Low-rise multi-family <input type="checkbox"/> Low-rise commercial <input type="checkbox"/> Pre-fabricated <input type="checkbox"/> One- or two-family dwelling <input type="checkbox"/> Other: _____ Primary Occupancy <input type="checkbox"/> Dwelling <input type="checkbox"/> Other residential <input type="checkbox"/> Public assembly <input type="checkbox"/> Emergency services <input type="checkbox"/> Commercial <input type="checkbox"/> Offices <input type="checkbox"/> Industrial <input type="checkbox"/> Other: _____ <input type="checkbox"/> Government <input type="checkbox"/> Historic <input type="checkbox"/> School
Building Description Building name: _____ Address: _____ Building contact/phone: _____ Number of stories: _____ "Footprint area" (square feet): _____ Number of residential units: _____	Type of Building <input type="checkbox"/> Mid-rise or High-rise <input type="checkbox"/> Low-rise multi-family <input type="checkbox"/> Low-rise commercial <input type="checkbox"/> Pre-fabricated <input type="checkbox"/> One- or two-family dwelling <input type="checkbox"/> Other: _____ Primary Occupancy <input type="checkbox"/> Dwelling <input type="checkbox"/> Other residential <input type="checkbox"/> Public assembly <input type="checkbox"/> Emergency services <input type="checkbox"/> Commercial <input type="checkbox"/> Offices <input type="checkbox"/> Industrial <input type="checkbox"/> Other: _____ <input type="checkbox"/> Government <input type="checkbox"/> Historic <input type="checkbox"/> School					
Evaluation Investigate the building for the conditions below and check the appropriate column. There is room on the second page for a sketch.						
	Minor/None	Moderate	Severe	Comments		
Overall hazards:						
Collapse or partial collapse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Building or story lean or drift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Fractured or displaced foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Structural hazards:						
Failure of significant element/connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Column, pier, or bearing wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Roof/floor framing or connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Superstructure/foundation connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Moment frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Diaphragm/horizontal bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Vertical bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Shear wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Nonstructural hazards:						
Parapets, ornamentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Canopy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Cladding, glazing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Ceilings, light fixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Stairs, exits, access walkways, gratings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Interior walls, partitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Mechanical & electrical equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Elevators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Building contents, other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Geotechnical hazards:						
Slope failure, debris impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Ground movement, erosion, sedimentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		
Differential settlement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____		

Continue on page 2

Figure AO605.2^b (Continued)

ATC-45 Detailed Evaluation Safety Assessment Form		Page 2
<p>Building name: _____</p> <p>Inspector ID: _____</p> <p>Sketch Make a sketch of the damaged building in the space provided. Indicate damage points.</p> <p>Estimated Building Damage (excluding contents)</p> <p> <input type="checkbox"/> None <input type="checkbox"/> > 0 to < 1% <input type="checkbox"/> 1 to < 10% <input type="checkbox"/> 10 to < 30% <input type="checkbox"/> 30 to < 70% <input type="checkbox"/> 70 to < 100% <input type="checkbox"/> 100% </p>	<div style="border: 1px solid black; height: 250px; width: 100%;"></div>	
<p>Posting If there is an existing posting from a previous evaluation, check the appropriate box.</p> <p>Previous posting: <input type="checkbox"/> INSPECTED <input type="checkbox"/> RESTRICTED USE <input type="checkbox"/> UNSAFE Inspector ID: _____ Date: _____</p> <p>If necessary, revise the posting based on the new evaluation and team judgment. <i>Severe</i> conditions endangering the overall building are grounds for an Unsafe posting. Local <i>Severe</i> and overall <i>Moderate</i> conditions may allow a Restricted Use posting. Indicate the current posting below and at the top of page one, whether the posting has been revised or not.</p> <p> <input type="checkbox"/> INSPECTED (Green placard) <input type="checkbox"/> RESTRICTED USE (Yellow placard) <input type="checkbox"/> UNSAFE (Red placard) </p> <p>Record any use and entry restrictions exactly as written on placard: _____</p> <p>Number of residential units vacated: _____</p>		
<p>Further Actions Check the boxes below only if further actions are needed.</p> <p><input type="checkbox"/> Barricades needed in the following areas: _____</p> <p> <input type="checkbox"/> Engineering Evaluation recommended: <input type="checkbox"/> Structural <input type="checkbox"/> Geotechnical <input type="checkbox"/> Other _____ </p> <p><input type="checkbox"/> Substantial Damage determination recommended</p> <p><input type="checkbox"/> Other recommendations: _____</p>		

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Figure AO605.3 ^b

<h1>INSPECTED</h1> <h2>LAWFUL OCCUPANCY PERMITTED</h2>	
This structure has been inspected (as indicated below) and no apparent structural hazard has been found.	Date _____ Time _____
<input type="checkbox"/> Inspected Exterior Only <input type="checkbox"/> Inspected Exterior and Interior	
Report any unsafe condition to local authorities; reinspection may be required.	This facility was inspected under emergency conditions for:
Inspector Comments: _____ _____ _____	_____ (Jurisdiction)
	Inspector ID / Agency _____ _____ _____
Facility Name and Address: _____ _____ _____	
Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority	

Figure AO605.4 ^b

<h1>RESTRICTED USE</h1>	
Caution: This structure has been inspected and found to be damaged as described below: _____ _____ _____ _____	Date _____ Time _____
Entry, occupancy, and lawful use are restricted as indicated below: <input type="checkbox"/> Do not enter the following areas: _____ <input type="checkbox"/> Brief entry allowed for access to contents: _____ <input type="checkbox"/> Other restrictions: _____	This facility was inspected under emergency conditions for: _____ (Jurisdiction) Inspector ID / Agency _____ _____ _____
Facility name and address: _____ _____ _____	
Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority	

Figure AO605.5 ^b

UNSAFE

DO NOT ENTER OR OCCUPY
(THIS PLACARD IS NOT A DEMOLITION ORDER)

This structure has been inspected, found to be seriously damaged and is unsafe to occupy, as described below:

This facility was inspected under emergency conditions for:

(Jurisdiction)

Inspector ID / Agency

Do not enter, except as specifically authorized in writing by jurisdiction. Entry may result in death or injury.

Facility Name and Address:

Date

Time

Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority

Georgia Bulletin - Oct 2023

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CHAPTER AO7

REFERENCES

REFERENCED STANDARDS

ASCE Standards ASCE/SEI 24-14 Flood Resistant Design and Construction

FEMA P-320, Fourth Edition / December 2014 Taking Shelter From the Storm: Building a Safe Room For Your Home or Small Business, Includes Construction Plans and Cost Estimates

FEMA 361, Third Edition / March 2015 Design and Construction Guidance for Community Safe Rooms

FEMA P-431, Second Edition/October 2009 Tornado Protection: Selecting Refuge Areas in Buildings

FEMA Technical Bulletin 2, Table 2. Types, Uses, and Classifications of Materials

REFERENCED RESOURCES

(a) *When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

(b) *Disaster Mitigation: A Guide for Building Departments* by the International Code Council, Inc., copyright 2009

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Design Chapter 2

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CHAPTER 34

EXISTING BUILDINGS AND STRUCTURES

SECTION 3401

GENERAL

3401.1 **Scope.** The provisions of this chapter shall control the *alteration, repair, addition* and change of occupancy of existing buildings and structures.

Exception: Existing *bleachers*, grandstands and folding and telescopic seating shall comply with ICC 300.

3401.2 **Maintenance.** Buildings and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices or safeguards which are required by this code shall be maintained in conformance with the code

edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of buildings and structures. To determine compliance with this subsection, the *building official* shall have the authority to require a building or structure to be reinspected. The requirements of this chapter shall not provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures.

3401.3 Compliance. *Alterations, repairs, additions* and changes of occupancy to, or relocation of, existing buildings and structures shall comply with the provisions for *alterations, repairs, additions* and changes of occupancy or relocation, respectively, in the *International Energy Conservation Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Property Maintenance Code, International Private Sewage Disposal Code, International Residential Code* and NFPA 70. Where provisions of the other codes conflict with provisions of this chapter, the provisions of this chapter shall take precedence.

3401.4 Building materials and systems. Building materials and systems shall comply with the requirements of this section.

3401.4.1 Existing materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the *building official* to be unsafe per Section 116.

3401.4.2 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs and alterations, provided no hazard to life, health or property is created. Hazardous materials shall not be used where the code for new construction would not *permit* their use in buildings of similar occupancy, purpose and location.

3401.4.3 Existing seismic force-resisting systems. Where the existing seismic force-resisting system is a type that can be designated ordinary, values of R , Ω_0 , and C_d for the existing seismic force-resisting system shall be those specified by this code for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of a detailed, intermediate or special system.

3401.5 Dangerous conditions. The *building official* shall have the authority to require the elimination of conditions deemed *dangerous*.

3401.6 Alternative compliance. Work performed in accordance with the *International Existing Building Code* shall be deemed to comply with the provisions of this chapter.

SECTION 3402

DEFINITIONS

3402.1 Definitions. The following terms are defined in Chapter 2:

DANGEROUS.

EXISTING STRUCTURE.

PRIMARY FUNCTION.

SUBSTANTIAL STRUCTURAL DAMAGE.

TECHNICALLY INFEASIBLE.

SECTION 3403

ADDITIONS

3403.1 General. *Additions* to any building or structure shall comply with the requirements of this code for new construction. *Alterations* to the existing building or structure shall be made to ensure that the existing building or structure together with the *addition* are no less conforming with the provisions of this code than the existing building or structure was prior to the *addition*. An existing building together with its *additions* shall comply with the height and area provisions of Chapter 5.

3403.2 Flood hazard areas. For buildings and structures in *flood hazard areas* established in Section 1612.3, any *addition* that constitutes *substantial improvement* of the *existing structure*, as defined in Section 202, shall comply with the flood design requirements for new construction, and all aspects of the *existing structure* shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3, any additions that do not constitute *substantial improvement* of the *existing structure*, as defined in Section 202, are not required to comply with the flood design requirements for new construction.

3403.3 Existing structural elements carrying gravity load. Any existing gravity load-carrying structural element for which an *addition* and its related alterations cause an increase in design gravity load of more than 5 percent shall be strengthened, supplemented, replaced or otherwise altered as needed to carry the increased gravity load required by this code for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased shall be considered an altered element subject to the requirements of Section 3404.3. Any existing element that will form part of the lateral load path for any part of the *addition* shall be considered an existing lateral load-carrying structural element subject to the requirements of Section 3403.4.

3403.3.1 Design live load. Where the *addition* does not result in increased design live load, existing gravity load-carrying structural elements shall be permitted to be evaluated and designed for live loads *approved* prior to the *addition*. If the *approved* live load is less than that required by Section 1607, the area designed for the nonconforming live load shall be posted with placards of *approved* design indicating the *approved* live load. Where the *addition* does result in increased design live load, the live load required by Section 1607 shall be used.

3403.4 Existing structural elements carrying lateral load. Where the *addition* is structurally independent of the *existing structure*, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the *addition* is not structurally independent of the *existing structure*, the *existing structure* and its *addition* acting together as a single structure shall be shown to meet the requirements of Sections 1609 and 1613.

Exception: Any existing lateral load-carrying structural element whose demand-capacity ratio with the *addition* considered is no more than 10 percent greater than its demand-capacity ratio with the *addition* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

3403.5 Smoke alarms in existing portions of a building. Where an *addition* is made to a building or structure of a Group R or I-1 occupancy, the existing building shall be provided with *smoke alarms* in accordance with Section 1103.8 of the *International Fire Code*.

SECTION 3404

ALTERATIONS

3404.1 General. Except as provided by Section 3401.4 or this section, *alterations* to any building or structure shall comply with the requirements of the code for new construction. *Alterations* shall be such that the existing building

or structure is no less complying with the provisions of this code than the existing building or structure was prior to the *alteration*.

Exceptions:

1. An existing *stairway* shall not be required to comply with the requirements of Section 1011 where the existing space and construction does not allow a reduction in pitch or slope.
2. *Handrails* otherwise required to comply with Section 1011.11 shall not be required to comply with the requirements of Section 1014.6 regarding full extension of the *handrails* where such extensions would be hazardous due to plan configuration.

3404.2 Flood hazard areas. For buildings and structures in *flood hazard areas* established in Section 1612.3, any *alteration* that constitutes *substantial improvement* of the *existing structure*, as defined in Section 202, shall comply with the flood design requirements for new construction, and all aspects of the *existing structure* shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3, any *alterations* that do not constitute *substantial improvement* of the *existing structure*, as defined in Section 202, are not required to comply with the flood design requirements for new construction.

3404.3 Existing structural elements carrying gravity load. Any existing gravity load-carrying structural element for which an *alteration* causes an increase in design gravity load of more than 5 percent shall be strengthened, supplemented, replaced or otherwise altered as needed to carry the increased gravity load required by this code for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the *alteration* shall be shown to have the capacity to resist the applicable design gravity loads required by this code for new structures.

3404.3.1 Design live load. Where the *alteration* does not result in increased design live load, existing gravity load-carrying structural elements shall be permitted to be evaluated and designed for live loads *approved* prior to the *alteration*. If the *approved* live load is less than that required by Section 1607, the area designed for the nonconforming live load shall be posted with placards of *approved* design indicating the *approved* live load. Where the *alteration* does result in increased design live load, the live load required by Section 1607 shall be used.

3404.4 Existing structural elements carrying lateral load. Except as permitted by Section 3404.5, where the *alteration* increases design lateral loads in accordance with Section 1609 or 1613, or where the *alteration* results in a structural irregularity as defined in ASCE 7, or where the *alteration* decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall be shown to meet the requirements of Sections 1609 and 1613.

Exception: Any existing lateral load-carrying structural element whose demand-capacity ratio with the *alteration* considered is no more than 10 percent greater than its demand-capacity ratio with the *alteration* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces per Sections 1609 and 1613. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces, and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

3404.5 Voluntary seismic improvements. *Alterations* to existing structural elements or additions of new structural elements that are not otherwise required by this chapter and are initiated for the purpose of improving the performance of the seismic force-resisting system of an *existing structure* or the performance of seismic bracing or anchorage of existing non-structural elements shall be permitted, provided that an engineering analysis is submitted demonstrating the following:

1. The altered structure and the altered nonstructural elements are no less conforming with the provisions of this code with respect to earthquake design than they were prior to the alteration.
2. New structural elements are detailed as required for new construction.
3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required for new construction.
4. The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

3404.6 **Smoke alarms.** Individual *sleeping units* and individual *dwelling units* in Group R and I-1 occupancies shall be provided with *smoke alarms* in accordance with Section 1103.8 of the *International Fire Code*.

SECTION 3405

REPAIRS

3405.1 **General.** Buildings and structures, and parts thereof, shall be repaired in compliance with Section 3405 and 3401.2. Work on nondamaged components that is necessary for the required *repair* of damaged components shall be considered part of the *repair* and shall not be subject to the requirements for *alterations* in this chapter. Routine maintenance required by Section 3401.2, ordinary repairs exempt from *permit* in accordance with Section 105.2, and abatement of wear due to normal service conditions shall not be subject to the requirements for *repairs* in this section.

3405.2 **Substantial structural damage to vertical elements of the lateral force-resisting system.** A building that has sustained *substantial structural damage* to the vertical elements of its lateral force-resisting system shall be evaluated and repaired in accordance with the applicable provisions of Sections 3405.2.1 through 3405.2.3.

Exceptions:

1. Buildings assigned to *Seismic Design Category* A, B, or C whose *substantial structural damage* was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earthquake effects.
2. One- and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.

3405.2.1 **Evaluation.** The building shall be evaluated by a *registered design professional*, and the evaluation findings shall be submitted to the *building official*. The evaluation shall establish whether the damaged building, if repaired to its pre-damage state, would comply with the provisions of this code for wind and earthquake loads.

Wind loads for this evaluation shall be those prescribed in Section 1609. Earthquake loads for this evaluation, if required, shall be permitted to be 75 percent of those prescribed in Section 1613.

3405.2.2 **Extent of repair for compliant buildings.** If the evaluation establishes compliance of the pre-damage building in accordance with Section 3405.2.1, then repairs shall be permitted that restore the building to its pre-damage state, based on material properties and design strengths applicable at the time of original construction.

3405.2.3 **Extent of repair for noncompliant buildings.** If the evaluation does not establish compliance of the pre-damage building in accordance with Section 3404.2.1, then the building shall be rehabilitated to comply with applicable provisions of this code for load combinations that include wind or seismic loads. The wind loads for the repair shall be as required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be as required by this code. Earthquake loads for this

rehabilitation design shall be those required for the design of the pre-damage building, but not less than 75 percent of those prescribed in Section 1613. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of this code for new buildings of similar structure, purpose and location.

3405.3 Substantial structural damage to gravity load-carrying components. Gravity load-carrying components that have sustained *substantial structural damage* shall be rehabilitated to comply with the applicable provisions of this code for dead and live loads. Snow loads shall be considered if the *substantial structural damage* was caused by or related to snow load effects. Existing gravity load-carrying structural elements shall be permitted to be designed for live loads *approved* prior to the damage. Nondamaged gravity load-carrying components that receive dead, live or snow loads from rehabilitated components shall also be rehabilitated or shown to have the capacity to carry the design loads of the rehabilitation design. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of this code for new buildings of similar structure, purpose and location.

3405.3.1 Lateral force-resisting elements. Regardless of the level of damage to vertical elements of the lateral force-resisting system, if *substantial structural damage* to gravity load-carrying components was caused primarily by wind or earthquake effects, then the building shall be evaluated in accordance with Section 3405.2.1 and, if noncompliant, rehabilitated in accordance with Section 3405.2.3.

Exceptions:

1. One- and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.
2. Buildings assigned to *Seismic Design Category A, B, or C* whose *substantial structural damage* was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earthquake effects.

3405.4 Less than substantial structural damage. For damage less than *substantial structural damage*, *repairs* shall be allowed that restore the building to its pre-damage state, based on material properties and design strengths applicable at the time of original construction. New structural members and connections used for this repair shall comply with the detailing provisions of this code for new buildings of similar structure, purpose and location.

3405.5 Flood hazard areas. For buildings and structures in *flood hazard areas* established in Section 1612.3, any *repair* that constitutes *substantial improvement* of the *existing structure*, as defined in Section 202, shall comply with the flood design requirements for new construction, and all aspects of the *existing structure* shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3, any *repairs* that do not constitute *substantial improvement* or *repair* of *substantial damage* of the *existing structure*, as defined in Section 202, are not required to comply with the flood design requirements for new construction.

SECTION 3406

FIRE ESCAPES

3406.1 Where permitted. Fire escapes shall be permitted only as provided for in Sections 3406.1.1 through 3406.1.4.

3406.1.1 New buildings. Fire escapes shall not constitute any part of the required *means of egress* in new buildings.

3406.1.2 Existing fire escapes. Existing fire escapes shall be continued to be accepted as a component in the *means of egress* in existing buildings only.

3406.1.3 **New fire escapes.** New fire escapes for existing buildings shall be permitted only where exterior *stairs* cannot be utilized due to lot lines limiting *stair* size or due to the sidewalks, alleys or roads at grade level. New fire escapes shall not incorporate ladders or access by windows.

3406.1.4 **Limitations.** Fire escapes shall comply with this section and shall not constitute more than 50 percent of the required number of *exits* nor more than 50 percent of the required *exit* capacity.

3406.2 **Location.** Where located on the front of the building and where projecting beyond the building line, the lowest landing shall not be less than 7 feet (2134 mm) or more than 12 feet (3658 mm) above grade, and shall be equipped with a counterbalanced stairway to the street. In alleyways and thoroughfares less than 30 feet (9144 mm) wide, the clearance under the lowest landing shall not be less than 12 feet (3658 mm).

3406.3 **Construction.** The fire escape shall be designed to support a live load of 100 pounds per square foot (4788 Pa) and shall be constructed of steel or other *approved* noncombustible materials. Fire escapes constructed of wood not less than nominal 2 inches (51 mm) thick are permitted on buildings of Type V construction. Walkways and railings located over or supported by combustible roofs in buildings of Type III and IV construction are permitted to be of wood not less than nominal 2 inches (51 mm) thick.

3406.4 **Dimensions.** *Stairs* shall be at least 22 inches (559 mm) wide with risers not more than, and treads not less than, 8 inches (203 mm) and landings at the foot of stairs not less than 40 inches (1016 mm) wide by 36 inches (914 mm) long, located not more than 8 inches (203 mm) below the door.

3406.5 **Opening protectives.** Doors and windows along the fire escape shall be protected with $\frac{3}{4}$ -hour opening protectives.

SECTION 3407

GLASS REPLACEMENT

3407.1 **Conformance.** The installation or replacement of glass shall be as required for new installations.

SECTION 3408

CHANGE OF OCCUPANCY

3408.1 **Conformance.** No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancies or in a different group of occupancies, unless such building is made to comply with the requirements of this code for such division or group of occupancies. Subject to the approval of the *building official*, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

3408.2 **Certificate of occupancy.** A certificate of occupancy shall be issued where it has been determined that the requirements for the new occupancy classification have been met.

3408.3 **Stairways.** An existing *stairway* shall not be required to comply with the requirements of Section 1009 where the existing space and construction does not allow a reduction in pitch or slope.

3408.4 **Seismic.** When a change of occupancy results in a structure being reclassified to a higher risk category, the structure shall conform to the seismic requirements for a new structure of the higher risk category.

Exceptions:

1. Specific seismic detailing requirements of Section 1613 for a new structure shall not be required to be met where the seismic performance is shown to be equivalent to that of a new structure. A demonstration of equivalence shall consider the regularity, overstrength, redundancy and ductility of the structure.

2. When a change of use results in a structure being reclassified from Risk Category I or II to Risk Category III and the structure is located where the seismic coefficient, S_{DS} , is less than 0.33, compliance with the seismic requirements of Section 1613 are not required.

SECTION 3409

HISTORIC BUILDINGS

3409.1 **Historic buildings.** The provisions of this code relating to the construction, *repair, alteration, addition*, restoration and movement of structures, and change of occupancy shall not be mandatory for *historic buildings* where such buildings are judged by the *building official* to not constitute a distinct life safety hazard.

3409.2 **Flood hazard areas.** Within *flood hazard areas* established in accordance with Section 1612.3, where the work proposed constitutes *substantial improvement* as defined in Section 202, the building shall be brought into compliance with Section 1612.

Exception: *Historic buildings* that are:

1. Listed or preliminarily determined to be eligible for listing in the National Register of Historic Places;
2. Determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district; or
3. Designated as historic under a state or local historic preservation program that is *approved* by the Department of Interior.

SECTION 3410

MOVED STRUCTURES

3410.1 **Conformance.** Structures moved into or within the jurisdiction shall comply with the provisions of this code for new structures.

SECTION 3411

ACCESSIBILITY FOR EXISTING BUILDINGS

3411.1 **Scope.** The provisions of Sections 3411.1 through 3411.9 apply to maintenance, change of occupancy, *additions* and *alterations* to existing buildings, including those identified as *historic buildings*.

3411.2 **Maintenance of facilities.** A *facility* that is constructed or altered to be *accessible* shall be maintained *accessible* during occupancy.

3411.3 **Extent of application.** An *alteration* of an existing *facility* shall not impose a requirement for greater accessibility than that which would be required for new construction. *Alterations* shall not reduce or have the effect of reducing accessibility of a *facility* or portion of a *facility*.

3411.4 Change of occupancy. Existing buildings that undergo a change of group or occupancy shall comply with this section.

Exception: *Type B dwelling units* or *sleeping units* required by Section 1107 of this code are not required to be provided in existing buildings and facilities undergoing a change of occupancy in conjunction with *alterations* where the work area is 50 percent or less of the aggregate area of the building.

3411.4.1 Partial change in occupancy. Where a portion of the building is changed to a new occupancy classification, any *alterations* shall comply with Sections 3411.6, 3411.7 and 3411.8.

3411.4.2 Complete change of occupancy. Where an entire building undergoes a change of occupancy, it shall comply with Section 3411.4.1 and shall have all of the following *accessible* features:

1. At least one *accessible* building entrance.
2. At least one *accessible route* from an *accessible* building entrance to *primary function* areas.
3. Signage complying with Section 1111.
4. *Accessible* parking, where parking is being provided.
5. At least one *accessible* passenger loading zone, when loading zones are provided.
6. At least one *accessible route* connecting *accessible* parking and *accessible* passenger loading zones to an *accessible* entrance.

Where it is *technically infeasible* to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent *technically feasible*.

Exception: The *accessible* features listed in Items 1 through 6 are not required for an *accessible* route to *Type B units*.

3411.5 Additions. Provisions for new construction shall apply to *additions*. An *addition* that affects the accessibility to, or contains an area of, a *primary function* shall comply with the requirements in Section 3411.7.

3411.6 Alterations. A *facility* that is altered shall comply with the applicable provisions in Chapter 11 of this code, unless *technically infeasible*. Where compliance with this section is *technically infeasible*, the *alteration* shall provide access to the maximum extent technically feasible.

Exceptions:

1. The altered element or space is not required to be on an *accessible route*, unless required by Section 3411.7.
2. *Accessible means of egress* required by Chapter 10 are not required to be provided in existing facilities.
3. The *alteration* to *Type A* individually owned *dwelling units* within a Group R-2 occupancy shall be permitted to meet the provision for a *Type B dwelling unit*.
4. *Type B dwelling* or *sleeping units* required by Section 1107 of this code are not required to be provided in existing buildings and facilities undergoing a change of occupancy in conjunction with *alterations* where the work area is 50 percent or less of the aggregate area of the building.

3411.7 Alterations affecting an area containing a primary function. Where an *alteration* affects the accessibility to, or contains an area of *primary function*, the route to the *primary function* area shall be *accessible*. The *accessible route* to the *primary function* area shall include toilet facilities or drinking fountains serving the area of *primary function*.

Exceptions:

1. The costs of providing the *accessible route* are not required to exceed 20 percent of the costs of the *alterations* affecting the area of *primary function*.
2. This provision does not apply to *alterations* limited solely to windows, hardware, operating controls, electrical outlets and signs.
3. This provision does not apply to *alterations* limited solely to mechanical systems, electrical systems, installation or alteration of fire protection systems and abatement of hazardous materials.
4. This provision does not apply to *alterations* undertaken for the primary purpose of increasing the accessibility of a *facility*.
5. This provision does not apply to altered areas limited to *Type B dwelling* and *sleeping units*.

3411.8 Scoping for alterations. The provisions of Sections 3411.8.1 through 3411.8.14 shall apply to *alterations* to existing buildings and facilities.

3411.8.1 Entrances. *Accessible* entrances shall be provided in accordance with Section 1105.

Exception: Where an *alteration* includes *alterations* to an entrance, and the *facility* has an *accessible* entrance, the altered entrance is not required to be *accessible*, unless required by Section 3411.7. Signs complying with Section 1111 shall be provided.

3411.8.2 Elevators. Altered elements of existing elevators shall comply with ASME A17.1 and ICC A117.1. Such elements shall also be altered in elevators programmed to respond to the same hall call control as the altered elevator.

3411.8.3 Platform lifts. Platform (wheelchair) lifts complying with ICC A117.1 and installed in accordance with ASME A18.1 shall be permitted as a component of an *accessible route*.

3411.8.4 Stairs and escalators in existing buildings. In *alterations*, change of occupancy or *additions* where an escalator or *stair* is added where none existed previously and major structural modifications are necessary for installation, an *accessible* route shall be provided between the levels served by the escalator or *stairs* in accordance with Sections 1104.4 and 1104.5.

3411.8.5 Ramps. Where slopes steeper than allowed by Section 1012.2 are necessitated by space limitations, the slope of ramps in or providing access to existing *facilities* shall comply with Table 3411.8.5.

Table 3411.8.5

RAMPS

SLOPE	MAXIMUM RISE
Steeper than 1:10 but not steeper than 1:8	3 inches
Steeper than 1:12 but not steeper than 1:10	6 inches

For SI: 1 inch = 25.4 mm.

3411.8.6 Performance areas. Where it is *technically infeasible* to alter performance areas to be on an *accessible route*, at least one of each type of performance area shall be made *accessible*.

3411.8.7 Accessible dwelling or sleeping units. Where Group I-1, I-2, I-3, R-1, R-2 or R-4 *dwelling or sleeping units* are being altered or added, the requirements of Section 1107 for *Accessible units* apply only to the quantity of spaces being altered or added.

3411.8.8 Type A dwelling or sleeping units. Where more than 20 Group R-2 *dwelling or sleeping units* are being altered or added, the requirements of Section 1107 for *Type A units* apply only to the quantity of the spaces being altered or added.

3411.8.9 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 *dwelling or sleeping units* are being added, the requirements of Section 1107 for *Type B units* apply only to the quantity of the spaces being added. Where Group I-1, I-2, R-1, R-2, R-3 or R-4 *dwelling or sleeping units* are being altered and where the work area is greater than 50 percent of the aggregate area of the building, the requirements of Section 1107 for *Type B units* apply only to the quantity of the spaces being altered.

3411.8.10 Jury boxes and witness stands. In *alterations*, *accessible* wheelchair spaces are not required to be located within the defined area of raised jury boxes or witness stands and shall be permitted to be located outside these spaces where the ramp or lift access restricts or projects into the *means of egress*.

3411.8.11 Toilet rooms. Where it is *technically infeasible* to alter existing toilet and bathing rooms to be *accessible*, an *accessible* family or assisted-use toilet or bathing room constructed in accordance with Section 1109.2.1 is permitted. The family or assisted-use toilet or bathing room shall be located on the same floor and in the same area as the existing toilet or bathing rooms.

3411.8.12 Dressing, fitting and locker rooms. Where it is *technically infeasible* to provide *accessible* dressing, fitting or locker rooms at the same location as similar types of rooms, one *accessible* room on the same level shall be provided. Where separate-sex facilities are provided, *accessible* rooms for each sex shall be provided. Separate-sex facilities are not required where only unisex rooms are provided.

3411.8.13 Fuel dispensers. Operable parts of replacement fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

3411.8.14 Thresholds. The maximum height of thresholds at doorways shall be $\frac{3}{4}$ inch (19.1 mm). Such thresholds shall have beveled edges on each side.

3411.9 Historic buildings. These provisions shall apply to facilities designated as historic structures that undergo *alterations* or a change of occupancy, unless *technically infeasible*. Where compliance with the requirements for *accessible routes*, entrances or toilet rooms would threaten or destroy the historic significance of the facility, as determined by the applicable governing authority, the alternative requirements of Sections 3411.9.1 through 3411.9.4 for that element shall be permitted.

Exception: *Type B dwelling or sleeping units* required by Section 1107 are not required to be provided in historical buildings.

3411.9.1 Site arrival points. At least one *accessible* route from a site arrival point to an *accessible* entrance shall be provided.

3411.9.2 **Multilevel buildings and facilities.** An *accessible route* from an *accessible* entrance to public spaces on the level of the *accessible* entrance shall be provided.

3411.9.3 **Entrances.** At least one main entrance shall be *accessible*.

Exceptions:

1. If a main entrance cannot be made *accessible*, an *accessible* nonpublic entrance that is unlocked while the building is occupied shall be provided; or
2. If a main entrance cannot be made *accessible*, a locked *accessible* entrance with a notification system or remote monitoring shall be provided.

Signs complying with Section 1111 shall be provided at the primary entrance and the *accessible* entrance.

3411.9.4 **Toilet and bathing facilities.** Where toilet rooms are provided, at least one *accessible* family or assisted-use toilet room complying with Section 1109.2.1 shall be provided.

SECTION 3412

COMPLIANCE ALTERNATIVES

3412.1 **Compliance.** The provisions of this section are intended to maintain or increase the current degree of public safety, health and general welfare in existing buildings while permitting repair, *alteration*, *addition* and change of occupancy without requiring full compliance with Chapters 2 through 33, or Sections 3401.3, and 3403 through 3409, except where compliance with other provisions of this code is specifically required in this section.

3412.2 **Applicability.** Structures existing prior to [DATE TO BE INSERTED BY THE JURISDICTION. NOTE: IT IS RECOMMENDED THAT THIS DATE COINCIDE WITH THE EFFECTIVE DATE OF BUILDING CODES WITHIN THE JURISDICTION], in which there is work involving *additions*, *alterations* or changes of occupancy shall be made to comply with the requirements of this section or the provisions of Sections 3403 through 3409. The provisions in Sections 3412.2.1 through 3412.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, S and U. These provisions shall not apply to buildings with occupancies in Group H or I.

3412.2.1 **Change in occupancy.** Where an existing building is changed to a new occupancy classification and this section is applicable, the provisions of this section for the new occupancy shall be used to determine compliance with this code.

3412.2.2 **Partial change in occupancy.** Where a portion of the building is changed to a new occupancy classification, and that portion is separated from the remainder of the building with *fire barriers* or *horizontal assemblies* having a *fire-resistance rating* as required by Table 508.4 for the separate occupancies, or with *approved* compliance alternatives, the portion changed shall be made to comply with the provisions of this section.

Where a portion of the building is changed to a new occupancy classification, and that portion is not separated from the remainder of the building with *fire barriers* or *horizontal assemblies* having a *fire-resistance rating* as required by Table 508.4 for the separate occupancies, or with *approved* compliance alternatives, the provisions of this section which apply to each occupancy shall apply to the entire building. Where there are conflicting provisions, those requirements which secure the greater public safety shall apply to the entire building or structure.

3412.2.3 **Additions.** *Additions* to existing buildings shall comply with the requirements of this code for new construction. The combined height and area of the existing building and the new *addition* shall not exceed the height

and area allowed by Chapter 5. Where a *fire wall* that complies with Section 706 is provided between the *addition* and the existing building, the *addition* shall be considered a separate building.

3412.2.4 Alterations and repairs. An existing building or portion thereof, which does not comply with the requirements of this code for new construction, shall not be altered or repaired in such a manner that results in the building being less safe or sanitary than such building is currently. If, in the *alteration* or repair, the current level of safety or sanitation is to be reduced, the portion altered or repaired shall conform to the requirements of Chapters 2 through 12 and Chapters 14 through 33.

3412.2.4.1 Flood hazard areas. For existing buildings located in *flood hazard areas* established in Section 1612.3, if the *alterations* and *repairs* constitute *substantial improvement* of the existing building, the existing building shall be brought into compliance with the requirements for new construction for flood design.

3412.2.5 Accessibility requirements. All portions of the buildings proposed for change of occupancy shall conform to the accessibility provisions of Section 3411.

3412.3 Acceptance. For *repairs*, *alterations*, *additions* and changes of occupancy to existing buildings that are evaluated in accordance with this section, compliance with this section shall be accepted by the *building official*.

3412.3.1 Hazards. Where the *building official* determines that an unsafe condition exists, as provided for in Section 116, such unsafe condition shall be abated in accordance with Section 116.

3412.3.2 Compliance with other codes. Buildings that are evaluated in accordance with this section shall comply with the *International Fire Code* and the *International Property Maintenance Code*.

3412.4 Investigation and evaluation. For proposed work covered by this section, the building owner shall cause the existing building to be investigated and evaluated in accordance with the provisions of this section.

3412.4.1 Structural analysis. The owner shall have a structural analysis of the existing building made to determine adequacy of structural systems for the proposed *alteration*, *addition* or change of occupancy. The analysis shall demonstrate that the building with the work completed is capable of resisting the loads specified in Chapter 16.

3412.4.2 Submittal. The results of the investigation and evaluation as required in Section 3412.4, along with proposed compliance alternatives, shall be submitted to the *building official*.

3412.4.3 Determination of compliance. The *building official* shall determine whether the existing building, with the proposed *addition*, *alteration* or change of occupancy, complies with the provisions of this section in accordance with the evaluation process in Sections 3412.5 through 3412.9.

3412.5 Evaluation. The evaluation shall be comprised of three categories: fire safety, means of egress and general safety, as defined in Sections 3412.5.1 through 3412.5.3.

3412.5.1 Fire safety. Included within the fire safety category are the structural fire resistance, automatic fire detection, fire alarm, automatic sprinkler system and fire suppression system features of the facility.

3412.5.2 Means of egress. Included within the means of egress category are the configuration, characteristics and support features for *means of egress* in the facility.

3412.5.3 General safety. Included within the general safety category are the fire safety parameters and the means of egress parameters.

3412.6 Evaluation process. The evaluation process specified herein shall be followed in its entirety to evaluate existing buildings. Table 3412.7 shall be utilized for tabulating the results of the evaluation. References to other

sections of this code indicate that compliance with those sections is required in order to gain credit in the evaluation herein outlined. In applying this section to a building with mixed occupancies, where the separation between the mixed occupancies does not qualify for any category indicated in Section 3412.6.16, the score for each occupancy shall be determined and the lower score determined for each section of the evaluation process shall apply to the entire building.

Where the separation between mixed occupancies qualifies for any category indicated in Section 3412.6.16, the score for each occupancy shall apply to each portion of the building based on the occupancy of the space.

3412.6.1 Building height. The value for building height shall be the lesser value determined by the formula in Section 3412.6.1.1. Chapter 5 shall be used to determine the allowable height of the building, including allowable increases due to automatic sprinklers as provided for in Section 504.2. Subtract the actual *building height* in feet from the allowable and divide by 12 ¹/₂ feet. Enter the height value and its sign (positive or negative) in Table 3412.7 under Safety Parameter 3412.6.1, Building Height, for fire safety, means of egress and general safety. The maximum score for a building shall be 10.

3412.6.1.1 Height formula. The following formulas shall be used in computing the *building height* value.

$$\text{Height value, feet} = \frac{(AH) - (EBH)}{12.5} \times CF$$

(Equation 34-1)

$$\text{Height value, feet} = (AS - EBS) \times CF$$

(Equation 34-2)

where:

AH = Allowable height in feet from 2012 IBC Table 503.

EBH = Existing *building height* in feet.

AS = Allowable height in stories from 2012 IBC Table 503.

EBS = Existing *building height* in stories.

CF = 1 if *(AH) - (EBH)* is positive.

CF = Construction-type factor shown in Table 3412.6.6(2) if *(AH) - (EBH)* is negative.

Note: Where mixed occupancies are separated and individually evaluated as indicated in Section 3412.6, the values *AH*, *AS*, *EBH* and *EBS* shall be based on the height of the occupancy being evaluated.

3412.6.2 Building area. The value for building area shall be determined by the formula in Section 3412.6.2.2. Section 503 and the formula in Section 3412.6.2.1 shall be used to determine the allowable area of the building. This shall include any allowable increases due to frontage and automatic sprinklers as provided for in Section 506. Subtract the actual *building area* in square feet from the allowable area and divide by 1,200 square feet. Enter the area value and its sign (positive or negative) in Table 3412.7 under Safety Parameter 3412.6.2, Building Area, for fire safety, means of egress and general safety. In determining the area value, the maximum permitted positive value for area is 50 percent of the fire safety score as *listed* in Table 3412.8, Mandatory Safety Scores.

3412.6.2.1 **Allowable area formula.** The following formula shall be used in computing allowable area:

$$A_a = [A_t + (A_t \times I_f) + (A_t \times I_s)] \quad \text{(Equation 34-3)}$$

where:

A_a = Allowable *building area* per story (square feet).

A_t = Tabular *building area* per story in accordance with 2012 IBC Table 503. (square feet).

I_s = Area increase factor due to sprinkler protection as calculated in accordance with 2012 IBC Section 506.3.

I_f = Area increase factor due to for frontage as calculated in accordance with 2012 IBC Section 506.2.

3412.6.2.2 **Area formula.** The following formula shall be used in computing the area value. Determine the area value for each occupancy floor area on a floor-by-floor basis. For each occupancy, choose the minimum area value of the set of values obtained for the particular occupancy

$$\text{Area value } i = \frac{\text{Allowable area } i}{1,200 \text{ square feet}} \left[1 - \left(\frac{\text{Actual area } i}{\text{Allowable area } i} + \dots + \frac{\text{Actual area } n}{\text{Allowable area } n} \right) \right]$$

(Equation 34-4)

where:

i = Value for an individual separated occupancy on a floor.

n = Number of separated occupancies on a floor.

3412.6.3 **Compartmentation.** Evaluate the compartments created by *fire barriers* or *horizontal assemblies* which comply with Sections 3412.6.3.1 and 3412.6.3.2 and which are exclusive of the wall elements considered under Sections 3412.6.4 and 3412.6.5. Conforming compartments shall be figured as the net area and do not include shafts, chases, *stairways*, walls or columns. Using Table 3412.6.3, determine the appropriate compartmentation value (CV) and enter that value into Table 3412.7 under Safety Parameter 3412.6.3, Compartmentation, for fire safety, means of egress and general safety.

3412.6.3.1 **Wall construction.** A wall used to create separate compartments shall be a *fire barrier* conforming to Section 707 with a *fire-resistance rating* of not less than 2 hours. Where the building is not divided into more than one compartment, the compartment size shall be taken as the total floor area on all floors. Where there is more than one compartment within a *story*, each compartmented area on such *story* shall be provided with a *horizontal exit* conforming to Section 1026. The *fire door* serving as the *horizontal exit* between compartments shall be so installed, fitted and gasketed that such *fire door* will provide a substantial barrier to the passage of smoke.

3412.6.3.2 **Floor/ceiling construction.** A floor/ceiling assembly used to create compartments shall conform to Section 711 and shall have a *fire-resistance rating* of not less than 2 hours.

3412.6.4 **Tenant and dwelling unit separations.** Evaluate the *fire-resistance rating* of floors and walls separating tenants, including *dwelling units*, and not evaluated under Sections 3412.6.3 and 3412.6.5. Under the categories and occupancies in Table 3412.6.4, determine the appropriate value and enter that value in Table 3412.7 under Safety Parameter 3412.6.4, Tenant and Dwelling Unit Separations, for fire safety, means of egress and general safety.

Table 3412.6.4

SEPARATION VALUES

OCCUPANCY	CATEGORIES				
	a	b	c	d	e
A-1	0	0	0	0	1
A-2	-5	-3	0	1	3
A-3, A-4, B, E, F, M, S-1	-4	-3	0	2	4
R	-4	-2	0	2	4
S-2	-5	-2	0	2	4

3412.6.4.1 **Categories.** The categories for tenant and *dwelling unit* separations are:

1. Category a—No *fire partitions*; incomplete *fire partitions*; no doors; doors not self-closing or automatic-closing.
2. Category b—*Fire partitions* or floor assemblies with less than a 1-hour *fire-resistance rating* or not constructed in accordance with Sections 708 or 711.
3. Category c—*Fire partitions* with a 1-hour or greater *fire-resistance rating* constructed in accordance with Section 708 and floor assemblies with a 1-hour but less than 2-hour *fire-resistance rating* constructed in accordance with Section 711, or with only one tenant within the floor area.
4. Category d—*Fire barriers* with a 1-hour but less than 2-hour *fire-resistance rating* constructed in accordance with Section 707 and floor assemblies with a 2-hour or greater *fire-resistance rating* constructed in accordance with Section 711.
5. Category e—*Fire barriers* and floor assemblies with a 2-hour or greater *fire-resistance rating* and constructed in accordance with Sections 707 and 711, respectively.

3412.6.5 **Corridor walls.** Evaluate the *fire-resistance rating* and degree of completeness of walls which create *corridors* serving the floor, and constructed in accordance with Section 1020. This evaluation shall not include the wall elements considered under Sections 3412.6.3 and 3412.6.4. Under the categories and groups in Table 3412.6.5, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.5, Corridor Walls, for fire safety, means of egress and general safety.

Table 3412.6.5

CORRIDOR WALL VALUES

OCCUPANCY	CATEGORIES			
	a	b	c ^a	d ^a
A-1	-10	-4	0	2
A-2	-30	-12	0	2
A-3, F, M, R, S-1	-7	-3	0	2

OCCUPANCY	CATEGORIES			
	a	b	c ^a	d ^a
A-4, B, E, S-2	-5	-2	0	5

a. Corridors not providing at least one-half the travel distance for all occupants on a floor shall be category b.

3412.6.5.1 **Categories.** The categories for Corridor Walls are:

1. Category a-No *fire partitions*; incomplete *fire partitions*; no doors; or doors not self-closing.
2. Category b-Less than 1-hour *fire-resistance rating* or not constructed in accordance with Section 708.4.
3. Category c-1-hour to less than 2-hour *fire-resistance rating*, with doors conforming to Section 716 or without *corridors* as permitted by Section 1020.
4. Category d-2-hour or greater *fire-resistance rating*, with doors conforming to Section 716.

3412.6.6 **Vertical openings.** Evaluate the *fire-resistance rating* of *exit* enclosures, hoistways, escalator openings and other shaft enclosures within the building, and openings between two or more floors. Table 3412.6.6(1) contains the appropriate protection values. Multiply that value by the construction type factor found in Table 3412.6.6(2). Enter the vertical opening value and its sign (positive or negative) in Table 3412.7 under Safety Parameter 3412.6.6, Vertical Openings, for fire safety, means of egress, and general safety. If the structure is a one-story building or if all the unenclosed vertical openings within the building conform to the requirements of Section 712, enter a value of 2. The maximum positive value for this requirement shall be 2.

Table 3412.6.6(1)

VERTICAL OPENING PROTECTION VALUE

PROTECTION	VALUE
None (unprotected opening)	-2 times number floors connected
Less than 1 hour	-1 times number floors connected
1 to less than 2 hours	1
2 hours or more	2

Table 3412.6.6(2)

CONSTRUCTION-TYPE FACTOR

FACTOR	TYPE OF CONSTRUCTION								
	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
	1.2	1.5	2.2	3.5	2.5	3.5	2.3	3.3	7

3412.6.6.1 **Vertical opening formula.** The following formula shall be used in computing vertical opening value.

$$VO = PV \times CF$$

(Equation 34-5)

where:

VO = Vertical opening value.

PV = Protection value [Table 3412.6.6(1)].

CF = Construction type factor [Table 3412.6.6(2)].

3412.6.7 HVAC systems. Evaluate the ability of the HVAC system to resist the movement of smoke and fire beyond the point of origin. Under the categories in Section 3412.6.7.1, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.7, HVAC Systems, for fire safety, means of egress and general safety.

Table 3412.6.3

COMPARTMENTATION VALUES

OCCUPANCY	CATEGORIES ^a				
	a Compartment size equal to or greater than 15,000 square feet	b Compartment size of 10,000 square feet	c Compartment size of 7,500 square feet	d Compartment size of 5,000 square feet	e Compartment size of 2,500 square feet or less
A-1, A-3	0	6	10	14	18
A-2	0	4	10	14	18
A-4, B, E, S-2	0	5	10	15	20
F, M, R, S-1	0	4	10	16	22

For SI: 1 square foot = 0.093 m².

a. For areas between categories, the compartmentation value shall be obtained by linear interpolation.

3412.6.7.1 Categories. The categories for HVAC systems are:

1. Category a-Plenums not in accordance with Section 602 of the *International Mechanical Code*. -10 points.
2. Category b-Air movement in egress elements not in accordance with Section 1020.5. -5 points.
3. Category c-Both categories a and b are applicable. -15 points.
4. Category d-Compliance of the HVAC system with Section 1018.5 and Section 602 of the *International Mechanical Code*. 0 points.
5. Category e-Systems serving one *story*; or a central boiler/chiller system without ductwork connecting two or more stories. 5 points.

3412.6.8 Automatic fire detection. Evaluate the smoke detection capability based on the location and operation of *automatic fire detectors* in accordance with Section 907 and the *International Mechanical Code*. Under the categories and occupancies in Table 3412.6.8, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.8, Automatic Fire Detection, for fire safety, means of egress and general safety.

Table 3412.6.8**AUTOMATIC FIRE DETECTION VALUES**

OCCUPANCY	CATEGORIES				
	a	b	c	d	e
A-1, A-3, F, M, R, S-1	-10	-5	0	2	6
A-2	-25	-5	0	5	9
A-4, B, E, S-2	-4	-2	0	4	8

3412.6.8.1 **Categories.** The categories for automatic fire detection are:

1. Category a—None.
2. Category b—Existing *smoke detectors* in HVAC systems and maintained in accordance with the *International Fire Code*.
3. Category c—*Smoke detectors* in HVAC systems. The detectors are installed in accordance with the requirements for new buildings in the *International Mechanical Code*.
4. Category d—*Smoke detectors* throughout all floor areas other than individual *sleeping units*, tenant spaces and *dwelling units*.
5. Category e—*Smoke detectors* installed throughout the floor area.

3412.6.9 **Fire alarm systems.** Evaluate the capability of the *fire alarm system* in accordance with Section 907. Under the categories and occupancies in Table 3412.6.9, determine the appropriate value and enter that value into

Table 3412.7 under Safety Parameter 3412.6.9, Fire Alarm Systems, for fire safety, means of egress and general safety.

Table 3412.6.9**FIRE ALARM SYSTEM VALUES**

OCCUPANCY	CATEGORIES			
	a	b ^a	c	d
A-1, A-2, A-3, A-4, B, E, R	-10	-5	0	5
F, M, S	0	5	10	15

a. For buildings equipped throughout with an *automatic sprinkler system*, add 2 points for activation by a sprinkler waterflow device.

3412.6.9.1 **Categories.** The categories for *fire alarm systems* are:

1. Category a—None.
2. Category b—*Fire alarm system* with *manual fire alarm boxes* in accordance with Section 907.4 and alarm notification appliances in accordance with Section 907.5.2.

3. Category c—*Fire alarm system* in accordance with Section 907.

4. Category d—Category c plus a required *emergency voice/alarm communications* system and a *fire command center* that conforms to Section 403.4.6 and contains the *emergency voice/alarm communications* system controls, fire department communication system controls and any other controls specified in Section 911 where those systems are provided.

3412.6.10 Smoke control. Evaluate the ability of a natural or mechanical venting, exhaust or pressurization system to control the movement of smoke from a fire. Under the categories and occupancies in Table 3412.6.10, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.10, Smoke Control, for means of egress and general safety.

Table 3412.6.10

SMOKE CONTROL VALUES

OCCUPANCY	CATEGORIES					
	a	b	c	d	e	f
A-1, A-2, A-3	0	1	2	3	6	6
A-4, E	0	0	0	1	3	5
B, M, R	0	2 ^a	3 ^a	3 ^a	3 ^a	4 ^a
F, S	0	2 ^a	2 ^a	3 ^a	3 ^a	3 ^a

a. This value shall be 0 if compliance with Category d or e in Section 3412.6.8.1 has not been obtained.

3412.6.10.1 Categories. The categories for smoke control are:

1. Category a—None.

2. Category b—The building is equipped throughout with an *automatic sprinkler system*. Openings are provided in exterior walls at the rate of 20 square feet (1.86 m²) per 50 linear feet (15 240 mm) of *exterior wall* in each *story* and distributed around the building perimeter at intervals not exceeding 50 feet (15 240 mm). Such openings shall be readily openable from the inside without a key or separate tool and shall be provided with ready access thereto. In lieu of operable openings, clearly and permanently marked tempered glass panels shall be used.

3. Category c—One enclosed *exit stairway*, with ready access thereto, from each occupied floor of the building. The *stairway* has operable exterior windows and the building has openings in accordance with Category b.

4. Category d—One *smokeproof enclosure* and the building has openings in accordance with Category b.

5. Category e—The building is equipped throughout with an *automatic sprinkler system*. Each floor area is provided with a mechanical air-handling system designed to accomplish smoke containment. Return and exhaust air shall be moved directly to the outside without recirculation to other floor areas of the building under fire conditions. The system shall exhaust not less than six air changes per hour from the floor area. Supply air by mechanical means to the floor area is not required. Containment of smoke shall be considered as confining smoke to the floor area involved without migration to other floor areas. Any other tested and *approved* design which will adequately accomplish smoke containment is permitted.

6. Category f—Each *stairway* shall be one of the following: a *smokeproof enclosure* in accordance with Section 1023.11; pressurized in accordance with Section 909.20.5 or shall have operable exterior windows.

3412.6.11 Means of egress capacity and number. Evaluate the *means of egress* capacity and the number of exits available to the building occupants. In applying this section, the *means of egress* are required to conform to the following sections of this code: 1003.7, 1004, 1005, 1006, 1007, 1016.2, 1017.2, 1026.1, 1029.2, 1028.5, 1029.2, 1029.3, 1029.4 and 1030. The number of exits credited is the number that is available to each occupant of the area being evaluated. Existing fire escapes shall be accepted as a component in the *means of egress* when conforming to Section 3406.

Under the categories and occupancies in Table 3412.6.11, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.11, Means of Egress Capacity, for means of egress and general safety.

Table 3412.6.11

MEANS OF EGRESS VALUES

OCCUPANCY	CATEGORIES				
	a ^a	b	c	d	e
A-1, A-2, A-3, A-4, E	-10	0	2	8	10
M	-3	0	1	2	4
B, F, S	-1	0	0	0	0
R	-3	0	0	0	0

a. The values indicated are for buildings six stories or less in height. For buildings over six stories above grade plane, add an additional -10 points.

3412.6.11.1 Categories. The categories for Means of Egress Capacity and number of *exits* are:

1. Category a—Compliance with the minimum required *means of egress* capacity or number of *exits* is achieved through the use of a fire escape in accordance with Section 3406.
2. Category b—Capacity of the *means of egress* complies with Section 1004 and the number of *exits* complies with the minimum number required by Section 1006.
3. Category c—Capacity of the *means of egress* is equal to or exceeds 125 percent of the required *means of egress* capacity, the *means of egress* complies with the minimum required width dimensions specified in the code and the number of *exits* complies with the minimum number required by Section 1006.
4. Category d—The number of *exits* provided exceeds the number of *exits* required by Section 1006. *Exits* shall be located a distance apart from each other equal to not less than that specified in Section 1006.
5. Category e—The area being evaluated meets both Categories c and d.

3412.6.12 Dead ends. In spaces required to be served by more than one *means of egress*, evaluate the length of the *exit* access travel path in which the building occupants are confined to a single path of travel. Under the categories and occupancies in Table 3412.6.12, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.12, Dead Ends, for means of egress and general safety.

Table 3412.6.12

DEAD-END VALUES

OCCUPANCY	CATEGORIES ^a		
	a	b	c
A-1, A-3, A-4, B, E, F, M, R, S	-2	0	2
A-2, E	-2	0	2

a. For dead-end distances between categories, the dead-end value shall be obtained by linear interpolation.

3412.6.12.1 **Categories.** The categories for dead ends are:

1. Category a—Dead end of 35 feet (10 670 mm) in nonsprinklered buildings or 70 feet (21 340 mm) in sprinklered buildings.
2. Category b—Dead end of 20 feet (6096 mm); or 50 feet (15 240 mm) in Group B in accordance with Section 1020.4, exception 2.
3. Category c—No dead ends; or ratio of length to width (l/w) is less than 2.5:1.

3412.6.13 **Maximum exit access travel distance.** Evaluate the length of *exit access* travel to an *approved exit*. Determine the appropriate points in accordance with the following equation and enter that value into Table 3412.7 under Safety Parameter 3412.6.13, Maximum Exit Access Travel Distance, for means of egress and general safety. The maximum allowable *exit access* travel distance shall be determined in accordance with Section 1017.1.

$$\text{Points} = 20 \times \frac{\text{Maximum allowable travel distance} - \text{Maximum actual travel distance}}{\text{Max. allowable travel distance}}$$

(Equation 34-6)

3412.6.14 **Elevator control.** Evaluate the passenger elevator equipment and controls that are available to the fire department to reach all occupied floors. Emergency recall and in-car operation of elevator recall controls shall be provided in accordance with the *International Fire Code*. Under the categories and occupancies in Table 3412.6.14, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.14, Elevator Control, for fire safety, means of egress and general safety. The values shall be zero for a single-story building.

3412.6.14.1 **Categories.** The categories for elevator controls are:

1. Category a—No elevator.
2. Category b—Any elevator without Phase I emergency recall operation and Phase II emergency in-car operation.
3. Category c—All elevators with Phase I emergency recall operation and Phase II emergency in-car operation as required by the *International Fire Code*.
4. Category d—All meet Category c; or Category b where permitted to be without Phase I emergency recall operation and Phase II emergency in-car operation; and at least one elevator that complies with new construction requirements serves all occupied floors.

3412.6.15 **Means of egress emergency lighting.** Evaluate the presence of and reliability of *means of egress* emergency lighting. Under the categories and occupancies in Table 3412.6.15, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.15, Means of Egress Emergency Lighting, for means of egress and general safety.

Table 3412.6.15**MEANS OF EGRESS EMERGENCY LIGHTING VALUES**

NUMBER OF EXITS REQUIRED BY SECTION 1007	CATEGORIES		
	a	b	c
Two or more exits	NP	0	4
Minimum of one exit	0	1	1

3412.6.15.1 **Categories.** The categories for means of egress emergency lighting are:

1. Category a—*Means of egress* lighting and *exit* signs not provided with emergency power in accordance with Chapter 27.
2. Category b—*Means of egress* lighting and *exit* signs provided with emergency power in accordance with Chapter 27.
3. Category c—Emergency power provided to *means of egress* lighting and exit signs which provides protection in the event of power failure to the site or building.

3412.6.16 **Mixed occupancies.** Where a building has two or more occupancies that are not in the same occupancy classification, the separation between the mixed occupancies shall be evaluated in accordance with this section. Where there is no separation between the mixed occupancies or the separation between mixed occupancies does not qualify for any of the categories indicated in Section 3412.6.16.1, the building shall be evaluated as indicated in Section 3412.6 and the value for mixed occupancies shall be zero. Under the categories and occupancies in Table 3412.6.16, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.16, Mixed Occupancies, for fire safety and general safety. For buildings without mixed occupancies, the value shall be zero.

Table 3412.6.14**ELEVATOR CONTROL VALUES**

ELEVATOR TRAVEL	CATEGORIES			
	a	b	c	d
Less than 25 feet of travel above or below the primary level of elevator access for emergency fire-fighting or rescue personnel	-2	0	0	+2
Travel of 25 feet or more above or below the primary level of elevator access for emergency fire-fighting or rescue personnel	-4	NP	0	+4

For SI: 1 foot = 304.8 mm.

NP = Not permitted

Table 3412.6.16**MIXED OCCUPANCY VALUES^a**

OCCUPANCY	CATEGORIES		
	a	b	c
A-1, A-2, R	-10	0	10
A-3, A-4, B, E, F, M, S	-5	0	5

a. For fire-resistance ratings between categories, the value shall be obtained by linear interpolation.

3412.6.16.1 **Categories.** The categories for mixed occupancies are:

1. Category a—Occupancies separated by minimum 1-hour *fire barriers* or minimum 1-hour *horizontal assemblies*, or both.
2. Category b—Separations between occupancies in accordance with Section 508.4.
3. Category c—Separations between occupancies having a *fire-resistance rating* of not less than twice that required by Section 508.4.4.

3412.6.17 **Automatic sprinklers.** Evaluate the ability to suppress a fire based on the installation of an *automatic sprinkler system* in accordance with Section 903.3.1.1. "Required sprinklers" shall be based on the requirements of this code. Under the categories and occupancies in Table 3412.6.17, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.17, Automatic Sprinklers, for fire safety, means of egress divided by 2 and general safety.

Table 3412.6.17**SPRINKLER SYSTEM VALUES**

OCCUPANCY	CATEGORIES					
	a	b	c	d	e	f
A-1, A-3, F, M, R, S-1	-6	-3	0	2	4	6
A-2	-4	-2	0	1	2	4
A-4, B, E, S-2	-12	-6	0	3	6	12

3412.6.17.1 **Categories.** The categories for *automatic sprinkler system* protection are:

1. Category a—Sprinklers are required throughout; sprinkler protection is not provided or the sprinkler system design is not adequate for the hazard protected in accordance with Section 903.
2. Category b—Sprinklers are required in a portion of the building; sprinkler protection is not provided or the sprinkler system design is not adequate for the hazard protected in accordance with Section 903.
3. Category c—Sprinklers are not required; none are provided.

4. Category d—Sprinklers are required in a portion of the building; sprinklers are provided in such portion; the system is one which complied with the code at the time of installation and is maintained and supervised in accordance with Section 903.

5. Category e—Sprinklers are required throughout; sprinklers are provided throughout in accordance with Chapter 9.

6. Category f—Sprinklers are not required throughout; sprinklers are provided throughout in accordance with Chapter 9.

3412.6.18 Standpipes. Evaluate the ability to initiate attack on a fire by making a supply of water available readily through the installation of standpipes in accordance with Section 905. Required standpipes shall be based on the requirements of this code. Under the categories and occupancies in Table 3412.6.18, determine the appropriate value and enter that value into Table 3412.7 under Safety Parameter 3412.6.18, Standpipes, for fire safety, means of egress and general safety.

Table 3412.6.18

STANDPIPE SYSTEM VALUES

OCCUPANCY	CATEGORIES			
	a ^a	b	c	d
A-1, A-3, F, M, R, S-1	-6	0	4	6
A-2	-4	0	2	4
A-4, B, E, S-2	-12	0	6	12

a. This option cannot be taken if Category a or b in Section 3412.6.17 is used.

3412.6.18.1 Standpipe. The categories for standpipe systems are:

1. Category a—Standpipes are required; standpipe is not provided or the standpipe system design is not in compliance with Section 905.3.

2. Category b—Standpipes are not required; none are provided.

3. Category c—Standpipes are required; standpipes are provided in accordance with Section 905.

4. Category d—Standpipes are not required; standpipes are provided in accordance with Section 905.

3412.6.19 Incidental uses. Evaluate the protection of incidental uses in accordance with Section 509.4.2. Do not include those where this code requires automatic sprinkler systems throughout the buildings, including *covered or open mall buildings, high-rise buildings*, public garages and unlimited area buildings. Assign the lowest score from Table 3412.6.19 for the building or floor area being evaluated and enter that value into Table 3412.7 under safety Parameter 3412.6.19, Incidental Use Area, for fire safety, means of egress and general safety. If there are no specific occupancy areas in the building or floor area being evaluated, the value shall be zero.

3412.7 Building score. After determining the appropriate data from Section 3412.6, enter those data in Table 3412.7 and total the building score.

3412.8 Safety scores. The values in Table 3412.8 are the required mandatory safety scores for the evaluation process listed in Section 3412.6.

3412.9 Evaluation of building safety. The mandatory safety score in Table 3412.8 shall be subtracted from the building score in Table 3412.7 for each category. Where the final score for any category equals zero or more, the building is in compliance with the requirements of this section for that category. Where the final score for any category is less than zero, the building is not in compliance with the requirements of this section.

3412.9.1 Mixed occupancies. For mixed occupancies, the following provisions shall apply:

1. Where the separation between mixed occupancies does not qualify for any category indicated in Section 3412.6.16, the mandatory safety scores for the occupancy with the lowest general safety score in Table 3412.8 shall be utilized (see Section 3412.6).
2. Where the separation between mixed occupancies qualifies for any category indicated in Section 3412.6.16, the mandatory safety scores for each occupancy shall be placed against the evaluation scores for the appropriate occupancy.

Table 3412.6.19

INCIDENTAL USE AREA VALUES

PROTECTION REQUIRED BY TABLE 509	PROTECTION PROVIDED						
	None	1 Hour	AS	AS with SP	1 Hour and AS	2 Hours	2 Hours and AS
2 Hours and AS	-4	-3	-2	-2	-1	-2	0
2 Hours, or 1 Hour and AS	-3	-2	-1	-1	0	0	0
1 Hour and AS	-3	-2	-1	-1	0	-1	0
1 Hour	-1	0	-1	0	0	0	0
1 Hour, or AS with SP	-1	0	-1	0	0	0	0
AS with SP	-1	-1	-1	0	0	-1	0
1 Hour or AS	-1	0	0	0	0	0	0

AS = Automatic sprinkler system; SP = Smoke partitions (See Section 509.4.2).

Note: For Table 3412.7, see next page.

Table 3412.7

SUMMARY SHEET-BUILDING CODE

Existing occupancy: _____		Proposed occupancy: _____	
Year building was constructed: _____		Number of stories: _____ Height in feet: _____	
Type of construction: _____		Area per floor: _____	
Percentage of open perimeter increase: _____ %			
Completely suppressed: _____		Corridor wall rating: _____	
Compartmentation: _____		Required door closers: Yes__ No _ Fire-resistance	
rating of vertical opening enclosures: _____			
Type of HVAC system: _____, serving number of floors: _____			
Automatic fire detection: _____		Type and location: _____	
Fire alarm system: _____		Type: _____	
Smoke control: _____		Type: _____	
Adequate exit routes: _____		Dead ends: _____ Yes_____ No _____	
Maximum exit access travel distance: _____		Elevator controls: Yes_____ No _____	
Means of egress emergency lighting: Yes_____ No _____		Mixed occupancies: Yes_____ No _____	

SAFETY PARAMETERS	FIRE SAFETY (FS)	MEANS OF EGRESS (ME)	GENERAL SAFETY (GS)
3412.6.1 Building Height			
3412.6.2 Building Area			
3412.6.3 Compartmentation			
3412.6.4 Tenant and Dwelling Unit Separations 3412.6.5 Corridor Walls			
3412.6.6 Vertical Openings			
3412.6.7 HVAC Systems			
3412.6.8 Automatic Fire Detection			
3412.6.9 Fire Alarm Systems			
3412.6.10 Smoke Control	* * * *		
3412.6.11 Means of Egress Capacity	* * * *		
3412.6.12 Dead Ends	* * * *		
3412.6.13 Maximum Exit Access Travel Distance	* * * *		
3412.6.14 Elevator Control	* * * *		
3412.6.15 Means of Egress Emergency Lighting			
3412.6.16 Mixed Occupancies		* * * *	
3412.6.17 Automatic Sprinklers		÷ 2 =	
3412.6.18 Standpipes			
3412.6.19 Incidental Use			
Building score — total value			

* * * *No applicable value to be inserted.

Table 3412.8**MANDATORY SAFETY SCORES^a**

OCCUPANCY	FIRE SAFETY (MFS)	MEANS OF EGRESS (MME)	GENERAL SAFETY (MGS)
A-1	20	31	31
A-2	21	32	32
A-3	22	33	33
A-4, E	29	40	40
B	30	40	40
F	24	34	34
M	23	40	40
R	21	38	38
S-1	19	29	29
S-2	29	39	39

a. MFS = Mandatory Fire Safety;

MME = Mandatory Means of Egress;

MGS = Mandatory General Safety.

Table 3412.9**EVALUATION FORMULAS^a**

FORMULA	T.3412.7			T.3412.8	SCORE	PASS	FAIL
FS-MFS \geq 0	_____	(FS)	-	_____ (MFS) =	_____	_____	_____
ME-MME \geq 0	_____	(ME)	-	_____ (MME) =	_____	_____	_____
GS-MGS \geq 0	_____	(GS)	-	_____ (MGS) =	_____	_____	_____

a. FS = Fire Safety

ME = Means of Egress

GS = General Safety

MFS = Mandatory Fire Safety

MME = Mandatory Means of Egress

MGS = Mandatory General Safety

End of Amendments.

Cite as Ga. Comp. R. & Regs. R. 110-11-1-.24

AUTHORITY: O.C.G.A. § [8-2-20](#) *et seq.*

HISTORY: Original Rule entitled "International Building Code (IBC), 2012 Edition with 2014 Georgia State Amendments" adopted. F. Nov. 13, 2013; eff. Jan. 1, 2014, as specified by the Agency.

Amended: New title, "International Building Code (IBC), 2012 Edition with 2014 and 2015 Georgia State Amendments." F. Nov. 12, 2014; eff. Jan. 1, 2015, as specified by the Agency.

Amended: F. Nov. 17, 2016; eff. Jan. 1, 2017, as specified by the Agency.

Amended: New title, "International Building Code (IBC), 2012 Edition with 2014 and 2015 and 2017 and 2018 Georgia State Amendments." F. Nov. 21, 2017; eff. Jan. 1, 2018, as specified by the Agency.

Amended: New title, "International Building Code (IBC), 2018 Edition with 2020 Georgia State Amendments." F. Dec. 7, 2018; eff. Jan. 1, 2020, as specified by the Agency.

Amended: New title, "International Building Code (IBC), 2018 Edition with 2020 and 2022 Georgia State Amendments." F. Nov. 18, 2021; eff. Jan. 1, 2022, as specified by the Agency.

Amended: New title, "International Building Code (IBC), 2018 Edition with 2020, 2022 and 2024 Georgia State Amendments." F. Oct. 11, 2023; eff. Jan. 1, 2024, as specified by the Agency.

110-11-1-.25 [Effective 1/1/2024] International Residential Code for One- and Two-Family Dwellings (IRC), 2018 Edition with 2020 and 2024 Georgia State Amendment



Georgia State Amendments to the International Residential Code for One- and Two- Family Dwellings (2018 Edition)

Georgia Department of Community Affairs
Community Development Division
60 Executive Park South, N.E.
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Revised January 1, 2024

GEORGIA STATE MINIMUM STANDARD ONE- AND TWO-FAMILY DWELLING CODE

(INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS WITH GEORGIA STATE AMENDMENTS)

The INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2018 Edition, published by the International Code Council, when used in conjunction with these and any other Georgia State Amendments to the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2018 Edition, shall constitute the official *Georgia State Minimum Standard One- and Two-Family Dwelling Code*.

Part IV, Energy Conservation (Chapter 11), is deleted from the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS. Substitute all references to Chapter 11 ENERGY EFFICIENCY with references to the *Georgia State Minimum Standard Energy Code (International Energy Conservation Code with Georgia State Supplements and Amendments)*.

Part VII, Plumbing (Chapters 25 through 33), is deleted from the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS. Substitute for plumbing requirements the *Georgia State Minimum Standard Plumbing Code (International Plumbing Code with Georgia State Amendments)*.

Part VIII, Electrical (Chapters 34 through 43), is deleted from the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS. Substitute for electrical requirements the *Georgia State Minimum Standard Electrical Code (National Electrical Code with any Georgia State Amendments)*.

GEORGIA STATE AMENDMENTS

CODE REFERENCES:

- (a) Replace all references to the ICC *Electrical Code* with references to the *Georgia State Minimum Standard Electrical Code (National Electrical Code with any 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 heating and air conditioning equipment.

SCOPE:

The provisions of the *International Residential Code for One- and Two-family Dwellings* shall apply to the construction, *alteration*, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of 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*.

Exceptions:

1. Live/work units complying with the requirements of Section 419 of the *International Building Code* shall be permitted to be built as one- and two-family *dwellings* or townhouses. Fire suppression required by Section 419.5 of the *International Building Code* when constructed under the *International Residential Code for One- and Two-family Dwellings* shall conform to NFPA 13D.
2. Owner-occupied lodging houses with five or fewer guestrooms shall be permitted to be constructed in accordance with the *International Residential Code for One- and Two-family Dwellings* when equipped with a fire sprinkler system in accordance with NFPA 13D.

IMPORTANT NOTE:

The intent of the GA amendments is that fire sprinklers shall not be mandatory in one- and two-family dwellings. However, the provisions of the 2018 Edition of the *International Residential Code for One- and Two-Family Dwellings* regarding automatic fire sprinklers are to remain in the Code for use when the builder/developer or owner chooses to install fire sprinklers as an option.

{Ref. O.C.G.A. § [8-2-4](#). Neither the state residential and fire building code nor any residential and fire building code adopted by a political subdivision of the state adopted after May 24, 2010, shall include a requirement that fire sprinklers be installed in a single-family dwelling or a residential building that contains no more than two dwelling units.}

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.

**Revise the International Residential Code for One- and Two-Family Dwellings, 2018 Edition, as follows:*

CHAPTER 14

HEATING AND COOLING EQUIPMENT AND APPLIANCES

SECTION M1402

CENTRAL FURNACES

*Revise Section M1402.1 'General' to read as follows:

M1402.1 General

Oil-fired central furnaces shall conform to ANSI/UL 727. Electric furnaces shall conform to UL 1995 or UL/CSA 60335-2-40.

(Effective January 1, 2024)

SECTION M1403

HEAT PUMP EQUIPMENT

*Revise Section M1403.1 'Heat pumps' to read as follows:

M1403.1 Heat pumps

Electric heat pumps shall be listed and labeled in accordance with UL 1995 or UL/CSA 60335-240.

(Effective January 1, 2024)

SECTION M1412

ABSORPTION COOLING EQUIPMENT

*Revise Section M1412.1 'Approval of equipment' to read as follows:

M1412.1 Approval of equipment

Absorption systems shall be installed in accordance with the manufacturer's instructions.

Absorption equipment shall comply with UL 1995 or UL/CSA 60335-2-40.

(Effective January 1, 2024)

SECTION M1413

EVAPORATIVE COOLING EQUIPMENT

*Revise Section M1413.1 'General' to read as follows:

M1413.1 General

Evaporative cooling equipment and appliances shall comply with UL 1995 or UL/CSA 60335-240 and shall be installed:

(Effective January 1, 2024)

CHAPTER 20

BOILERS AND WATER HEATERS

SECTION M2006

POOL HEATERS

*Revise Section M2006.1 'General' to read as follows:

M2006.1 General

Pool and spa heaters shall be installed in accordance with the manufacturer's installation instructions. Oil-fired pool heaters shall comply with UL 726. Electric pool and spa heaters shall comply with UL 12161. Pool and spa heat pump water heaters shall comply with UL 1995, UL/CSA 60335-2-40 or CSA C22.2 No. 236.

(Effective January 1, 2024)

CHAPTER 44

REFERENCED STANDARDS

*Revise Chapter 44 'Referenced standards' to read as follows:

ASHRAE

34-2022

Designation and Safety Classification M1411.1
of Refrigerants

ASHRAE
1791 Tullie Circle NE
Atlanta, GA 30329

UL

1995-2015

Heating and Cooling Equipment

UL/CSA 60335-2-40-2022

Standard for Household and Similar
Electrical Appliances - Safety -, Part
2-40: Particular Requirements for
Electrical Heat Pumps, Air-
Conditioners and Dehumidifiers

UL LLC

333 Pfingsten Road
Northbrook, IL 60062

M1402.1, M1403.1, M1412.1,
M1413.1, M2006.1

M1402.1, M1403.1, M1412.1,
M1413.1, M2006.1



Georgia State Amendments to the International Residential Code for One- and Two- Family Dwellings (2018 Edition)



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Revised January 1, 2020

GEORGIA STATE MINIMUM STANDARD ONE- AND TWO-FAMILY DWELLING CODE

(INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS WITH GEORGIA STATE AMENDMENTS)

The INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2018 Edition, published by the International Code Council, when used in conjunction with these and any other Georgia State Amendments to the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2018 Edition, shall constitute the official *Georgia State Minimum Standard One- and Two-Family Dwelling Code*.

Part IV, Energy Conservation (Chapter 11), is deleted from the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS. Substitute all references to Chapter 11 ENERGY EFFICIENCY with references to the *Georgia State Minimum Standard Energy Code (International Energy Conservation Code with Georgia State Supplements and Amendments)*.

Part VII, Plumbing (Chapters 25 through 33), is deleted from the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS. Substitute for plumbing requirements the *Georgia State Minimum Standard Plumbing Code (International Plumbing Code with Georgia State Amendments)*.

Part VIII, Electrical (Chapters 34 through 43), is deleted from the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS. Substitute for electrical requirements the *Georgia State Minimum Standard Electrical Code (National Electrical Code with any Georgia State Amendments)*.

GEORGIA STATE AMENDMENTS

CODE REFERENCES:

- (a) Replace all references to the ICC *Electrical Code* with references to the *Georgia State Minimum Standard Electrical Code (National Electrical Code with any 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 heating and air conditioning equipment.

SCOPE:

The provisions of the *International Residential Code for One- and Two-family Dwellings* shall apply to the construction, *alteration*, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of 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*.

Exceptions:

1. Live/work units complying with the requirements of Section 419 of the *International Building Code* shall be permitted to be built as one- and two-family *dwellings* or townhouses. Fire suppression required by Section 419.5 of the *International Building Code* when constructed under the *International Residential Code for One- and Two-family Dwellings* shall conform to NFPA 13D.
2. Owner-occupied lodging houses with five or fewer guestrooms shall be permitted to be constructed in accordance with the *International Residential Code for One- and Two-family Dwellings* when equipped with a fire sprinkler system in accordance with NFPA 13D.

IMPORTANT NOTE:

The intent of the GA amendments is that fire sprinklers shall not be mandatory in one- and two-family dwellings. However, the provisions of the 2018 Edition of the *International Residential Code for One- and Two-Family Dwellings* regarding automatic fire sprinklers are to remain in the Code for use when the builder/developer or owner chooses to install fire sprinklers as an option.

{Ref. O.C.G.A. § [8-2-4](#). Neither the state residential and fire building code nor any residential and fire building code adopted by a political subdivision of the state adopted after May 24, 2010, shall include a requirement that fire sprinklers be installed in a single-family dwelling or a residential building that contains no more than two dwelling units.}

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.

**Revise the International Residential Code for One- and Two-Family Dwellings, 2018 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 to use in development of their own *Administrative Procedures*.*

(Effective January 1, 2020)

CHAPTER 2

DEFINITIONS

SECTION R202

DEFINITIONS

**Revise Section R202 'Definitions' for "[RB] Lodging House" to read as follows:*

[RB] LODGING HOUSE. A one-family dwelling with 5 or fewer guestrooms, where one or more occupants are primarily permanent in nature, and rent is paid for guestrooms.

(Effective January 1, 2020)

**Revise Section R202 'Definitions' for "[RB] Townhouse" to read as follows:*

[RB] TOWNHOUSE (ROW HOUSE). A single-family *dwelling unit* constructed in a group of three or more attached units. Each unit extends from foundation to roof, not more than three stories in height, with a separate means of egress, and with an open space/*yard* or public way on at least two sides. Each townhouse shall be considered a separate building with independent exterior walls and shall be separated by a 2-hour fire-resistance-rated wall assembly.

(Effective January 1, 2020)

CHAPTER 3

BUILDING PLANNING

SECTION R302

FIRE-RESISTANT CONSTRUCTION

*Revise Section R302.1 'Exterior walls' to read as follows:

R302.1 Exterior walls. Construction, projections, openings and penetrations of *exterior walls* of *dwelling*s and accessory buildings shall comply with Table R302.1(1); or *dwelling*s equipped throughout with an *automatic sprinkler system* installed in accordance with NFPA 13D shall comply with Table R302.1(2).

(Existing exceptions to remain as written).

(Effective January 1, 2020)

*Revise Section R302.2 'Townhouses' to read as follows:

R302.2 Townhouses. Each *townhouse* shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.

Exception: A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses, if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with the National Electrical Code (NEC). Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

(Effective January 1, 2020)

*Delete Section R302.2.1 'Double walls' without substitution.

(Effective January 1, 2020)

*Delete Section R302.2.2 'Common walls' without substitution.

(Effective January 1, 2020)

*Revise Section R302.2.6 'Structural independence' to delete exception #5 without substitution.

(Effective January 1, 2020)

*Revise Section R302.5.1 'Opening protection' to read as follows:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire rated doors. (Effective January 1, 2020)

*Revise Table R302.6 'DWELLING-GARAGE SEPARATION' to add a new footnote "a" to read as follows:

TABLE R302.6**DWELLING-GARAGE SEPARATION**

SEPARATION	MATERIAL
From the residence and attics	Not less than 1/2-inch gypsum board or equivalent applied to the garage side
From all habitable rooms above the garage	Not less than 5/8-inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section ^a	Not less than 1/2-inch gypsum board or equivalent
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. Separation of floor/ceiling assemblies is not required in garages protected by an automatic sprinkler system that meets the following criteria:

1. The sprinkler system shall be connected to a reliable water supply system with or without an automatic operated pump.
2. A piping system serving both sprinkler and domestic needs shall be acceptable.
3. Ordinary-temperature-rated residential or quick response sprinklers (135°F to 170°F [57°C to 77°C]) with a 1/2-inch (13 mm) orifice shall be installed.
4. The minimum operating pressure of any residential or quick response sprinkler shall be 7 psi (0.5 bar).
5. Walls that resist the passage of smoke shall separate the sprinklered compartment from any other space(s). Openings in this wall shall be regulated by Section R302.5.
6. The maximum area protected by a single sprinkler head shall not exceed 144 ft² (13.4 m²).
7. The maximum distance between sprinklers shall not exceed 12 feet (3.7 m).
8. The maximum distance to a wall or partition shall not exceed 6 feet (1.8 m).
9. The minimum distance between sprinklers within a compartment shall be 8 feet (2.4 m).
10. Pendent and upright sprinkler heads shall be positioned so that the deflectors are within 1 to 4 inches (25.4 to 102 mm) below framing.
11. Sprinkler heads shall be located on a looped piping configuration.
12. Minimum pipe size, including that for copper, listed chlorinated polyvinyl chloride (CPVC), and polybutylene (PB) piping shall be 3/4-inch (19 mm).
13. Garage doors in the open position shall not interfere with the operation of a sprinkler head.

14. A smoke alarm detector shall be installed in accordance with Section R314.

(Effective January 1, 2020)

*Delete Section R302.13 'Fire protection of floors' without substitution.

(Effective January 1, 2020)

SECTION R303

LIGHT, VENTILATION AND HEATING

*Revise Section R303.4 'Mechanical ventilation' to read as follows:

R303.4 Mechanical ventilation. Where the air infiltration rate of a *dwelling unit* is 3 air changes per hour or less where tested with a blower door at a pressure of 0.2 inch w.c. (50 Pa) in accordance with Section N1102.4.1.2, the *dwelling unit* shall be provided with whole-house mechanical ventilation in accordance with Section M1505.4.

(Effective January 1, 2020)

SECTION R306

SANITATION

*Add new Section R306.5 'Exterior hose bibs, sill cocks or outside hydrants' to read as follows:

R306.5 Exterior hose bibs, sill cocks or outside hydrants. One and two-family dwellings shall have not less than two exterior hose bibs, sill cocks or outside hydrants with one being located on the side or rear of the structure.

(Effective January 1, 2020)

*Add new Section R306.6 'Construction worker toilet facilities' to read as follows:

R306.6 Construction worker toilet facilities. Toilet facilities shall be provided for construction workers and such facilities shall be maintained in a sanitary condition. Construction worker toilet facilities of the non-sewer type shall conform to ANSI Z4.3.

(Effective January 1, 2020)

SECTION R309

GARAGES AND CARPORTS

*Delete Section R309.5 'Fire sprinklers' without substitution.

(Effective January 1, 2020)

SECTION R311

MEANS OF EGRESS

*Delete Exception to Section R311.7.11 'Alternating tread devices' without substitution.

(Effective January 1, 2020)

SECTION R312

GUARDS AND WINDOW FALL PROTECTION

*Revise the heading of Section R312 'Guards and Window Fall Protection' to read as follows:

SECTION R312

GUARDS

(Effective January 1, 2020)

*Delete Section R312.2 'Window fall protection' without substitution.

(Effective January 1, 2020)

SECTION R313

AUTOMATIC FIRE SPRINKLER SYSTEMS

*Delete Section R313 'AUTOMATIC FIRE SPRINKLER SYSTEMS' and substitute to read as follows:

SECTION R313

AUTOMATIC FIRE SPRINKLER SYSTEMS

(Optional)

R313.1 Automatic fire sprinkler systems (Optional). Installation of an automatic residential fire sprinkler system shall be optional and not mandatory in one- and two-family *dwelling*s and *townhouses*.

(Effective January 1, 2020)

R313.2 Design and installation. When installed, automatic residential fire sprinkler systems for one- and two-family *dwelling*s and *townhouses* shall be designed and installed in accordance with NFPA 13D.

(Effective January 1, 2020)

*Delete any other code references to Section P2904 'Dwelling unit fire sprinkler systems' and substitute NFPA 13D.

(Effective January 1, 2020)

SECTION R315

CARBON MONOXIDE ALARMS

*Revise Section R315.2.1 'New Construction' to read as follows:

R315.2.1 New construction. For new construction, carbon monoxide alarms shall be provided in dwelling units.

(Effective January 1, 2020)

SECTION R321

ELEVATORS AND PLATFORM LIFTS

*Revise Section R321.1 'Elevators' and add a new Section R321.1.1 'Hoistway opening framing' to read as follows:

R321.1 Elevators. Where provided, limited-use and limited-application elevators or private residence elevators shall comply with ASME A17.1/CSA B44.

(Effective January 1, 2020)

R321.1.1 Hoistway opening framing. Limited-use/limited-application elevators or private residence elevators shall have hoistway landing openings that meet the Georgia amended requirements of ASME A17.1/CSA B44 Sections 5.3.1.1 and 5.3.1.7.2. The clearance between the hoistway doors or gates and the hoistway edge of the landing sill shall not exceed 3/4 inch (19 mm). The distance between the hoistway face of the landing door or gate and the car door or gate shall not exceed 3 inches (75 mm).

(Effective January 1, 2020)

SECTION R322

FLOOD-RESISTANT CONSTRUCTION

*Delete Section R322.1.9 'Manufactured homes' without substitution.

(Effective January 1, 2020)

CHAPTER 5

FLOORS

SECTION R502

WOOD FLOOR FRAMING

*Revise Section R502.6 'Bearing' to read as follows:

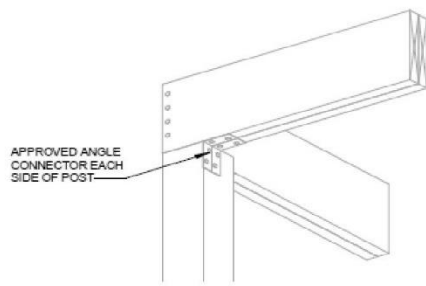
R502.6 Bearing. The ends of each joist, beam or girder shall have not less than 1 ½ inches (38 mm) of bearing on wood or metal, have not less than 3 inches of bearing (76 mm) on masonry or concrete or be supported by *approved* joist hangers. Alternatively, the ends of joists shall be supported on a 1-inch by 4-inch (25 mm by 102 mm) ribbon strip and shall be nailed to the adjacent stud. The bearing on masonry or concrete shall be direct, or a sill plate of 2-inch minimum (51mm) nominal thickness shall be provided under the joist, beam or girder.

(Effective January 1, 2020)

SECTION R507

EXTERIOR DECKS

*Revise Figure R507.5.1(1) 'DECK BEAM TO DECK POST' to include a new illustration for "Corner Beam Over Post" as follows:



CORNER BEAM OVER POST

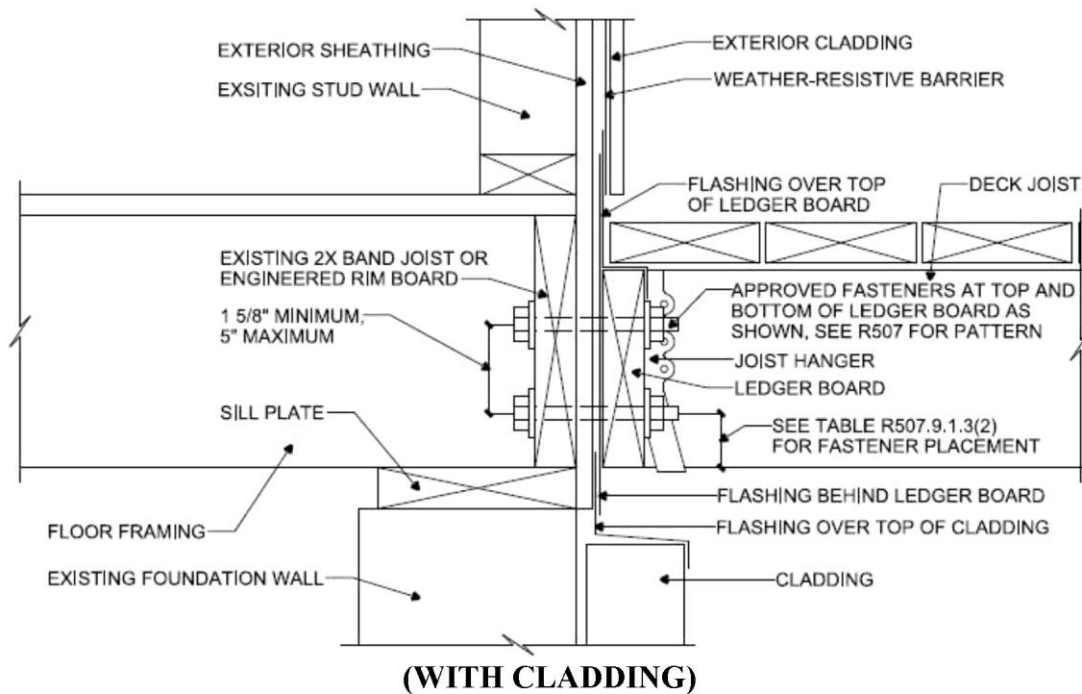
(Effective January 1, 2020)

*Revise R507.9.1.3 'Ledger to band joist details' to read as follows:

R507.9.1.3 Ledger to band joist details. Fasteners used in deck ledger connections in accordance with Table R507.9.1.3(1) shall be hot-dipped galvanized, stainless steel, or other approved fasteners and shall be installed in accordance with Table R507.9.1.3(2) and Figures R507.9.1.3(1) and R507.9.1.3(2).

(Effective January 1, 2020)

*Revise Figure R507.9.1.3(2) 'Placement of Lag Screws and Bolts in Band Joists' as follows:



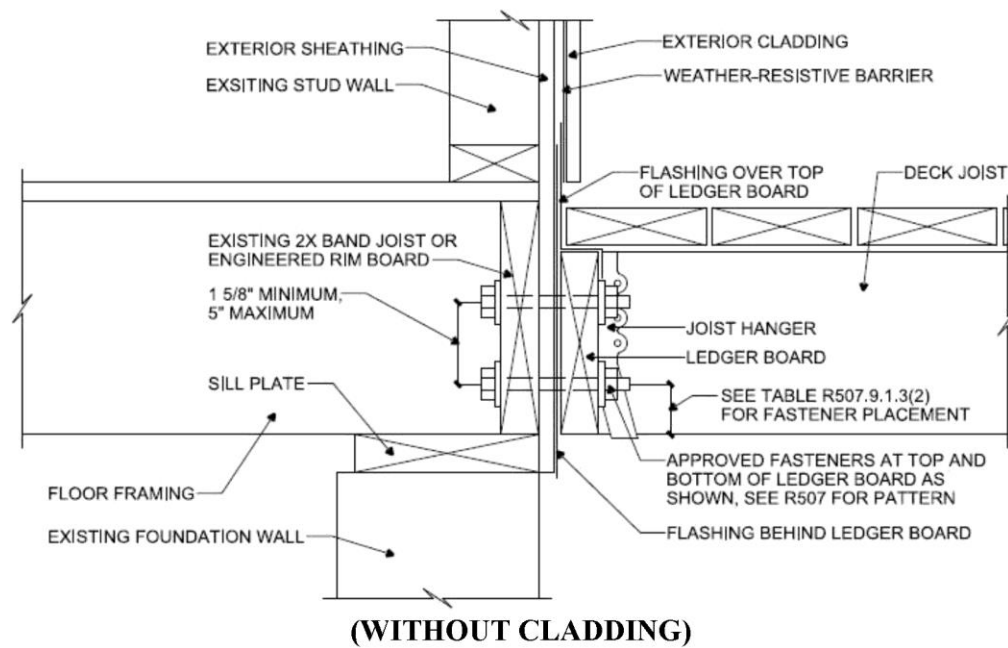


FIGURE R507.9.1.3(2)

PLACEMENT LAG SCREWS AND BOLTS IN BAND JOISTS

(Effective January 1, 2020)

*Revise Figure R507.9.2(1) 'Deck Attachment for Lateral Loads' as follows:

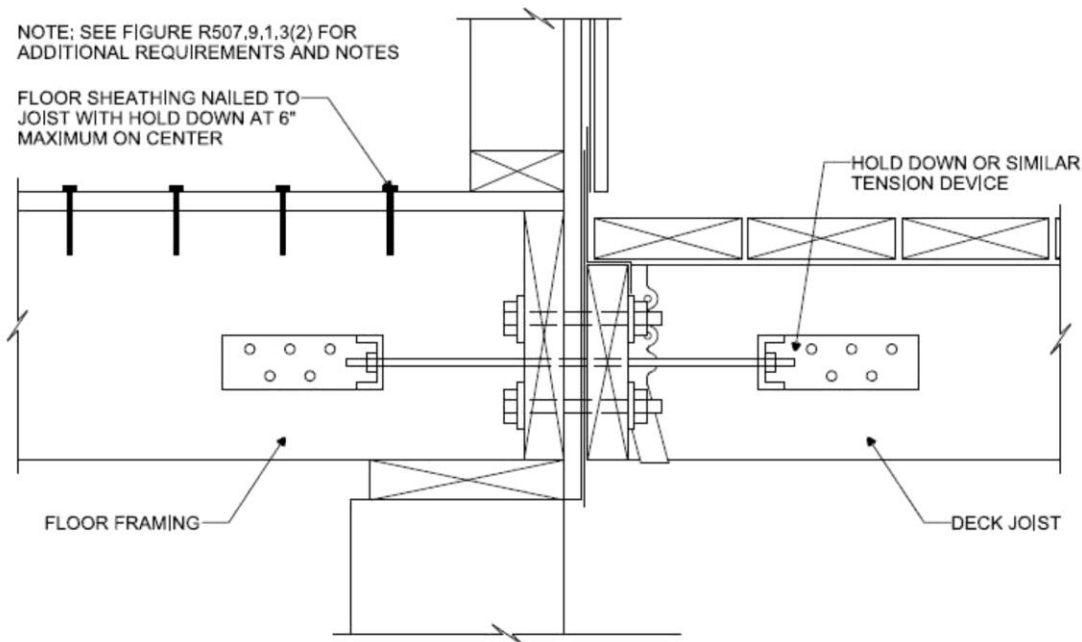


FIGURE R507.9.2(1)

DECK ATTACHMENT FOR LATERAL LOADS

(Effective January 1, 2020)

*Revise Figure R507.9.2(2) 'Deck Attachment for Lateral Loads' and as follows:

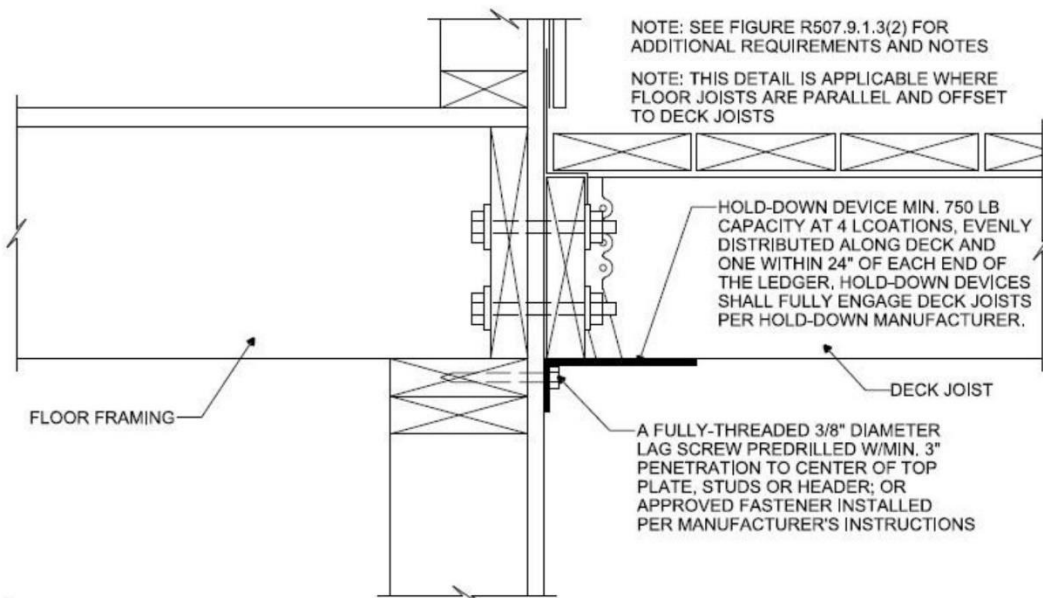


FIGURE R507.9.2(2)

DECK ATTACHMENT FOR LATERAL LOADS

(Effective January 1, 2020)

CHAPTER 6

WALL CONSTRUCTION

SECTION R602

WOOD WALL FRAMING

*Add new exception to R602.10 'Wall bracing' to read as follows:

R602.10 **Wall bracing.** Buildings shall be braced in accordance with this section or, when applicable, Section R602.12. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1.

Exception: APA Simplified Wall Bracing Method, SR-102 may be used as an alternate method of wall bracing subject to limitations in document.

(Effective January 1, 2020)

CHAPTER 8

ROOF-CEILING CONSTRUCTION

SECTION R806

ROOF VENTILATION

*Delete R806.5 'Unvented attic and unvented enclosed rafter assemblies' Item 5.2 without substitution.

(Effective January 1, 2020)

SECTION R807

ATTIC ACCESS

Add new Section R807.1.1 'Attic service access' to read as follows:

R807.1.1 **Attic service access.** 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 13

GENERAL MECHANICAL SYSTEM REQUIREMENTS

SECTION M1301

GENERAL

*Revise Section M1301.2 'Identification' to read as follows:

M1301.2 **Identification.** Each length of pipe and tubing and each pipe fitting 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 gas fuel system, shall bear the identification of the manufacturer.

(Effective January 1, 2020)

CHAPTER 16

DUCT SYSTEMS

SECTION M1601

DUCT CONSTRUCTION

*Delete Section M1601.1.1 'Above-ground duct systems', Item 5 without substitution.

(Effective January 1, 2020)

*Revise Section M1601.1.1 'Above ground duct systems', Item 7.1 as follows:

M1601.1.1 **Above-ground duct systems.** Above-ground *duct systems* shall conform to the following:

7. Stud wall cavities and the spaces between solid floor joists to be used as air plenums shall comply with the following conditions:

7.1 These cavities or spaces shall not be used as a plenum for supply or return air unless all such supply and return ducts are lined with metal, flex duct, duct board or other material that is approved in this section.

(Remainder of section unchanged.)

(Effective January 1, 2020)

CHAPTER 19

SPECIAL APPLIANCES, EQUIPMENT AND SYSTEMS

SECTION M1901

RANGES AND OVENS

*Revise Section M1901.2 'Cooking appliances' to add a new exception to read as follows:

M1901.2 **Cooking appliances.** Cooking *appliances* shall be *listed* and *labeled* for household use and shall be installed in accordance with the manufacturer's instructions. The installation shall not interfere with *combustion air* or access for operation and servicing. Electric cooking appliances shall comply with UL 1026 or UL 858. Solid-fuel-fired fireplace stoves shall comply with UL 737. Microwave ovens shall comply with UL 923.

Exception: Listed and labeled commercial cooking appliances may be installed in dwelling units and domestic kitchens when designed and accepted by a Georgia licensed Professional Engineer.

(Effective January 1, 2020)

CHAPTER 24

FUEL GAS

SECTION G2415 (404)

PIPING SYSTEM INSTALLATION

*Delete Section G2415.6 (404.6) 'Underground penetrations prohibited' and substitute to read as follows:

G2415.6 **(404.6) Piping through foundation wall.** Underground piping where installed below grade through the foundation or basement wall of a building, shall be encased in a protective pipe sleeve. The annular space between the gas piping and the sleeve shall be sealed.

(Effective January 1, 2020)

*Revise Section G2415.7.1 (404.7.1) 'Piping through bored holes or notches' to read as follows:

G2415.7.1 **(404.7.1) Piping through bored holes or notches.** Where *piping* is installed through holes or notches in framing members and the *piping* is located less than 1 1/2 inches (38 mm) from the framing member face to which wall, ceiling or floor membranes will be attached, the pipe shall be protected by shield plates that cover the width of the pipe and the framing member. Where the framing member that the *piping* passes through is a bottom plate, bottom track, top plate or top track, the shield plates shall cover the framing member and extend not less than 4 inches (102 mm) above the bottom framing member and not less than 4 inches (102 mm) below the top framing member.

(Effective January 1, 2020)

*Delete Section G2415.7.2 (404.7.2) 'Piping installed in other locations' without substitution.

(Effective January 1, 2020)

*Delete Section G2415.11.1 (404.11.1) 'Galvanizing' without substitution:

(Effective January 1, 2020)

*Revise Section G2415.18 (404.18) 'Pipe Cleaning' to read as follows:

G2415.18 **(404.18) Pipe debris removal.** The interior of piping shall be clear of debris. The use of a flammable or combustible gas to clean or remove debris from a *piping system* shall be prohibited.

(Effective January 1, 2020)

SECTION G2420 (409)

SHUTOFF VALVES

*Add new Section G2420.2.1 (409.2.1) 'System shutoff valve' to read as follows:

G2420.2.1 **(409.2.1) System Shutoff Valve.** Where the point of delivery is the outlet of the service meter assembly, or the outlet of the service regulator, a system shutoff valve shall be installed. Such valve is considered to be part of the customer piping system.

(Effective January 1, 2020)

SECTION G2423 (413)

COMPRESSED NATURAL GAS MOTOR VEHICLE FUEL-DISPENSING FACILITIES

*Delete Section G2423.1 (413.1) 'General' and substitute to read as follows:

G2423.1 **(413.1) General.** Under Georgia law, the Rules and Regulations of the Georgia Safety Fire Commissioner govern the storage, delivery and dispensing of compressed natural gas. Refer to the Rules and Regulations of the Georgia Safety Fire Commissioner and NFPA 52 for all requirements concerning compressed natural gas motor vehicle fuel-dispensing stations.

(Effective January 1, 2020)

*Add new APPENDIX Q 'TINY HOUSES' to read as follows:

APPENDIX Q

TINY HOUSES

(The provisions contained in this appendix are not mandatory unless specifically referenced in the adopted ordinance.)

SECTION AQ101

GENERAL

AQ101.1 **Scope.** This appendix shall be applicable to *tiny houses* used as single dwelling units. *Tiny houses* shall comply with this code except as otherwise stated in this appendix.

APPENDIX AQ102

DEFINITIONS

AQ102.1 **General.** The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.

EGRESS ROOF ACCESS WINDOW. A *skylight* or roof window designed and installed to satisfy the emergency escape and rescue opening requirements in Section R310.2.

LANDING PLATFORM. A landing provided as the top step of a stairway accessing a *loft*.

LOFT. A floor level located more than 30 inches (762 mm) above the main floor, open to the main floor on one or more sides with a ceiling height of less than 6 feet 8 inches (2032 mm) and used as a living or sleeping space.

LOFT. A floor level located more than 30 inches (762 mm) above the main floor, and open to it on at least one side with a ceiling height of a maximum of 5 feet, used as a living or sleeping space.

TINY HOUSE. A dwelling that is 400 square feet (37 m²) or less in floor area excluding *lofts*.

SECTION AQ103

CEILING HEIGHT

AQ103.1 Minimum ceiling height. *Habitable space* and hallways in *tiny houses* shall have a finished ceiling height of not less than 6 feet 8 inches (2032 mm). Bathrooms, toilet rooms and kitchens shall have a ceiling height of not less than 6 feet 4 inches (1930 mm). Obstructions including, but not limited to, beams, girders, ducts and lighting, shall not extend below these minimum ceiling heights including beams, girders, ducts, lighting and other obstructions.

Exception: Ceiling heights in *lofts* are permitted to be less than 6 feet 8 inches (2032 mm) a maximum of 5 feet (1524 mm).

SECTION AQ104

LOFTS

AQ104.1 Minimum loft area and dimensions. *Lofts* used as a sleeping or living space shall meet the minimum area and dimension requirements of Sections AS104.1.1 through AS104.1.3.

AQ104.1.1 Minimum area. *Lofts* shall have a floor area of not less than 35 square feet (3.25 m²).

AQ104.1.2 Minimum dimensions. *Lofts* shall be not less than 5 feet (1524 mm) in any horizontal dimension.

AQ104.1.3 Height effect on loft area. Portions of a *loft* with a sloped ceiling measuring less than 3 feet (914 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft.

Exception: Under gable roofs with a minimum slope of 6:12, portions of a *loft* with a sloped ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the *loft*.

AQ104.2 Loft access. The access to and primary egress from *lofts* shall be any type described in Sections AQ104.2.1 through AQ104.2.4.

AQ104.2.1 Stairways. Stairways accessing *lofts* shall comply with this code or with Sections AQ104.2.1.1 through AQ104.2.1.6.

AQ104.2.1.1 Width. Stairways accessing a *loft* shall not be less than 17 inches (432 mm) in clear width at or above the handrail. The minimum width below the handrail shall be not less than 20 inches (508 mm).

AQ104.2.1.2 Headroom. The headroom in stairways accessing a *loft* shall be not less than 6 feet 2 inches (1880 mm), as measured vertically, from a sloped line connecting the tread or landing platform nosings in the middle of their width.

AQ104.2.1.3 Treads and risers. Risers for stairs accessing a *loft* shall be not less than 7 inches (178 mm) and not more than 12 inches (305 mm) in height. Tread depth and riser height shall be calculated in accordance with one of the following formulas:

1. The tread depth shall be 20 inches (508 mm) minus $\frac{4}{3}$ of the riser height, or

2. The riser height shall be 15 inches (381 mm) minus 3/4 of the tread depth.

AQ104.2.1.4 Landing platforms. The top tread and riser of stairways accessing *lofts* shall be constructed as a *landing platform* where the *loft* ceiling height is less than 6 feet 2 inches (1880 mm) where the stairway meets the *loft*. The *landing platform* shall be 18 inches to 22 inches (457 to 559 mm) in depth measured from the nosing of the landing platform to the edge of the *loft*, and 16 to 18 inches (406 to 457 mm) in height measured from the *landing platform* to the *loft* floor.

AQ104.2.1.4.1 Landing platform guards. Guards at the open side of landing platforms shall comply with Section R312.1 or shall be at least as high as the *loft* guard; whichever is greater.

AQ104.2.1.5 Handrails. Handrails shall comply with Section R311.7.8.

AQ104.2.1.6 Stairway guards. Guards at open sides of stairways shall comply with Section R312.1.

AQ104.2.2 Ladders. Ladders accessing *lofts* shall comply with Sections AS104.2.2.1 and AS104.2.2.2.

AQ104.2.2.1 Size and capacity. Ladders accessing *lofts* shall have a rung width of not less than 12 inches (305 mm), and 10 inches (254 mm) to 14 inches (356 mm) spacing between rungs. Ladders shall be capable of supporting a 300-pound (75 kg) load on any rung. Rung spacing shall be uniform within 3/8 inch (9.5 mm).

AQ104.2.2.2 Incline. Ladders shall be installed at 70 to 80 degrees from horizontal.

AQ104.2.3 Ships ladders. Ships ladders accessing *lofts* shall have a minimum tread depth of 5 inches (127 mm). The tread shall be projected such that the total of the tread depth plus the nosing projection is no less than 8 1/2 inches (216 mm). The maximum riser height shall be 9 1/2 inches (241 mm). Handrails shall be provided on both sides of ship ladders and shall comply with Section R311.7.8. Handrail height shall be uniform, not less than 30 inches (762 mm) and not more than 34 inches (864). The clear width at and below handrails shall be not less than 20 inches (508 mm). Compliant ship ladders may also access additional stories of a tiny house.

AQ104.2.4 Loft guards. *Loft* guards shall be located along the open side of *lofts*. *Loft* guards shall not be less than 36 inches (914 mm) in height or one-half of the clear height to the ceiling, whichever is less, but no less than 18 inches.

SECTION AQ105

EMERGENCY ESCAPE AND RESCUE OPENINGS

AQ105.1 General. *Tiny houses* shall meet the requirements of Section R310 for emergency escape and rescue openings.

Exception: *Egress roof access windows* in *lofts* used as sleeping rooms shall be deemed to meet the requirements of Section R310 where installed such that the bottom of the opening is not more than 44 inches (1118 mm) above the *loft* floor, provided the *egress roof access window* complies with the minimum opening area requirements of Section R310.2.1.

SECTION AQ106

SMOKE AND CARBON MONOXIDE DETECTORS

AQ106.1 SMOKE AND CARBON MONOXIDE DETECTORS. Smoke and carbon monoxide detectors shall be installed as required in Sections R314 and R315 and on the ceiling directly underneath any *loft* and just below the highest point of any *loft*.

(Effective January 1, 2020)

APPENDIX U

DISASTER RESILIENT CONSTRUCTION

*The Department of Community Affairs hereby adopts Appendix U 'Disaster Resilient Construction' as optional. This document is available to download free from DCA's webpage at:

https://dca.ga.gov/sites/default/files/appendix_u_-_irc_-_final_5-21-2018rev1.pdf

(Effective January 1, 2020)



Georgia State International Residential Code

Appendix U Disaster Resilient Construction (2020 Edition)



Georgia Department of Community Affairs
Community Development Division
60 Executive Park South, N.E.
Atlanta, Georgia 30329-2231
(404) 679-3118
www.dca.ga.gov

January 1, 2020

GEORGIA STATE INTERNATIONAL RESIDENTIAL CODE

APPENDIX U

DISASTER RESILIENT CONSTRUCTION

The INTERNATIONAL RESIDENTIAL CODE, 2018 Edition, published by the International Code Council, when used in conjunction with the Georgia State Amendments to the INTERNATIONAL RESIDENTIAL CODE, 2018 Edition and Appendix U Disaster Resilient Construction, shall constitute the official *Georgia State Minimum Standard Residential Code*.

FORWARD

Introduction

The Department of Community Affairs (DCA) was awarded a grant through the U.S. Department of Housing and Urban Development (HUD) to develop Disaster Resilient Building Code (DRBC) Appendices for the International Building Code (IBC) and the International Residential Code (IRC). The DRBC Appendices are optional regulations that local jurisdictions may adopt, in whole or in part, through local ordinance. A task force of stakeholders was appointed to look for opportunities to improve any code provisions relating to damage from hurricane, flood, and tornado disasters. In addition to the approved recommendations from the task force, the state has developed and will conduct a comprehensive training program for code enforcement officials on the importance, implementation and enforcement of the Disaster Resilient Construction Appendices.

The meetings for the Disaster Resilient Building Code Appendices Task Force were open to the public, interested individuals and organizations that desired participation. The technical content of currently published documents on flooding, high-wind construction, and storm shelters, were used and referenced. Those publications included documents of the International Code Council (ICC), American Society of Civil Engineers (ASCE), the Federal Emergency Management Agency (FEMA), Mitigation Assessment Team (MAT) Program, Georgia Emergency Management Agency/Homeland Security (GEMA), APA - The Engineered Wood Association, National Institute of Standards and Technology (NIST), National Oceanic and Atmospheric Administration (NOAA), National Science Foundation (NSF), The State of Florida, American Forest & Paper Association's American Wood Council, Southern Forest Products Association, NAHB Research Center, Insurance Institute for Business & Home Safety, and the Federal Alliance for Safe Homes.

Adoption

Local jurisdictions may adopt this entire appendix with chosen options or specific sections that apply to their communities through a local ordinance. The adopting ordinance must also be filed on record with DCA. A sample ordinance has been included in this document to assist the local jurisdictions with the adoption process. Recommended training is being offered to assist code enforcement officials in the implementation and enforcement of the appendices documents. Contact DCA at (404) 679-3118 or www.dca.ga.gov for more information.

Neither The Disaster Resilient Building Code Appendices Task Force, its members nor those participating in the development of Appendix U Disaster Resilient Construction accept any liability resulting from compliance or noncompliance with the provisions of Appendix U Disaster Resilient Construction.

The 2012 Disaster Resilient Building Code (DRBC) Appendices Task Force was charged with the development of two appendices. One appendix is for the International Residential Code and the other appendix is for the International Building Code. These two appendices look for opportunities to improve any provisions relating to hurricane, flood, and tornado disasters. In addition to improving existing provisions in the codes, the task force also developed new provisions to be included in the appendices that address these issues. These appendices contain

increased construction requirements for disaster resilience and are intended to be made available for adoption by local jurisdictions in the State of Georgia.

These appendices have reasonable and substantial connection with the public health, safety, and general welfare. In addition, the financial impact and costs associated with these appendices have been taken into consideration.

Members:

Mr. Gregori Anderson, Chairman, States Codes Advisory Committee (SCAC)

Mr. David L. Adams, Vice Chairman, States Codes Advisory Committee (SCAC)

Mr. Bill Abballe, AIA, American Institute of Architects (AIA) - Georgia Chapter

Mr. John Hutton, P.E., S.E., American Council of Engineering Companies of Georgia (ACEC/G)

Mr. Ron Anderson, Code Consultant

Mr. Lamar Smith, Home Builders Association of Georgia (HBAG)

Mr. Thomas Harper, Georgia State Inspectors Association (GSIA)

Mr. Tom Buttram, Building Officials Association of Georgia (BOAG)

Capt. Zane Newman, Georgia State Fire Marshal's Office (Local Fire Official)

Mr. Terry Lunn, Georgia Emergency Management Agency (GEMA)

Mr. Alan Giles, CFM, Georgia Department of Natural Resources (EPD / Floodplain Management Unit)

Mr. Tony Hebert, HUD Georgia State Representative (Region IV Office)

Mr. Jim C. Beck, Sr., Georgia Underwriting Association

Mr. Tim Thornton, Georgia Association of Realtors (GAR)

Mr. Steve Harrison, Building Owners and Managers Association - Georgia (BOMA)

Mr. Tom Aderhold, Georgia Apartment Association (GAA)

Mr. Tim Bromley, Accessibility Consultant - Georgia State ADA Coordinator's Office

Mayor Mark Mathews, Georgia Municipal Association (GMA)

Commissioner Jeff Long, Association of County Commissioners of Georgia (ACCG)

Ad Hoc Subcommittee:

Mr. Tom Buttram, Chairman, DRBC Task Force Liaison (BOAG)

Mr. Ron Anderson, Vice Chairman, Code Consultant

Mr. Stephen V. Skalko, P.E. Concrete Industry

Mr. Jeffrey B. Stone, PhD., Wood Industry (AWC)

Mr. Robert Wills, Steel Industry (AISC)

Mr. Tom Cunningham, PhD., Residential Building Design

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Mr. Bill Towson, 2012 International Residential Code Task Force Liaison, Code Consultant

Mr. Calvin Jordan, 2012 International Building Code Task Force Liaison, Code Consultant

How to Use *Appendix U Disaster Resilient Construction*

The appendix may be adopted in whole or in part by Local Jurisdictions to fit the needs of their community. The following sample ordinance has been provided to aid in the process of identifying Chapters and Sections of the appendix that may be adopted. The format easily allows for choosing to adopt, revise or delete individual Chapters and Sections. Download the MS Word (.doc) version from the DCA website to take advantage of the dropdown menu choices and edit ability features of the document. Note that in Chapter 3, choose one of three options for flood elevation. Only one option may be chosen and that option must be higher than what has been previously adopted and enforced by your jurisdiction. Also note that in Chapter 4, choose one of four options for increased wind speed. Only one option may be chosen and that option must be higher than the mapped wind speed shown in the International Residential Code. The Sample Ordinance document takes into account the flood elevation option in Chapter 3 and the wind speed option in Chapter 4 of this appendix.

SAMPLE ORDINANCE FOR ADOPTION OF

GEORGIA STATE INTERNATIONAL RESIDENTIAL CODE

APPENDIX U

DISASTER RESILIENT CONSTRUCTION

ORDINANCE NO. _____

An ordinance of the [JURISDICTION] adopting the latest edition as adopted and amended by the Georgia Department of Community Affairs of *Appendix U Disaster Resilient Construction* regulating and governing the mitigation of hazard to life and property from natural weather related disasters, high-wind damages, flooding, and establishing construction standards for storm shelters in the [JURISDICTION]; providing for the issuance of permits and collection of fees therefore; repealing Ordinance No. of the [JURISDICTION] and all other ordinances or parts of the laws 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 *Appendix U Disaster Resilient Construction* to the International Residential Code, the latest edition as adopted and amended by the Georgia Department of Community Affairs, be and is adopted as the *Appendix U Disaster Resilient Construction* of the **[JURISDICTION]**, in the State of Georgia for regulating and governing the mitigation of hazard to life and property from natural weather related disasters, high-wind damages, flooding, and establishing construction standards for storm shelters; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said *Appendix U Disaster Resilient Construction* 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. **[NAME OF JURISDICTION]** hereby:

Choose an item. CHAPTER AU1 SCOPE AND ADMINISTRATION Choose an item.

Choose an item. SECTION AU101 ADMINISTRATION Choose an item.

Choose an item. AU101.1 Purpose Choose an item.

Choose an item. AU101.2 Objectives Choose an item.

Choose an item. AU101.3 Scope Choose an item.

AU101.3.1 Insert **[Name Of Jurisdiction]** for **[NAME OF JURISDICTION]**.

Choose an item. AU101.4 Violations Choose an item.

Insert **[Name Of Jurisdiction]** for **[NAME OF JURISDICTION]**.

Choose an item. SECTION AU102 APPLICABILITY Choose an item.

Choose an item. AU102.1 General Choose an item.

Choose an item. AU102.2 Other laws Choose an item.

Choose an item. AU102.3 Referenced codes and standards Choose an item.

Choose an item. SECTION AU103 POST DISASTER EVENT INSPECTIONS GUIDELINES Choose an item.

Choose an item. AU103.1 Inspections Choose an item.

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Section 3. That Ordinance No. ____ of [JURISDICTION] entitled [FILL IN HERE THE COMPLETE TITLE OF THE LEGISLATION OR LAWS IN EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY DEFINITE MENTION] and all other ordinances or parts of laws 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 law, 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 *Appendix U Disaster Resilient Construction* 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.

Section 8. Chapter AU6 Resources of this document is intended to be used by the building officials as a resource guide.

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APPENDIX U

DISASTER RESILIENT CONSTRUCTION

CHAPTER AU1

SCOPE AND ADMINISTRATION

SECTION AU101

ADMINISTRATION

AU101.1 **Purpose.** The scope of this appendix is to promote enhanced public health, safety and general welfare and to reduce public and private property losses due to hazards and natural disasters associated with flooding, high-winds, and windborne debris above that which is provided in the general provisions of this appendix.

AU101.2 **Objectives.** The objectives of this appendix are to:

1. Protect human life, to minimize property loss and to minimize the expenditures of public money associated with natural weather related disasters, including flooding, tornadoes and other high-wind events.
2. Establish enhanced design and construction regulations consistent with nationally recognized good practices for the safeguarding of life and property.

AU101.3 **Scope.**

AU101.3.1 The provisions of this appendix are not mandatory unless specifically referenced in an adopting ordinance of [NAME OF JURISDICTION]. If adopted, the provisions shall apply to all new development and to substantial improvements to existing development.

AU101.3.2 The provisions of this appendix supplement the jurisdiction's building codes to provide for enhanced provisions to mitigate the hazard to life and property from natural weather related disasters, including flooding, tornadoes and other high-wind events.

AU101.3.3 The provisions of this appendix establish design and construction standards for storm shelters.

AU101.4 **Violations.** Any violation of a provision of this appendix or failure to comply with a permit of variance issued pursuant to this appendix or any requirement of this appendix shall be handled in accordance with the ordinances of [NAME OF JURISDICTION].

SECTION AU102

APPLICABILITY

AU102.1 **General.** This appendix provides enhanced minimum requirements for development of new construction and substantial improvement of existing development above that contained in the *International Residential Code* (IRC).

AU102.1.1 Regardless of the category of work being performed, the work shall not cause the structure to become unsafe or adversely affect the performance of the building; shall not cause an existing mechanical or plumbing system to become unsafe, hazardous, insanitary or overloaded; and unless expressly permitted by these provisions, shall not make the building any less compliant with this appendix or to any previously approved alternative arrangements than it was before the work was undertaken.

AU102.1.2 Where there is a conflict between a requirement of the *International Residential Code* and a requirement of this appendix, the requirement of this appendix shall govern. Where there is a conflict between a general requirement of this appendix and a specific requirement of this appendix, the specific requirement shall govern. Where, in any specific case, different sections of this appendix specify different materials, methods of construction or other requirements, the most restrictive shall govern.

AU102.2 **Other laws.** The provisions of this appendix shall not be deemed to nullify any provisions of local, state or federal law.

AU102.3 **Referenced codes and standards.** The codes and standards referenced in this appendix shall be those that are listed in Chapter AR7 and such codes and standards shall be considered as part of the requirements of this appendix to the prescribed extent of each such reference. Where differences occur between provisions this appendix and references and standards, the provisions of this appendix shall apply.

SECTION AU103

POST DISASTER EVENT INSPECTIONS GUIDELINES

AU103.1 **Inspections.** The building official or agents shall inspect residential buildings and structures to determine the habitability of each with the goal of getting the community back into their residences quickly and safely. Inspections shall always be performed by teams of at least two individuals, also known as disaster assessment teams.

AU103.1.1 **Right of entry.** Unless permitted under the exigent circumstances provisions or from an order from State or Federal Authorities, disaster assessment teams shall confirm the right of entry requirements with the incident commander. Upon approval, the assessment teams shall be authorized to enter the structure or premises at reasonable times to inspect or perform duties as provided by this code, provided that the structure or premises be occupied, that credentials are presented, that entry is requested, and that entry is granted by the owner or person having charge over the structure or premises.

AU103.2 **Types of inspections.**

AU103.2.1 **Rapid evaluation.** Rapid evaluation is performed after a disaster event to determine if a building is apparently safe or obviously unsafe. The evaluation should last 10 to 30 minutes per building and shall be performed by the building official and/or their designated responders. Evaluation shall determine if a detailed evaluation is necessary. Placards are posted on buildings indicating status as one of the following:

1. INSPECTED
2. RESTRICTED USE
3. UNSAFE

See Section AU605 for Placards that may be reproduced for use in the field during evaluations. The jurisdiction shall alter placards to meet the jurisdiction and building department's requirements.

AU103.2.2 **Detailed evaluation.** Detailed evaluation is a thorough visual examination of a damaged building performed by a team of two, including an inspector and a design professional. Evaluation should last 30 minutes to 4 hours per building. Evaluation shall determine necessary restrictions on a damaged building's use, the need for an engineering evaluation or to evaluate postings.

AU103.2.3 **Engineering evaluation.** When indicated by the building official as necessary, engineering evaluations shall be completed by a registered design professional hired by the building owner.

AU103.3 **Post disaster building safety evaluation Chart.** See Figure AU103.3 for Post Disaster Building Safety Evaluation Chart.

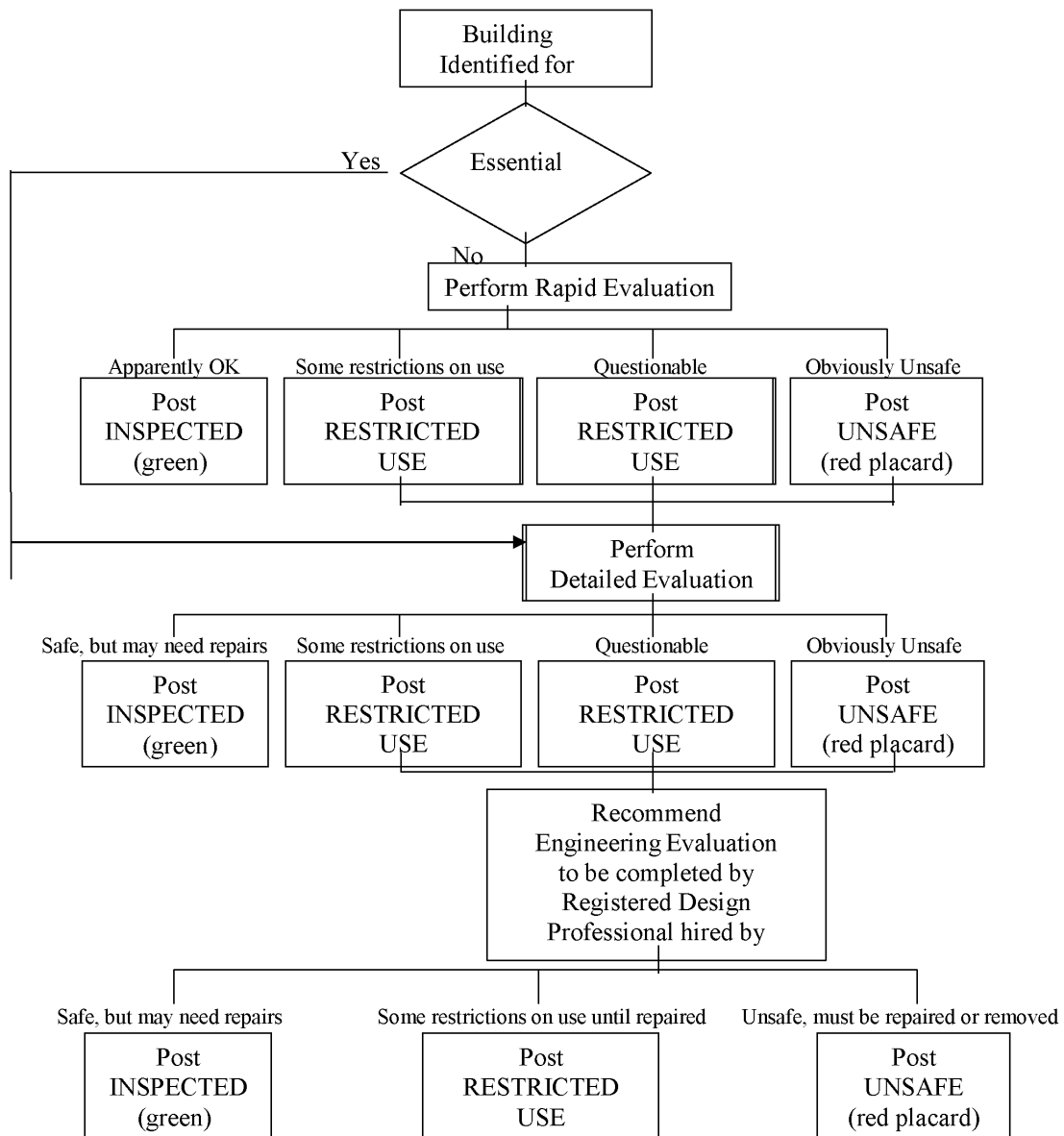
AU103.4 **Evaluation forms.** *ATC-45 Rapid Evaluation Safety Assessment Form* and *ATC-45 Detailed Evaluation Safety Assessment Form* shall be used by [NAME OF JURISDICTION]'s Building Official for post disaster inspections. See Section AU605 for copies of the Safety Assessment Forms.

AU103.5 **Placement and removal of placards.**

AU103.5.1 **Placement.** Placards are to be posted in a clearly visible location near the main entrance and shall be visible from the public right-of-way. In addition RESTRICTED USE or UNSAFE placards shall be placed at all entrances.

AU103.5.2 **Removal.** Placards shall not be removed or replaced, except by the authorized representatives of the local jurisdiction.

Figure AU103.3 Post Disaster Building Safety Evaluation Chart ^a



^(a)*When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

CHAPTER AU2

DEFINITIONS

SECTION AU201

GENERAL

AU201.1 **Scope.** Unless otherwise expressly stated the following words and terms shall, for the purposes of this appendix, have the meanings shown in this chapter.

AU201.2 **Terms defined in other codes.** Where terms are not defined in this appendix and are defined in other *International Codes*, such terms shall have the meanings ascribed to them as in those codes.

AU201.3 **Terms not defined.** Where terms are not defined through the methods authorized by this section, such terms shall have their ordinarily accepted meanings such as the context implies.

SECTION AU202

DEFINITIONS

500-YEAR FLOOD. Flood having a 0.2% annual probability of being equaled or exceeded.

ADVISORY BASE FLOOD ELEVATION (ABFE).

An advisory base flood elevation (BFE) issued by the Federal Emergency Management Agency (FEMA) that reflects post-storm conditions and vulnerability to damages from future flooding.

BASE FLOOD. Flood having a 1% chance of being equaled or exceeded in any given year, also referred to as the 100-year flood.

BASE FLOOD ELEVATION (BFE). The elevation of flooding, including wave height, having a 1% chance of being equaled or exceeded in any given year established relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the *Flood Insurance Rate Map (FIRM)*.

BUILDING OFFICIAL. The officer or other designated authority charged with the administration and enforcement of the *International Residential Code*, or the building official's duly authorized representative.

DESIGN FLOOD. The greater of the following two flood events:

- (1) The *base flood*, affecting those areas identified as *special flood hazard areas* on the community's FIRM;
- (2) The flood corresponding to the area designated as a *flood hazard area* on a community's *flood hazard map* or otherwise legally designated.

DESIGN FLOOD ELEVATION (DFE). The elevation of the *design flood*, including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the *design flood elevation* shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map.

FLOOD [DAMAGE]-RESISTANT MATERIAL. Any building product [material, component or system] capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage.

FLOOD HAZARD AREA. The area subject to flooding during the *design flood*.

FLOOD HAZARD MAP. Map delineating *flood hazard areas* adopted by the authority having jurisdiction.

FLOOD INSURANCE RATE MAP (FIRM). An official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the *special flood hazard areas* and the risk premium zones applicable to the community.

FREEBOARD. A factor of safety expressed in feet above a flood level for purposes of floodplain management.

FUTURE-CONDITIONS FLOOD. The flood having a 1% chance of being equaled or exceeded in any given year based on future-conditions hydrology. Also known as the 100-year future-conditions flood.

FUTURE-CONDITIONS FLOOD ELEVATION. The flood standard equal to or higher than the Base Flood Elevation. The future-conditions flood elevation is defined as the highest water surface anticipated at any given point during the future-conditions flood.

CHAPTER AU3

FLOOD-RESISTANT CONSTRUCTION

Forward: This appendix provides three different options for increased freeboard. The jurisdiction may pick only one option that is higher than previously adopted and enforced by the jurisdiction. The National Flood Insurance Program (NFIP) minimum standards reference Base Flood Elevation without any freeboard in high risk flood hazard areas. Due to the flood damage prevention updates performed during the Map Modernization initiative that led to flood risks being digitally identified in all 159 Georgia counties, all Georgia NFIP participating communities have freeboard standards that meet or exceed the 1 foot standard used in the State model ordinances for areas where BFEs have been established.

SECTION AU301

HAZARD IDENTIFICATION

AU301.1 Identification of flood hazard areas. To establish flood hazard areas:

(a) flood hazard map adopted by jurisdiction based on areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study of [INSERT NAME OF JURISDICTION]," dated [INSERT DATE ISSUANCE], and amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto.

(b) FIRM maps provided by the Federal Emergency Management Agency.

SECTION AU302

SCOPE

AU302.1 Flood loads. Buildings designed and constructed in flood hazard areas defined in Table R301.2(1) of the *International Residential Code* shall comply with the following:

AU302.1.1 Flood hazard areas without base flood elevations. In flood hazard areas without base flood or future-conditions flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three (3) feet above the highest adjacent grade to the building foundation.

OPTION A - FLOOD ELEVATION

AU302.1.2 Increase to base flood elevation requirements. Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

- (a) Design flood elevation plus one (1) foot, or
- (b) Base flood elevation plus one (1) foot, or
- (c) Advisory base flood elevation, or
- (d) Future-conditions plus one (1) foot, if known or
- (e) 500-year flood, if known

OPTION B - FLOOD ELEVATION

AU302.1.3 **Increase to base flood elevation requirements.** Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

- (a) Design flood elevation plus two (2) feet, or
- (b) Base flood elevation plus two (2) feet, or
- (c) Advisory base flood elevation, or
- (d) Future-conditions plus one (1) foot, if known or
- (e) 500-year flood, if known

OPTION C - FLOOD ELEVATION

AU302.1.4 **Increase to base flood elevation requirements.** Floors required by ASCE 24 to be built above base flood elevations as follows:

The higher of:

- (a) Design flood elevation plus three (3) feet, or
- (b) Base flood elevation plus three (3) feet, or
- (c) Advisory base flood elevation, or
- (d) Future-conditions plus one (1) foot, if known or
- (e) 500-year flood, if known

SECTION AU303

FLOOD DAMAGE-RESISTANT MATERIALS

AU303.1 **Flood damage-resistant materials.** Flood damage-resistant materials comply with FEMA Technical Bulletin 2, Table 2. Types, Uses, and Classifications of Materials.

AU303.2 **Location of flood damage-resistant materials.**

Building components and materials located below the increase to base flood elevation as determined by the local jurisdiction in accordance with AU302.1 shall be flood damage-resistant as defined by Section AU303.1.

AU303.3 Fasteners and connectors used for flood damage-resistant materials. Fasteners and connectors used for flood damage-resistant materials to be made of stainless steel, hot-dipped zinc-coated galvanized steel, mechanically deposited-zinc coated, silicon bronze or copper. Copper fasteners shall not be permitted for use in conjunction with steel.

CHAPTER AU4

HIGH-WIND RESISTIVE CONSTRUCTION

Forward: This appendix provides four different options for increased wind speed. The jurisdiction may pick only one option that is higher than the mapped wind speed shown in the International Residential Code.

SECTION AU401

GENERAL

AU401.1 Scope. The provisions of this appendix shall govern the structural design of one- and two-family dwellings (townhouses) not more than three stories in height with separate means of egress and their accessory structures. The building or structure shall comply with all aspects of the International Residential Code in addition to the requirements of this appendix.

AU401.2 Continuous load path. A continuous load path shall be provided to transmit the applicable forces from the roof assembly to the foundation.

AU401.3 Adoption of wind speed. [INSERT NAME OF JURISDICTION] adopts Option [PICK A, B, C, or D] MINIMUM WIND SPEED [INSERT WIND SPEED].

AU401.4 Alternative materials, design and methods of construction and equipment. The provisions of this appendix are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this appendix, provided such material is listed and tested for such application intended. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this appendix, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this appendix. Compliance with the specific performance-based provisions of the International Codes in lieu of specific requirements of this appendix shall also be permitted as an alternate.

AU401.4.1 Tests. Whenever there is insufficient evidence of compliance with the provisions of this appendix, or evidence that a material or method does not conform to the requirements of this appendix, or in order to substantiate claims for alternative materials or methods, the *building official* shall have the authority to require tests as evidence of compliance to be made at no expense to the *jurisdiction*. Test methods shall be as specified in this appendix or by other recognized test standards. In the absence of recognized and accepted test methods, the *building official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *building official* for the period required for retention of public records.

SECTION AU402

OPTION A - MINIMUM WIND SPEED 100 MPH

AU402.1 **Wind speed.** *Buildings* shall be designed and constructed to comply with minimum wind speed of 100 mph Exposure B in accordance with AU402.1.1 or in accordance with Prescriptive Method AU402.2. Buildings with minimum wind speed of 100 mph Exposure C shall be in accordance with AU402.1.1.

AU402.1.1 **Design methods.** The design of buildings for wind loads shall be in accordance with one or more of the following methods:

1. *AF&PA Wood Frame Construction Manual (WFCM)*, or

2. *AF&PA Wood Frame Construction Manual*

Guide to Wood Construction in High Wind Areas for One- and Two-Family Dwellings: 100 MPH Exposure B (WFCM); or

3. *ICC Standard for Residential Construction in High-Wind Regions (ICC 600)*; or

4. *ASCE Minimum Design Loads for Buildings and Other Structures (ASCE 7)*; or

5. *AISI Standard for Cold-Formed Steel Framing - Prescriptive Method For One- and Two-Family Dwellings (AISI S230)*; or

6. *International Building Code*; or

7. *Concrete walls in accordance with R404 and R608 of the International Residential Code*; or

8. *Walls of structural insulated panels in accordance with R610 of the International Residential Code*.

AU402.2 **Prescriptive wood frame construction method deemed to comply with 100 MPH Exposure B.**

Prescriptive construction method for wood frame structures shall be in accordance with IRC requirements for 100 mph Exposure B construction as modified in this section. A continuous load path shall be provided to transmit uplift forces from the roof assembly to the ground as follows:

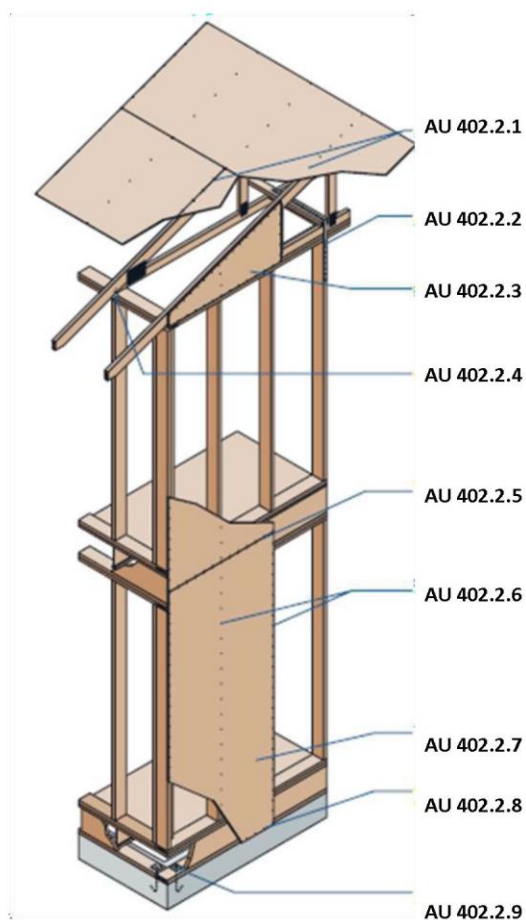


Figure U402.2^b

(b) *Form No. M310B* © 2011 APA - The Engineered Wood Association.

AU402.2.1 Roof sheathing attachment. Nail roof sheathing with 8d ring shank (or deformed shank) (0.131" x 2-1/2") nails at 4 inches on center along the ends of the sheathing and gable end framing 6 inches on center along intermediate framing. See Figure AU402.2.1.

AU402.2.2 Gable end wall connection. Tie gable end walls back to the structure. See Figure AU402.2.2.

AU402.2.3 Gable end wall sheathing. Continuously sheath gable end walls with wood structural panels or equivalent approved material meeting loading requirements. See Figure AU402.2.3.

AU402.2.4 Roof framing to wall connection. Connect roof framing to wall using an approved connector or connectors having allowable loads when attached to Southern Pine or Douglas Fir lumber of 585 pounds in the upward direction, 485 pounds in the direction parallel to the wall and 165 pounds in the direction perpendicular to the wall. Attachment to be on exterior face of the exterior walls. See Figure AU402.2.4.

AU402.2.5 Sheathing attachment at elevated floor level. Nail upper story sheathing and lower story sheathing into common wood structural panel or engineered rim board. See Figure AU402.2.5.

AU402.2.6 Wall sheathing attachment. Attach wall sheathing with 8d common (0.131" x 2-1/2") nails at 4 inches on center at end and edges of wood structural panels and 6 inches on center in the intermediate framing. See Figure AU402.2.6a. Adjacent edges in wood structural panel wall sheathing that do not occur over common framing members shall be attached to flat wise blocking as illustrated in Figure AU402.2.6b.

AU402.2.7 Continuous wall sheathing. Continuously sheath all walls with wood structural panels or equivalent approved material meeting loading requirements. Continuously sheath areas around openings for windows and doors. Minimum wall bracing requirements shall be in accordance with IRC Section R602.10 or R602.12 continuous sheathing methods as modified in Section AU402.2.

AU402.2.8 Wall sheathing to sill plate connection. Extend sheathing material to lap the sill plate. See Figure AU402.2.8.

AU402.2.9 Anchor bolt connection. Space 1/2" anchor bolts with 7 inches of embedment 48 inches on center with 0.229" x 3" x 3" square plate washers with slotted holes. See Figure AU402.2.9. There shall be a minimum of 2 bolts per plate section with one bolt located not more than 12" or less than 3.5" from each end of the plate section.

AU402.2.10 Top plate intersection detail. Double top plates shall be provided at the top of all exterior stud walls. The double plates shall overlap at corners and at intersections with other exterior or interior load bearing walls. Double top plates shall be lap-spliced with end joints offset in accordance with the minimum requirements given in the *WFCM Guides to Wood Construction in High Wind Areas for One- and Two-Family Dwellings: 100 MPH Exposure B*. See Figure AU402.2.10.

AU402.3 Wall openings. Uplift load path connections at wall openings shall be in accordance with IRC Section R602.3.5.

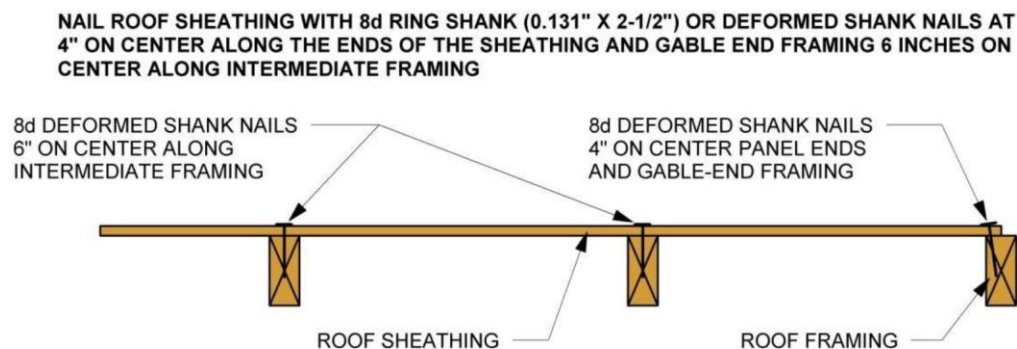


Figure AU402.2.1^b

Roof Sheathing Attachment Detail

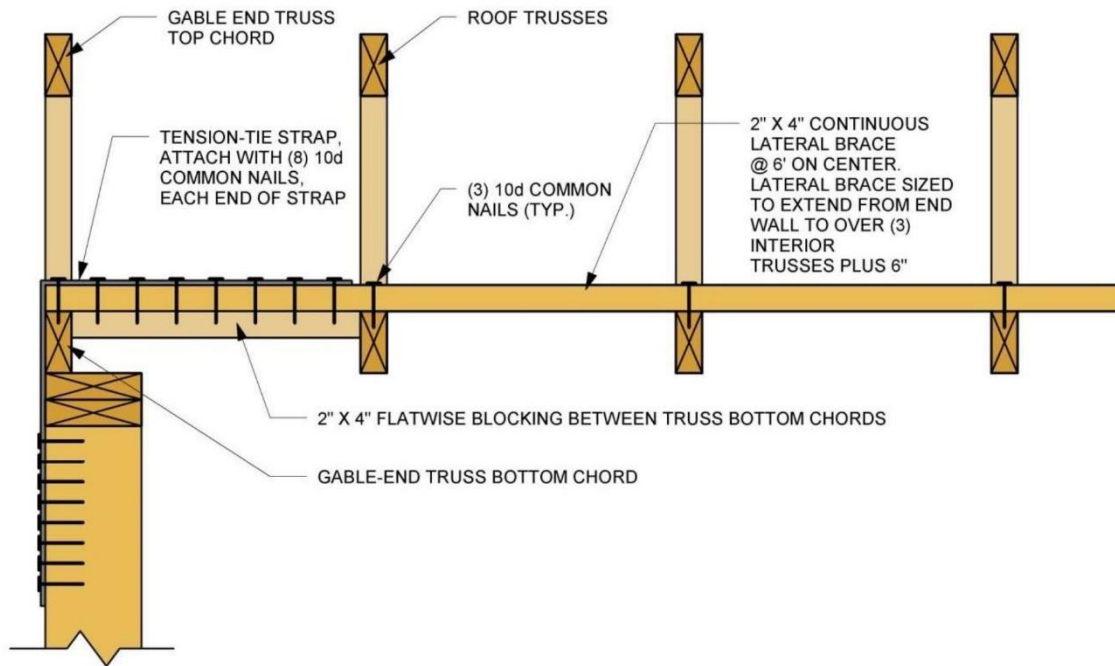


Figure AU402.2.2^b

Gable End Wall Connection Detail

SHEATH GABLE END WALLS WITH WOOD STRUCTURAL PANELS OR EQUIVALENT APPROVED MATERIAL MEETING LOADING REQUIREMENTS

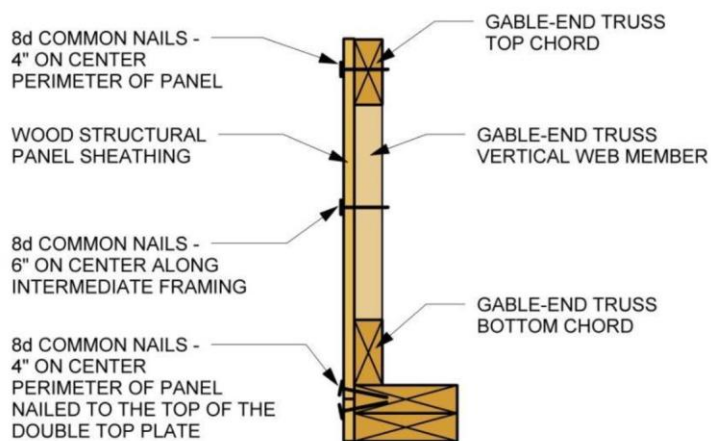


Figure AU402.2.3^b

Gable End Wall Sheathing Detail

ROOF FRAMING TO WALL CONNECTION WITH FRAMING ANCHOR TO MEET UPLIFT AND SHEAR CAPACITY ATTACHED ON SHEATHING SIDE OF THE EXTERIOR WALLS

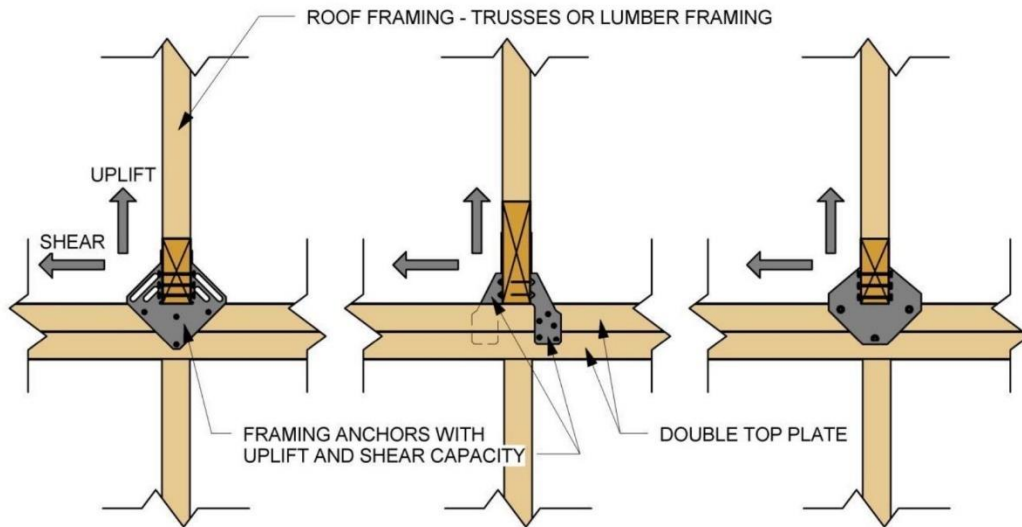


Figure AU402.2.4^b

Roof Framing to Wall Connection Detail

NAIL OFF UPPER STORY AND LOWER STORY SHEATHING INTO COMMON WOOD STRUCTURAL PANEL RIM BOARD

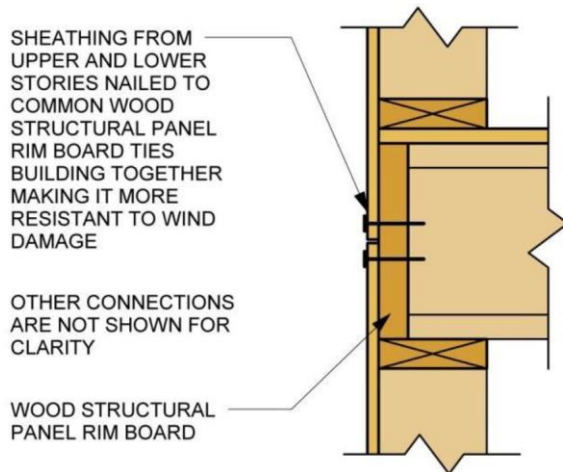


Figure AU402.2.5^b

Sheathing Attachment at Elevated Floor Level Detail

NAIL WALL SHEATHING WITH 8d COMMON (0.131" X 2-1/2") NAILS AT 4" ON CENTER IN THE BOUNDARY OF WOOD STRUCTURAL PANEL WALLSHEATHING AND 6" ON CENTER IN THE INTERMEDIATE STUDS

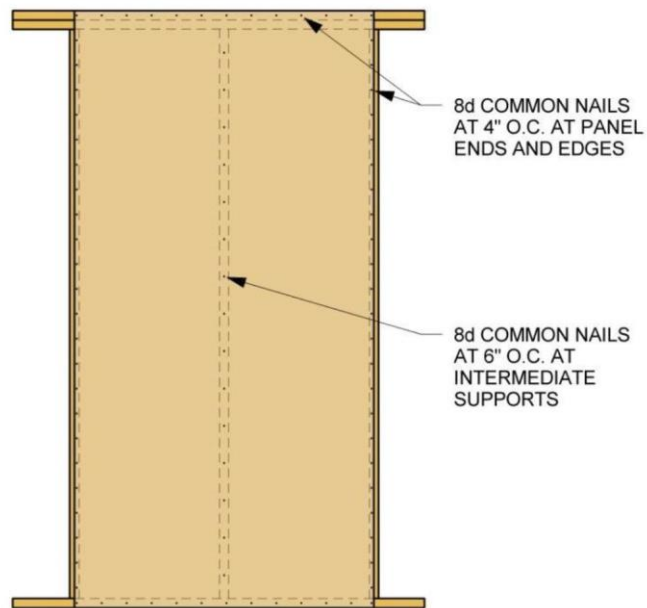


Figure AU402.2.6a^b

Wall Sheathing Attachment Detail

WOOD STRUCTURAL PANEL FLAT-WISE BLOCKING DETAIL

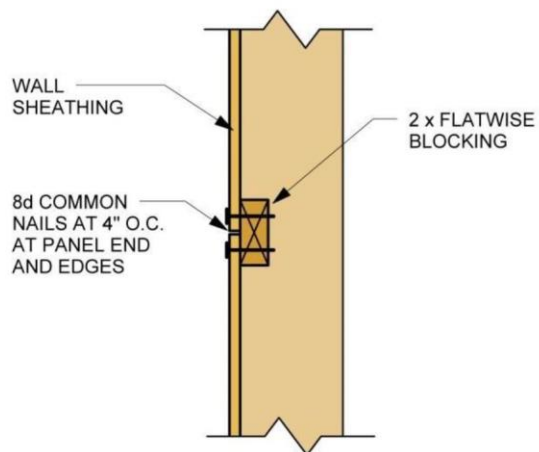


Figure AU402.2.6b Panel Splice Detail

**EXTEND WOOD STRUCTURAL PANEL SHEATHING AT
BOTTOM WALL TO SILL PLATE INTERSECTION**

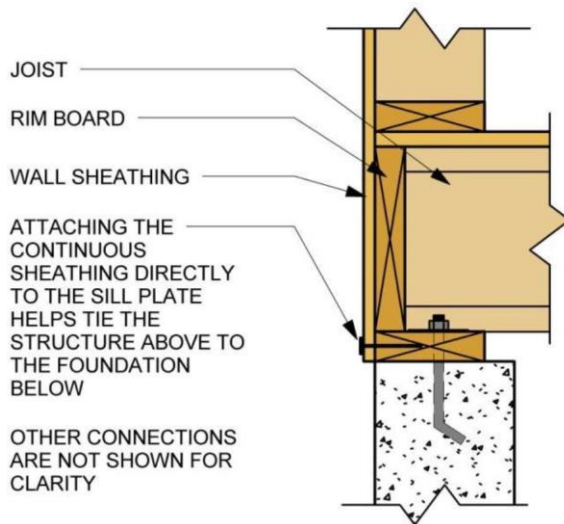


Figure AU402.2.8^b

Wall Sheathing to Sill Plate Connection Detail

**SPACE 1/2" ANCHOR BOLTS 48" ON CENTER WITH
0.229" X 3" X 3" SLOTTED SQUARE PLATE WASHERS AT THE
WALL TO SILL PLATE INTERSECTION**

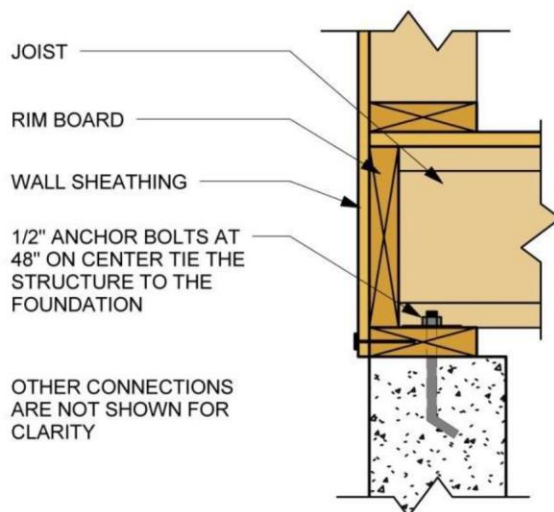


Figure AU402.2.9^b

Anchor Bolt Connection Detail

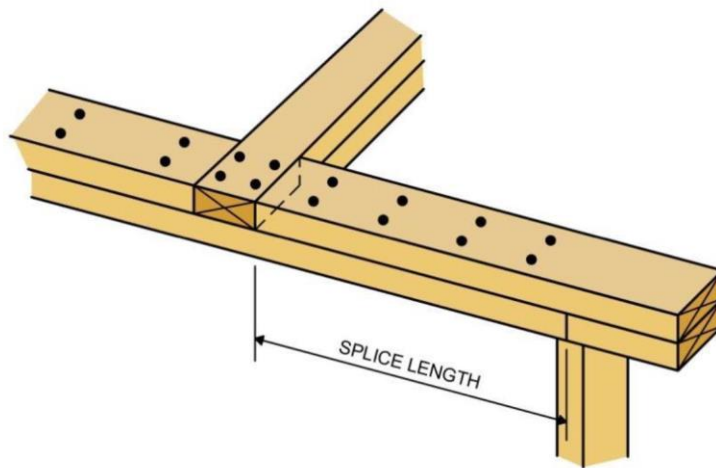


Figure AU402.2.10^c

Top Plate Intersection Detail

(b) *Form No. M310B August 2011 APA - The Engineered Wood Association*

(c) *WFCM Guide to Wood Construction in High Wind Areas for One- and Two-Family Dwellings - American Forest & Paper Association and the American Wood Council*

SECTION AU403

OPTION B -MINIMUM WIND SPEED 110 MPH

AU403.1 **Wind speed.** *Buildings* shall be designed and constructed to comply with minimum wind speed of 110 mph Exposure B.

AU403.1.1 **Design methods.** The design of buildings for wind loads shall be in accordance with one or more of the following methods:

1. *AF&PA Wood Frame Construction Manual (WFCM); or*
2. *ICC Standard for Residential Construction in High-Wind Regions (ICC 600); or*
3. *ASCE Minimum Design Loads for Buildings and Other Structures (ASCE 7); or*
4. *AISI Standard for Cold-Formed Steel Framing - Prescriptive Method For One- and Two-Family Dwellings (AISI S230); or*
5. *International Building Code; or*
6. *Concrete walls in accordance with R404 and R608 of the International Residential Code; or*
7. *Walls of structural insulated panels in accordance with R610 of the International Residential Code.*

SECTION AU404

OPTION C -MINIMUM WIND SPEED 120 MPH

AU404.1 **Wind speed.** *Buildings* shall be designed and constructed to comply with minimum wind speed of 120 mph Exposure B.

AU404.1.1 **Design methods.** The design of buildings for wind loads shall be in accordance with one or more of the following methods:

1. AF&PA *Wood Frame Construction Manual* (WFCM); or
2. ICC *Standard for Residential Construction in High-Wind Regions* (ICC 600); or
3. ASCE *Minimum Design Loads for Buildings and Other Structures* (ASCE 7); or
4. AISI *Standard for Cold-Formed Steel Framing - Prescriptive Method For One- and Two-Family Dwellings* (AISI S230); or
5. *International Building Code*; or
6. *Concrete walls in accordance with R404 and R608 of the International Residential Code*; or
7. *Walls of structural insulated panels in accordance with R610 of the International Residential Code*.

SECTION AU405

OPTION D - MINIMUM WIND SPEED 130 MPH

AU405.1 **Wind speed.** *Buildings* shall be designed and constructed to comply with minimum wind speed of 130 mph Exposure B.

AU405.1.1 **Design methods.** The design of buildings for wind loads shall be in accordance with one or more of the following methods:

1. AF&PA *Wood Frame Construction Manual* (WFCM); or
2. ICC *Standard for Residential Construction in High-Wind Regions* (ICC 600); or
3. ASCE *Minimum Design Loads for Buildings and Other Structures* (ASCE 7); or
4. AISI *Standard for Cold-Formed Steel Framing - Prescriptive Method For One- and Two-Family Dwellings* (AISI S230); or
5. *International Building Code*; or
6. *Concrete walls in accordance with R404 and R608 of the International Residential Code*.

SECTION AU406

FASTENERS AND CONNECTORS FOR CLADDING

AU406.1 **Fasteners and connectors for cladding.** Fasteners and connectors to be made of stainless steel, hot-dipped zinc-coated galvanized steel, mechanically deposited-zinc coated, silicon bronze or copper. Copper fasteners shall not be permitted for use in conjunction with steel.

SECTION AU407

FENESTRATION

AU407.1 **Design pressure.** Exterior windows and doors shall be designed to resist the design wind loads specified in *International Residential Code* Table R301.2(2) adjusted for height and exposure per *International Residential Code* Table R301.2(3) based on the minimum wind speed specified in this appendix by the local jurisdiction.

AU407.2 **Anchorage methods.** Window and door assembly anchoring systems shall be in accordance with the manufacturer's published recommendations to achieve the design pressure specified per Section AU407.1. Substitute anchoring systems shall provide equal or greater anchoring performance as demonstrated by accepted engineering practice. Anchorage shall not exceed the spacing for the tested rated performance.

SECTION AU408

ROOFING

AU408.1 **Secondary water barrier.** Underlayment shall be two layers applied in the following manner:

(a) **Self-adhering tape as first layer.** Install minimum 4 inch wide self-adhering modified bitumen tape over sheathing joints. Seal deck penetrations with self-adhering modified bitumen tape. **ASTM D 226 Type I, ASTM D 4869 Type I or ASTM D 6757** as second layer. Apply a 19-inch strip of underlayment felt parallel to and starting at eaves, secure with low-profile, capped-head nails or thin metal disks attached with roofing nails. Fasten at approximately 6 inches on center along the laps and at approximately 12 inches on center along a row in the field of the sheet between the side laps. All laps shall be a minimum of 4 inches. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches, fasten as before. Distortions in the underlayment shall not interfere with the ability of the shingles to seal.

(b) **Two layers of ASTM D 226 Type I, ASTM D 4869 Type I or ASTM D 6757.** For each layer, apply a 19-inch strip of underlayment felt parallel to and starting at eaves, secure with low-profile, cappedhead nails or thin metal disks attached with roofing nails. Fasten at approximately 6 inches on center along the laps and at approximately 12 inches on center along a row in the field of the sheet between the side laps. All laps shall be a minimum of 4 inches. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches, fasten as before. Distortions in the underlayment shall not interfere with the ability of the shingles to seal.

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

AU408.2 Fasteners.

AU408.2.1 **Underlayment fasteners.** Underlayment shall be attached using metal or plastic cap corrosion-resistant nails with a head diameter of not less than 1 inch with a thickness of at least 32-gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge with a sufficient length to penetrate through the roof sheathing or a minimum of ¾ inch into the roof sheathing.

AU408.2.2 **Asphalt shingles fasteners.** Where asphalt shingles shall be applied with corrosion-resistant nails with shanks made of minimum 12 gauge wire and a minimum head diameter of 3/8 inch. Nails shall be long enough to penetrate ¾ inch into the roof deck. Where the deck is less than 3/4 inch thick, the nails shall be long enough to penetrate completely through plywood decking and extend at least 1/8 inch through the roof deck.

AU408.3 **Attachment.** Where asphalt shingles shall have a minimum number of fasteners required by the manufacturer, but not less than six fasteners per strip shingle or three fasteners per individual shingle. Drive nail head flush with the shingle surface per figure AU408.2.

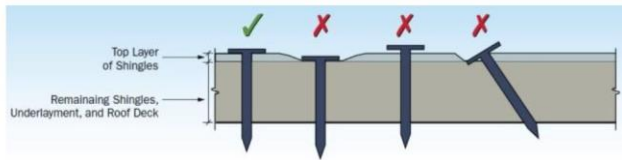


Figure AU408.2^d

(d) FEMA *Home Builder's Guide to Coastal Construction Technical Fact Sheet No. 7.3 Asphalt Shingle Roofing for High Wind Regions*.

CHAPTER AU5

RESIDENTIAL STORM SHELTERS AND SAFE ROOMS

SECTION AU501

GENERAL

AU501.1 **General.** This section applies to the construction of residential storm shelters and safe rooms when constructed as separate detached buildings or as internal areas within buildings for the purpose of providing safe refuge for storms that produce high winds, such as tornados and hurricanes. Residential storm shelters or safe rooms shall be offered as an optional package.

SECTION AU502

RESIDENTIAL STORM SHELTERS AND SAFE ROOMS

AU502.1 **Residential storm shelters.** Residential storm shelters when constructed shall be in compliance with the following:

1. *ICC/NSSA-500* per IRC Section R323.

AU502.2 **Residential safe rooms.** Residential safe rooms when constructed shall be in compliance with the following:

1. *FEMA 361 Design and Construction Guidance for Community Safe Rooms*; or
2. *FEMA 320 Taking Shelter from the Storm: Building a Safe Room For Your Home and Small Business*

CHAPTER AU6

RESOURCES

SECTION AU601

CONTACTS

Georgia Department of Community Affairs (DCA) Construction Codes
 Georgia State Amendments to the State Minimum
 Standard Codes

<https://dca.ga.gov/local-government-assistance/construction-codes-industrialized-buildings/construction-codes>

Phone: 404-679-3118

Georgia Department of Natural Resources (DNR)

Floodplain Management

4220 International Parkway, Ste. 101

Atlanta, GA 30354-3902

www.georgiadfirm.com

Phone: 404-675-1757

Federal Emergency Management Agency (FEMA)

www.fema.gov; www.floodsmart.gov

www.fema.gov/rebuild/buildingscience/

FEMA Publications and Technical Bulletins:

www.fema.gov/library/index.jsp

www.fema.gov/plan/prevent/floodplain/techbul.shtm

Georgia Emergency Management Agency (GEMA)

Georgia Office of Homeland Security

P.O. Box 18055

Atlanta, GA 30316-0055

www.gema.ga.gov

www.ready.ga.gov

Phone: 404-635-7000

Georgia Association of Regional Commissions (GARC)

www.garc.ga.gov

<http://garc.ga.gov/main.php?Regional-Commissions-2>
(for assistance in identifying Flood Hazard Areas)

International Code Council (ICC)

www.iccsafe.org

National Weather Service

www.srh.weather.gov

State Fire Marshal's Office

2 Martin Luther King Jr. Drive

Suite 920 / West Tower

Atlanta, Georgia 30334

www.oci.ga.gov

Phone: 404-656-7087

SECTION AU602

EMERGENCY INSPECTION KIT ^e

☐ Staff's disaster response management plan

☐ Team contact list

☐ Area maps

☐ Official identification

☐ Personal identification

☐ Work gloves

☐ Steel toe and waterproof boots

☐ Whistle

☐ First aid kit

☐ Latex gloves

☐ Envelope for expense receipts

☐ Compass, GPS unit

☐ Backpack, waistpack

☐ Flashlight and extra batteries

☐ Battery-operated radio

- | | | |
|--|---|--|
| <input type="checkbox"/> Staff's disaster response management plan | <input type="checkbox"/> Work gloves | <input type="checkbox"/> Envelope for expense receipts |
| <input type="checkbox"/> Inspection forms and placards | <input type="checkbox"/> Safety glasses | <input type="checkbox"/> Duct tape |
| <input type="checkbox"/> Communication equipment | <input type="checkbox"/> Sunglasses | |
| <input type="checkbox"/> Clipboard | <input type="checkbox"/> Pocket knife | |
| <input type="checkbox"/> Hard hat | <input type="checkbox"/> Matches | |
| <input type="checkbox"/> Orange safety vest | <input type="checkbox"/> Antibacterial hand wipes or alcohol-based hand sanitizer | |
| <input type="checkbox"/> Dust mask | <input type="checkbox"/> Insect repellent (w/Deet or Picaridin) | |
| <input type="checkbox"/> Sunscreen (SPF 15 or greater) | | |
| <input type="checkbox"/> Camera | | |
| <input type="checkbox"/> Black markers | | |
| <input type="checkbox"/> Pens & pencils | | |
| Remember to grab: | | |
| <input type="checkbox"/> Staples & stapler | <input type="checkbox"/> Personal identification | <input type="checkbox"/> Cell phone and charger |
| <input type="checkbox"/> Staple gun | <input type="checkbox"/> Rain gear, extra clothing | <input type="checkbox"/> Cash for personal expenses |
| <input type="checkbox"/> Calculator | <input type="checkbox"/> Water bottle | <input type="checkbox"/> Toiletries |
| <input type="checkbox"/> Tire repair kit | <input type="checkbox"/> Prescription medication | |

(e) *Disaster Mitigation: A Guide for Building Departments* by the International Code Council, Inc., copyright 2009

SECTION AU603

SAFETY TIPS ^a

1. Always travel in teams of at least two people.
2. Always wear a hard hat, gloves, goggles, safety vest, and dust masks.
3. Always wear safety shoes capable of protecting the toes and bottom of the foot.
4. Survey the building exterior completely before entering.
5. Enter building only if authorized and if deemed safe to do so.
6. Be alert for falling objects.
7. In case of fire, injuries or victims, evacuate the area and alert the fire department immediately.
8. Avoid downed power lines and buildings under them or water surrounding them.
9. In case of gas leaks, shut off the gas (if possible) and report the leak.
10. In a flood situation, have a "walking stick."

(a) *When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

SECTION AU604

MAJOR DISASTER PROCESS

(from link <http://www.fema.gov/hazard/dproc.shtm>)

A Major Disaster Declaration usually follows these steps:

- Incident occurs and local government responds, supplemented by neighboring communities and volunteer agencies. If overwhelmed, turn to the state for assistance;

Generally the local government will issue a local state of emergency

- The State responds with state resources, such as the National Guard and state agencies;

Prior to committing state resources, the Governor will declare a state of emergency in the counties impacted by the event for which assistance is needed.

- Damage assessment by local, state, federal, and volunteer organizations determine losses and recovery needs;

Generally the locals will submit a preliminary damage assessment to the State and the State will review and determine if state and/or federal assistance is needed. If federal assistance is needed, the state will request FEMA perform a preliminary joint damage assessment. If the Governor determines that the incident is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments then supplementary Federal assistance is requested (next step).

- A Major Disaster Declaration is requested by the Governor, based on the damage assessment, and agreement to commit state funds and resources to the long-term recovery;
- FEMA evaluates the request and recommends action to the White House based on the disaster, the local community and the state's ability to recover;
- The President approves the request or FEMA informs the Governor it has been denied. This decision process could take a few hours or several weeks depending on the nature of the disaster.

SECTION AU605

SAMPLE EVALUATION FORMS AND INSPECTION PLACARDS ^e (following pages)

Figure AU605.1 ^e

ATC-45 Rapid Evaluation Safety Assessment Form																																												
Inspection <div style="display: flex; justify-content: space-between;"> <div>Inspector ID: _____</div> <div>Inspection date: _____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Affiliation: _____</div> <div>Inspection time: _____ <input type="checkbox"/> AM <input type="checkbox"/> PM</div> </div> <div style="display: flex;"> <div style="flex: 1;">Areas inspected:</div> <div style="flex: 1;"><input type="checkbox"/> Exterior only</div> <div style="flex: 1;"><input type="checkbox"/> Exterior and interior</div> </div>																																												
<div style="display: flex;"> <div style="flex: 1;"> Building Description <div style="margin-bottom: 5px;">Building name: _____</div> <div style="margin-bottom: 5px;">Address: _____</div> <div style="margin-bottom: 5px;">Building contact/phone: _____</div> <div style="margin-bottom: 5px;">Number of stories: _____</div> <div style="margin-bottom: 5px;">"Footprint area" (square feet): _____</div> <div style="margin-bottom: 5px;">Number of residential units: _____</div> </div> <div style="flex: 1;"> Type of Building <input type="checkbox"/> Mid-rise or high-rise <input type="checkbox"/> Low-rise multi-family <input type="checkbox"/> Low-rise commercial Primary Occupancy <input type="checkbox"/> Dwelling <input type="checkbox"/> Other residential <input type="checkbox"/> Public assembly <input type="checkbox"/> Emergency services <input type="checkbox"/> Pre-fabricated <input type="checkbox"/> One- or two-family dwelling <input type="checkbox"/> Commercial <input type="checkbox"/> Offices <input type="checkbox"/> Industrial <input type="checkbox"/> Other: _____ <input type="checkbox"/> Government <input type="checkbox"/> Historic <input type="checkbox"/> School </div> </div>																																												
Evaluation <p>Investigate the building for the conditions below and check the appropriate column.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Observed Conditions:</th> <th style="text-align: center; border-bottom: 1px solid black;">Minor/None</th> <th style="text-align: center; border-bottom: 1px solid black;">Moderate</th> <th style="text-align: center; border-bottom: 1px solid black;">Severe</th> <th style="text-align: center; border-bottom: 1px solid black;">Estimated Building Damage (excluding contents)</th> </tr> </thead> <tbody> <tr> <td>Collapse, partial collapse, or building off foundation</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> None</td> </tr> <tr> <td>Building significantly out of plumb or in danger</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> > 0 to < 1%</td> </tr> <tr> <td>Damage to primary structural members, racking of walls</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 1 to < 10%</td> </tr> <tr> <td>Falling hazard due to nonstructural damage</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 10 to < 30%</td> </tr> <tr> <td>Geotechnical hazard, scour, erosion, slope failure, etc.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 30 to < 70%</td> </tr> <tr> <td>Electrical lines / fixtures submerged / leaning trees</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 70 to < 100%</td> </tr> <tr> <td>Other (specify) _____</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td><input type="checkbox"/> 100%</td> </tr> </tbody> </table> <p><input type="checkbox"/> See back of form for further comments.</p>					Observed Conditions:	Minor/None	Moderate	Severe	Estimated Building Damage (excluding contents)	Collapse, partial collapse, or building off foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None	Building significantly out of plumb or in danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> > 0 to < 1%	Damage to primary structural members, racking of walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 to < 10%	Falling hazard due to nonstructural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 to < 30%	Geotechnical hazard, scour, erosion, slope failure, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 30 to < 70%	Electrical lines / fixtures submerged / leaning trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 70 to < 100%	Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 100%
Observed Conditions:	Minor/None	Moderate	Severe	Estimated Building Damage (excluding contents)																																								
Collapse, partial collapse, or building off foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None																																								
Building significantly out of plumb or in danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> > 0 to < 1%																																								
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Falling hazard due to nonstructural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 to < 30%																																								
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Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 100%																																								
Posting <p>Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.</p> <div style="display: flex; justify-content: space-around; margin-bottom: 10px;"> <input type="checkbox"/> INSPECTED (Green placard) <input type="checkbox"/> RESTRICTED USE (Yellow placard) <input type="checkbox"/> UNSAFE (Red placard) </div> <p>Record any use and entry restrictions exactly as written on placard: _____</p> <p>_____</p> <p>_____</p> <p>Number of residential units vacated: _____</p>																																												
Further Actions Check the boxes below only if further actions are needed. <input type="checkbox"/> Barricades needed in the following areas: _____ <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <input type="checkbox"/> Detailed Evaluation recommended: <input type="checkbox"/> Structural <input type="checkbox"/> Geotechnical <input type="checkbox"/> Other: _____ </div> <input type="checkbox"/> Substantial Damage determination recommended <input type="checkbox"/> Other recommendations: _____ <input type="checkbox"/> See back of form for further comments.																																												

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 Permission is granted for unlimited, non-exclusive, non-commercial use and distribution of ATC evaluation forms, provided that this Copyright Notice appears on all copies and the Applied Technology Council name shall not be used in any advertising or publicity of Licensee product. Permission is further subject to the following conditions: (1) Licensee does not reprint, repackaging or offer this form for sale or license; and (2) no material gain or financial profit is to be made from any sale or license of this form. Placards may be used without restrictions for their intended use as building postings. All rights not specifically granted to Licensee are herein reserved by ATC.

Figure AU605.2 ^e

ATC-45 Detailed Evaluation Safety Assessment Form				
Inspection Inspector ID: _____ Inspection date: _____ Affiliation: _____ Inspection time: _____ <input type="checkbox"/> AM <input type="checkbox"/> PM			Final Posting from page 2 <input type="checkbox"/> Inspected <input type="checkbox"/> Restricted Use <input type="checkbox"/> Unsafe	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Building Description Building name: _____ Address: _____ Building contact/phone: _____ Number of stories: _____ "Footprint area" (square feet): _____ Number of residential units: _____ </div> <div style="width: 50%;"> Type of Building <input type="checkbox"/> Mid-rise or High-rise <input type="checkbox"/> Low-rise multi-family <input type="checkbox"/> Low-rise commercial Primary Occupancy <input type="checkbox"/> Dwelling <input type="checkbox"/> Other residential <input type="checkbox"/> Public assembly <input type="checkbox"/> Emergency services <input type="checkbox"/> Pre-fabricated <input type="checkbox"/> One- or two-family dwelling <input type="checkbox"/> Other: _____ <input type="checkbox"/> Commercial <input type="checkbox"/> Offices <input type="checkbox"/> Industrial <input type="checkbox"/> Other: _____ <input type="checkbox"/> Government <input type="checkbox"/> Historic <input type="checkbox"/> School </div> </div>				
Evaluation Investigate the building for the conditions below and check the appropriate column. There is room on the second page for a sketch.				
	Minor/None	Moderate	Severe	Comments
Overall hazards:				
Collapse or partial collapse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Building or story lean or drift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Fractured or displaced foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Structural hazards:				
Failure of significant element/connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Column, pier, or bearing wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Roof/floor framing or connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Superstructure/foundation connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Moment frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Diaphragm/horizontal bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Vertical bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Shear wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Nonstructural hazards:				
Parapets, ornamentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Canopy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cladding, glazing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Ceilings, light fixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Stairs, exits, access walkways, gratings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Interior walls, partitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Mechanical & electrical equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Elevators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Building contents, other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Geotechnical hazards:				
Slope failure, debris impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Ground movement, erosion, sedimentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Differential settlement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Figure AU605.2 ^e (Continued)

ATC-45 Detailed Evaluation Safety Assessment Form
Page 2

Building name: _____
Inspector ID: _____

Sketch

Make a sketch of the damaged building in the space provided. Indicate damage points.

Estimated Building Damage
(excluding contents)

☐ None

☐ > 0 to < 1 %

☐ 1 to < 10 %

☐ 10 to < 30 %

☐ 30 to < 70 %

☐ 70 to < 100 %

☐ 100 %

Posting

If there is an existing posting from a previous evaluation, check the appropriate box.

Previous posting: ☐ INSPECTED ☐ RESTRICTED USE ☐ UNSAFE Inspector ID: _____ Date: _____

If necessary, revise the posting based on the new evaluation and team judgment. *Severe* conditions endangering the overall building are grounds for an Unsafe posting. Local *Severe* and overall *Moderate* conditions may allow a Restricted Use posting. Indicate the current posting below and at the top of page one, whether the posting has been revised or not.

☐ **INSPECTED** (Green placard)
☐ **RESTRICTED USE** (Yellow placard)
☐ **UNSAFE** (Red placard)

Record any use and entry restrictions exactly as written on placard: _____

Number of residential units vacated: _____

Further Actions Check the boxes below only if further actions are needed.

☐ Barricades needed in the following areas: _____

☐ Engineering Evaluation recommended:
☐ Structural
☐ Geotechnical
☐ Other _____

☐ Substantial Damage determination recommended

☐ Other recommendations: _____

Figure AU605.3 ^e

<h1>INSPECTED</h1> <h2>LAWFUL OCCUPANCY PERMITTED</h2>	
<p>This structure has been inspected (as indicated below) and no apparent structural hazard has been found.</p> <div><input type="checkbox"/> Inspected Exterior Only</div> <div><input type="checkbox"/> Inspected Exterior and Interior</div> <p>Report any unsafe condition to local authorities; reinspection may be required.</p> <p>Inspector Comments:</p> <div></div> <div></div> <div></div> <div></div> <p>Facility Name and Address:</p> <div></div> <div></div> <div></div>	<p>Date <div></div></p> <p>Time <div></div></p> <p>This facility was inspected under emergency conditions for:</p> <div></div> <div>(Jurisdiction)</div> <p>Inspector ID / Agency</p> <div></div> <div></div> <div></div>
<p>Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority</p>	

RESTRICTED USE

Caution: This structure has been inspected and found to be damaged as described below:

Entry, occupancy, and lawful use are restricted as indicated below:

- ☐ Do not enter the following areas: _____
-
- ☐ Brief entry allowed for access to contents: _____
-
- ☐ Other restrictions: _____

Facility name and address:

Date _____

Time

This facility was inspected under emergency conditions for:

(Jurisdiction)

Inspector ID / Agency

**Do Not Remove, Alter, or Cover this Placard
until Authorized by Governing Authority**

Figure AU605.5 ^e

<h1>UNSAFE</h1> <p>DO NOT ENTER OR OCCUPY (THIS PLACARD IS NOT A DEMOLITION ORDER)</p>	
<p>This structure has been inspected, found to be seriously damaged and is unsafe to occupy, as described below:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Date _____</p> <p>Time _____</p> <p>This facility was inspected under emergency conditions for:</p> <p>_____</p> <p>(Jurisdiction)</p> <p>Inspector ID / Agency</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>Do not enter, except as specifically authorized in writing by jurisdiction. Entry may result in death or injury.</p> <p>Facility Name and Address:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>Do Not Remove, Alter, or Cover this Placard until Authorized by Governing Authority</p>	

CHAPTER AU7

REFERENCES

REFERENCED STANDARDS

ASCE Standards ASCE/SEI 24-05 Flood Resistant Design and Construction

FEMA P-320, Third Edition / August 2008 Taking Shelter From the Storm: Building a Safe Room For Your Home or Small Business, Includes Construction Plans and Cost Estimates

FEMA 361, Second Edition / August 2008 Design and Construction Guidance for Community Safe Rooms

FEMA Technical Bulletin 2, Table 2. Types, Uses, and Classifications of Materials

REFERENCED RESOURCES

(a) *When Disaster Strikes* by the International Code Council, Inc., Seventh Printing: November 2011, copyright 2007

(b) *Form No. M310B* August 2011 APA - The Engineered Wood Association; www.apawood.org

(c) *WFCM Guide to Wood Construction in High Wind Areas for One- and Two-Family Dwellings* - American Forest & Paper Association and the American Wood Council; www.awc.org

(d) *FEMA Home Builder's Guide to Coastal Construction Technical Fact Sheet No. 7.3 Asphalt Shingle Roofing for High Wind Regions*.

(e) *Disaster Mitigation: A Guide for Building Departments* by the International Code Council, Inc., copyright 2009

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End of Amendments.

Cite as Ga. Comp. R. & Regs. R. 110-11-1-.25

AUTHORITY: O.C.G.A. § [8-2-20](#) *et seq.*

HISTORY: Original Rule entitled "International Residential Code for One- and Two-Family Dwellings (IRC), 2012 Edition with 2014 Georgia State Amendments" adopted. F. Nov. 13, 2013; eff. Jan. 1, 2014, as specified by the Agency.

Amended: New title, "International Residential Code for One- and Two-Family Dwellings (IRC), 2012 Edition with 2014 and 2015 Georgia State Amendments." F. Nov. 12, 2014; eff. Jan. 1, 2015, as specified by the Agency.

Amended: New title, "International Residential Code for One- and Two-Family Dwellings (IRC), 2012 Edition with 2014 and 2015 and 2018 Georgia State Amendments." F. Nov. 21, 2017; eff. Jan. 1, 2018, as specified by the Agency.

Amended: New title, "International Residential Code for One- and Two-Family Dwellings (IRC), 2018 Edition with 2020 Georgia State Amendments." F. Dec. 7, 2018; eff. Jan. 1, 2020, as specified by the Agency.

Amended: New title, "International Residential Code for One- and Two-Family Dwellings (IRC), 2018 Edition with 2020 and 2024 Georgia State Amendment." F. Oct. 11, 2023; eff. Jan. 1, 2024, as specified by the Agency.

110-11-1-.26 [Effective 1/1/2024] International Plumbing Code (IPC), 2018 Edition with 2020, 2022, 2023 and 2024 Georgia State Amendments



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



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Revised January 1, 2024

GEORGIA STATE MINIMUM STANDARD PLUMBING CODE

(INTERNATIONAL PLUMBING CODE WITH GEORGIA STATE AMENDMENTS)

The INTERNATIONAL PLUMBING CODE, 2018 Edition, published by the International Code Council, when used in conjunction with these and any other Georgia State Amendments to the INTERNATIONAL PLUMBING CODE, 2018 EDITION, shall constitute the official *Georgia State Minimum Standard Plumbing 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 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.

CHAPTER 4

FIXTURES, FAUCETS AND FIXTURE FITTINGS

*Revise Table 403.1 'Minimum Number of Required Plumbing Fixtures'^a by adding the following requirement under the column labeled 'Other' for line number '7' 'One- and two-family dwellings' and 'Apartment house' descriptions:

Table 403.1 Minimum Number of Required Plumbing Fixtures^a

Detached single-family, duplex and multi-family dwelling structures three stories or less in height shall have not less than two exterior hose bibs, sill cocks or outside hydrants with one being located on the side or rear of the structure.

(Effective January 1, 2024)



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GEORGIA STATE AMENDMENTS

CODE REFERENCE:

(c) 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)*.

(d) 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 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.

CHAPTER 4

FIXTURES, FAUCETS AND FIXTURE FITTINGS

*Delete Table 403.1 'Minimum Number of Required Plumbing Fixtures' from the International Plumbing Code 2020 Amendments.

(Effective January 1, 2023)



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



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GEORGIA STATE AMENDMENTS

CODE REFERENCE:

(e) 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)*.

(f) 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 equipment.

APPENDICES:

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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 Plumbing Code, 2018 Edition, to read as follows:*

CHAPTER 5

WATER HEATERS

SECTION 506

MINIMUM CAPACITIES FOR RESIDENTIAL WATER HEATERS

**Name Change Table 506 'Minimum Capacities for Residential Water Heaters' to 'Minimum First Hour Rating for Residential Water Heaters' and Revise to read as follows:*

TABLE 506 MINIMUM FIRST HOUR RATING FOR RESIDENTIAL WATER HEATERS 1, 2, 3

Number of Bathrooms	1 to 1.5			2 to 2.5				3 to 3.5			
Number of Bedrooms	1	2	3	2	3	4	5	3	4	5	6
First Hour Rating, in Gallons	38	49	49	49	62	62	74	62	74	74	74

FHR= First Hour Rating, 1 gal=3.7854 L, 1 gph=1.5 mL/s

1. Tankless Water Heaters shall be sized and installed per manufacturer's recommendations.
2. Water heaters for single family dwellings having more than six bedrooms and/or 3 1/2 baths shall be sized per manufacturer's recommendations.
3. Table 506 reflects the total minimum requirements for one or multiple water heating units.

(Effective January 1, 2022)



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



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Revised January 1, 2020

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GEORGIA STATE AMENDMENTS

CODE REFERENCE:

(g) 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)*.

(h) 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 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.

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 Plumbing Code, 2018 Edition, to read as follows:*

CHAPTER 1

SCOPE AND ADMINISTRATION

**Delete Chapter 1 'Scope and Administration' entirely without substitution. Chapter 1 to remain in the Code as a reference guide for local governments to use in development of their own Administrative Procedures.*

(Effective January 1, 2020)

CHAPTER 2

DEFINITIONS

SECTION 202

GENERAL DEFINITIONS

**Add new definition of 'High Efficiency Plumbing Fixtures and Fittings' to read as follows:*

HIGH EFFICIENCY PLUMBING FIXTURES AND FITTINGS.

Dual flush water closet. A dual flush water closet or toilet that the average flush volume of two reduced flushes and one full flush does not exceed 1.28 gallons and is listed to the WaterSense Tank-Type High Efficiency Toilet Specification.

Kitchen faucet or kitchen faucet replacement aerator. A kitchen faucet or kitchen faucet replacement aerator that allows a flow of no more than 2.0 gallons of water per minute.

Lavatory faucet or lavatory faucet replacement aerator. A lavatory faucet or lavatory faucet replacement aerator that allows a flow of no more than 1.5 gallons per minute at a pressure of 60 pounds per square inch and is listed to the WaterSense High Efficiency Lavatory Faucet Specification.

Nonwater urinal. A urinal that is designed to receive and convey only liquid waste through a trap seal into the gravity drainage system without the use of water for such function.

Single flush water closet. A single flush water closet or toilet, including gravity, pressure assisted and electro-hydraulic tank types, that the average flush volume does not exceed 1.28 gallons and is listed to the WaterSense Tank-Type High Efficiency Toilet Specification.

Shower head. A shower head that allows a flow of no more than the average of 2.5 gallons of water per minute at 60 pounds per square inch of pressure.

Urinal. A urinal and associated flush valve that uses no more than 0.5 gallons of water per flush and is listed to the WaterSense Specification for Flushing Urinals.

(Effective January 1, 2020)

*Add new definition of 'Lavatory Faucet' to read as follows:

LAVATORY FAUCET. A faucet that discharges into a lavatory basin in a domestic or commercial installation.

(Effective January 1, 2020)

*Revise the definition of 'Plumbing Fixture' to read as follows:

PLUMBING FIXTURE. A receptacle or device that receives water, waste or both and discharges water, waste, or both into a drainage system, and that is either permanently or temporarily connected to the water distribution system of the premises and demands a supply of water therefrom; discharges wastewater, liquid-borne waste materials or sewage either directly or indirectly to the drainage system of the premises; or requires both a water supply connection and a discharge to the drainage system of the premises. The term includes a kitchen sink, utility sink, lavatory, bidet, bathtub, shower, urinal, toilet, water closet or drinking water fountain.

(Effective January 1, 2020)

*Rename and revise the definition of 'Fixture Fitting' to read as follows:

PLUMBING FIXTURE FITTING. A device that controls and directs the flow of water or conveys sanitary waste. The term includes a sink faucet, lavatory faucet, showerhead, or bath filler.

Supply fitting. A fitting that controls the volume, direction of flow or both of water and is either attached to or accessed from a fixture or is used with an open or atmospheric discharge.

Waste fitting. A combination of components that conveys the sanitary waste from the outlet of a fixture to the connection to the sanitary drainage system.

(Effective January 1, 2020)

*Add new definition of 'Pressurized Flushing Device' to read as follows:

PRESSURIZED FLUSHING DEVICE. A device that contains a valve that:

1. Is attached to a pressurized water supply pipe that is of sufficient size to deliver water at the necessary rate of flow to ensure flushing when the valve is open; and
2. Opens on actuation to allow water to flow into the fixture at a rate and in a quantity necessary for the operation of the fixture and gradually closes to avoid water hammer.

(Effective January 1, 2020)

*Under definition of 'Sewer' revise 'Public Sewer' to read as follows:

SEWER

Public sewer. That part of the drainage system of pipes installed or maintained by a city, township, county, public utility company or other public entity, on public property, in the street or in an approved dedicated easement of public or community use.

(Effective January 1, 2020)

*Add new definition of 'Toilet' to read as follows:

TOILET. A water closet.

(Effective January 1, 2020)

*Add new definition of 'Water Closet' to read as follows:

WATER CLOSET. A fixture with a water-containing receptor that receives liquid and solid body waste and on actuation conveys the waste through an exposed integral trap into a drainage system and which is also referred to as a toilet.

(Effective January 1, 2020)

*Add new definition of 'WaterSense' to read as follows:

WATERSENSE. A voluntary program of the United States Environmental Protection Agency designed to identify and promote water efficient products and practices.

(Effective January 1, 2020)

*Add new definition of 'WaterSense Listed Plumbing Fixture or Plumbing Fixture Fitting' to read as follows:

WATERSENSE LISTED PLUMBING FIXTURE OR PLUMBING FIXTURE FITTING.

A plumbing fixture or plumbing fixture fitting that has been tested by an accredited third-party certifying body or laboratory in accordance with the WaterSense Program of the United States Environmental Protection Agency and has been listed (certified) by such body or laboratory as meeting the performance and efficiency requirements of the program and has been authorized by the program to use its label.

(Effective January 1, 2020)

CHAPTER 3

GENERAL REGULATIONS

*Add new Section 300 'General Applicability Standards' to read as follows:

SECTION 300

GENERAL APPLICABILITY STANDARDS

300.1 Scope. The provisions of this code shall apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within the state of Georgia. The installation of fuel gas distribution piping and equipment, fuel-gas-fired water heaters and water heater venting systems shall be regulated by the *International Fuel Gas Code*.

300.2 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.

300.3 Intent. The purpose of this code is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of plumbing equipment and systems.

300.4 Severability. If any section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

300.5 General. The provisions of this code shall apply to all matters affecting or relating to structures, as set forth in Section 300. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

300.6 Maintenance. All plumbing systems, materials and appurtenances, both existing and new, and all parts thereof, shall be maintained in proper operating condition in accordance with the original design in a safe and sanitary condition. All devices or safeguards required by this code shall be maintained in compliance with the code edition under which they were installed.

The owner or the owner's designated agent shall be responsible for maintenance of plumbing systems. To determine compliance with this provision, the code official shall have the authority to require any plumbing system to be reinspected.

300.7 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested, placed in good and proper working condition and approved.

(Effective January 1, 2020)

SECTION 301

GENERAL

*Add new Section 301.1.1 'Requirements for high efficiency plumbing fixtures' to read as follows:

301.1.1 Requirements for high efficiency plumbing fixtures. The installation of high efficiency plumbing fixtures shall be required in all new construction.

(Effective January 1, 2020)

*Add new Section 301.1.2 'Waiver for requirements of high efficiency plumbing fixtures' to read as follows:

301.1.2 Waiver of requirements for high efficiency plumbing fixtures. Counties and municipalities are permitted to adopt an ordinance that grants a waiver for an exemption to the requirements for the installation of high efficiency plumbing fixtures relative to new construction and to the repair or renovation of an existing building under the following conditions:

1. When the repair or renovation of the existing building does not include the replacement of the plumbing or sewage system servicing toilets, faucets, or shower heads within such existing building;
2. When such plumbing or sewerage system within such existing building, because of its capacity, design, or installation, would not function properly if the toilets, faucets, or shower heads required by this part were installed;
3. When such system is a well or gravity flow from a spring and is owned privately by an individual for use in such individual's personal residence; or
4. When units to be installed are:
 - a. Specifically designed for use by person with disabilities;
 - b. Specifically designed to withstand unusual abuse or installation in a penal institution; or
 - c. Toilets for juveniles.

(Effective January 1, 2020)

SECTION 305

PROTECTION OF PIPES AND

PLUMBING SYSTEM COMPONENTS

*Revise Section 305.4.1 'Sewer depth' to read as follows:

305.4.1 Sewer depth. Building sewers shall be a minimum of 6 inches (152.4 mm) below grade.

(Effective January 1, 2020)

SECTION 306

TRENCHING, EXCAVATION AND BACKFILL

*Revise Section 306.3 'Backfilling' to read as follows:

306.3 **Backfilling.** Loose earth free from rocks, broken concrete, frozen chunks and other rubble, shall be placed in the trench in 6-inch (152.4 mm) layers and tamped in place until the crown of the pipe is covered by a minimum of 6 inches (152.4 mm) of tamped earth. The backfill under and beside the pipe shall be compacted for pipe support. Backfill shall be brought up evenly on both sides of the pipe so that the pipe remains aligned. In instances where the manufacturer's installation instructions for materials are more restrictive than those prescribed by the code, the material shall be installed in accordance with the more restrictive requirement.

(Effective January 1, 2020)

*Add new Section 306.5 'Open trenches' to read as follows:

306.5 **Open trenches.** All excavations required to be made for the installation of a building sewer, building drainage system, or any part thereof within the walls of a building shall be open trench work and shall be kept open until the piping has been inspected, tested and approved.

(Effective January 1, 2020)

SECTION 311

TOILET FACILITIES FOR WORKERS

*Delete Section 311 'Toilet Facilities for Workers' entirely without substitution.

(Effective January 1, 2020)

SECTION 314

CONDENSATE DISPOSAL

*Delete Section 314 'Condensate Disposal' entirely without substitution.

(Effective January 1, 2020)

CHAPTER 4

FIXTURES, FAUCETS AND FIXTURE FITTINGS

SECTION 401

GENERAL

*Add new Section 401.4 'Prohibited locations' to read as follows:

401.4 **Prohibited locations.** No floor drains or other plumbing fixtures except electric water heaters shall be installed in a room containing air handling machinery when such room is used as a plenum.

Exception: Deep-seal trap floor drains consisting of a minimum 4-inch (102 mm) seal and supplied with a trap primer connected to a water distribution pipe shall be permitted.

(Effective January 1, 2020)

SECTION 403

MINIMUM PLUMBING FIXTURES

*Revise Table 403.1 'Minimum Number of Required Plumbing Fixtures^a' to delete the requirements for 'service sink' entirely without substitution.

(Effective January 1, 2020)

*Revise Table 403.1 'Minimum Number of Required Plumbing Fixtures^a' by adding the following requirement under the column labeled 'Other' for line number '7' descriptions:

TABLE 403.1

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

NO.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS (URINALS: SEE SECTION 424.2)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE SECTION 410)	OTHER
			Male	Female	Male	Female			
7	Residential	Apartment house	1 per dwelling unit		1 per dwelling unit		----	---	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units. Detached single-family, duplex and multi-family dwelling structures three stories or less in height shall have not less than two exterior hose bibs, sill cocks or outside hydrants with one being located on the side or rear of the structure.
		One-and two-family dwellings and lodging houses with five or fewer guestrooms	1 per dwelling unit		1 per dwelling unit		1 per dwelling unit	----	1 kitchen sink per dwelling unit, 1 automatic clothes washer connection per dwelling unit. Detached singlefamily, duplex and multi-family dwelling structures three stories or less in height shall have not less than two exterior hose bibs, sill cocks or outside hydrants with one being located on the side or rear of the structure.

Remainder of table remains unchanged.

(Effective January 1, 2020)

*Revise exception of Section 403.3.3 'Location of toilet facilities in occupancies other than malls' to read as follows:

403.3.3 Location of toilet facilities in occupancies other than malls.

Exception: The location and maximum travel distances to required employee toilet facilities in factory, storage and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved.

(Effective January 1, 2020)

SECTION 406

AUTOMATIC CLOTHES WASHERS

*Revise Section 406.2 'Waste connection' to read as follows:

406.2 Waste connection. The waste from an automatic clothes washer shall discharge through an air break into a standpipe in accordance with Section 802.4 or into a laundry sink. The trap and fixture drain for an automatic clothes washer standpipe shall be a minimum of 2 inches (51 mm) in diameter. The automatic clothes washer fixture drain shall connect to a building drain, branch drain or drainage stack a minimum of 3 inches (76 mm) in diameter. Automatic clothes washers that discharge by gravity shall be permitted to drain to a trench drain.

(Effective January 1, 2020)

SECTION 410

DRINKING FOUNTAINS

*Revise Section 410.2 'Small occupancies' to read as follows:

410.2 Small occupancies. Drinking fountains shall not be required for an occupant load of 25 or fewer.

(Effective January 1, 2020)

SECTION 412

FAUCETS AND OTHER FIXTURE FITTINGS

*Revise Section 412.1 'Approval' to add a new paragraph at the end of the section:

412.1 Approval. Faucets and fixture fittings shall conform to ASME A112.18.1/CSA B125.1. Faucets and fixture fittings that supply drinking water for human ingestion shall conform to the requirements of NSF 61, Section 9. Flexible water connectors exposed to continuous pressure shall conform to the requirements of Section 605.6.

High efficiency lavatory faucets or lavatory faucet replacement aerators in private use, such as, in residences and apartments, and private (nonpublic) restrooms in hotels and hospitals shall be listed to the WaterSense High Efficiency Lavatory Faucet Specification.

412.1.1 Faucets and supply fittings. Faucets and supply fittings shall conform to the water consumption requirements of Section 604.4.

412.1.2 Waste fittings. Waste fittings shall conform to ASME A112.18.2/CSA B125.2, ASTM F 409 or to one of the standards listed in Tables 702.1 and 702.4 for above-ground drainage and vent pipe and fittings.

(Effective January 1, 2020)

SECTION 419

LAVATORIES

*Revise Section 419.5 'Tempered water for public hand-washing facilities' to read as follows:

419.5 Tempered water for public hand-washing facilities. *Tempered water* may be delivered from lavatories and group wash fixtures located in public toilet facilities provided for customers, patrons and visitors. If provided, tempered water shall be delivered through an *approved* water-temperature limiting device that conforms to ASSE 1070/ASME A112.70/CSA B125.70 or CSA B125.3.

(Effective January 1, 2020)

SECTION 424

URINALS

*Revise Section 424.1 'Approval' to read as follows:

424.1 Approval. Urinals shall conform to ANSI Z124.9, ASME A112.19.2/CSA B45.1, ASME A112.19.19 or CSA B45.5. Urinals shall conform to the water consumption requirements of Section 604.4. Water-supplied urinals shall conform to the hydraulic performance requirements of ASME A112.19.2/CSA B45.1 or CSA B45.5. High efficiency urinals with pressurized flushing devices and flush tank (gravity type) flushing devices shall be listed to the WaterSense Specification for Flushing Urinals and shall conform to ASME A112.19.2/CSA B45.1. Non-water urinals shall conform to ASME A112.19.3/CSA B45.4 or A112.19.19, CSA B45.4. Where nonwater urinals are employed, they shall be cleaned and maintained in accordance with the manufacturer's instructions after installation. Where nonwater urinals are installed they shall have a properly sized water distribution line roughed-in to the urinal location at a minimum height of 56 inches (1,422 mm) to allow for the installation of an approved backflow prevention device in the event of a retrofit. Such water distribution lines shall be installed with shut-off valves located as close as possible to the distributing main to prevent the creation of dead ends. Where nonwater urinals are installed, a minimum of one water supplied fixture rated at a minimum of one water supply fixture unit shall be installed upstream on the same drain line to facilitate drain line flow and rinsing.

(Effective January 1, 2020)

SECTION 425

WATER CLOSETS

*Revise Section 425.1 'Approval' to read as follows:

425.1 Approval. Water closets shall conform to the water consumption requirements of Section 604.4 and shall conform to ANSI Z124.4, ASME A112.19.2/CSA B45.1, ASME A 112.19.3/CSA B45.4 or CSA B45.5. Water closets shall conform to the hydraulic performance requirements of ASME A112.19.2/CSA B45.1. Water closet tanks shall conform to ANSI Z124.4, ASME A112.19.2/CSA B45.1, ASME A 112.19.3/CSA B45.4 or CSA B45.5. Electro-hydraulic water closets shall comply with ASME A112.19.2/CSA B45.1. High efficiency single flush and dual-flush toilets or water closets shall conform to ASME A112.19.2/CSA B45.1 and ASME A112.19.14.

(Effective January 1, 2020)

CHAPTER 5

WATER HEATERS

SECTION 501

GENERAL

*Add new Section 501.9 'Water heaters over 200,000 BTU/h' to read as follows:

501.9 Water heaters over 200,000 BTU/h. 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, 2020)

SECTION 504

SAFETY DEVICES

*Revise Section 504.6 'Requirements for discharge piping' to read as follows:

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the *airgap*.
3. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
4. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
5. Discharge in a manner that does not cause personal injury or structural damage.
6. Discharge to a termination point that is readily observable by the building occupants.
7. When the relief valve discharge piping goes upward, a thermal expansion control device shall be installed on the cold-water distribution or service pipe in accordance with Section 607.3. If the discharge pipe is trapped, provisions shall be made to drain the low point of the trapped portion of the discharge pipe.
8. Terminate not more than 6 inches (152 mm) above and not less than two times the discharge pipe diameter above the floor or *flood level rim* of the waste receptor.
9. Not have a threaded connection at the end of such piping.
10. Not have valves or tee fittings.
11. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
12. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is installed with insert fittings. The outlet end of such tubing shall be fastened in place.

(Effective January 1, 2020)

*Add new Section 506 'Minimum Capacities for Residential Water Heaters' to read as follows:

SECTION 506

MINIMUM CAPACITIES FOR RESIDENTIAL WATER HEATERS

506.1 **General.** Water heaters installed in residential occupancies shall be sized in accordance with Table 506 or the manufacturer's recommendations. The water heater must at a minimum meet the First Hour Rating (FHR) requirements of Table 506.

(Effective January 1, 2020)

*Add new Table 506 'Minimum Capacities for Residential Water Heaters' to read as follows:

TABLE 506

MINIMUM CAPACITIES FOR RESIDENTIAL WATER HEATERS^{1, 2, 3}

Fuel		Gas	Elec	Gas	Elec	Gas	Elec	Gas	Elec
# of Bedrooms		1		2		3		
1 to 1 ½ Baths	FHR (gal)	40	40	45	45	48	48
# of Bedrooms		2		3		4		5	
2 to 2 ½ Baths	FHR (gal)	47	47	60	60	62	62	70	70
# of Bedrooms		3		4		5		6	
3 to 3 ½ Baths	FHR (gal)	60	60	67	67	70	70	72	72

FHR= First Hour Rating, 1 gal=3.7854 L, 1 gph=1.05 mL/s

1. Tankless Water Heaters shall be sized and installed per manufacturer's recommendations.
2. Water heaters for single family dwellings having more than six bedrooms and/or 3 ½ baths shall be sized per manufacturer's recommendations.
3. Table 506 reflects the minimum requirements for one or multiple water heating units.

(Effective January 1, 2020)

CHAPTER 6

WATER SUPPLY AND DISTRIBUTION

SECTION 604

DESIGN OF BUILDING

WATER DISTRIBUTION SYSTEM

*Revise Table 604.4 'Maximum Flow Rates and Consumption for Plumbing Fixtures and Fixture Fittings' to read as follows:

TABLE 604.4**MAXIMUM FLOW RATES AND CONSUMPTION FOR
PLUMBING FIXTURES AND FIXTURE FITTINGS**

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY^b
Lavatory, private	1.5 ^f gpm at 60 psi
Lavatory, public (metering)	0.25 gallon per metering cycle
Lavatory, public (other than metering)	0.5 gpm at 60 psi
Shower head ^a	2.5 gpm at 60 ^f psi
Sink faucet	2.0 ^f gpm at 60 psi
Urinal	0.5 ^f gallons per flushing cycle
Water closet	1.28 ^{c, d, e, f} gallons per flushing cycle

For SI: 1 gallon = 3.785 L, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

a. A hand-held shower spray is a shower head.

b. Consumption tolerances shall be determined from referenced standards.

c. For flushometer valves and flushometer tanks, the average flush volume shall not exceed 1.28 gallons.

d. For single flush water closets, including gravity, pressure assisted and electro-hydraulic tank types, the average flush volume shall not exceed 1.28 gallons.

e. For dual flush water closets, the average flush volume of two reduced flushes and one full flush shall not exceed 1.28 gallons.

f. See 2020 GA Amendment to Section 301.1.2 'Waiver from requirements of high efficiency plumbing fixtures.'

(Effective January 1, 2020)

SECTION 605**MATERIALS, JOINTS AND CONNECTIONS**

*Revise Section 605.9 'Prohibited joints and connections' to add a new exception to Item 4. 'Saddle-type fittings' to read as follows:

605.9 Prohibited joints and connections.

4. Saddle-type fittings.

Exception: Saddle-type fittings can be used to connect refrigerator ice makers and humidifiers to an existing residential unit water distribution system provided that the manufacturer's installation instructions for the distribution piping do not prohibit the use of saddle fittings.

(Effective January 1, 2020)

*Revise Section 605.12.3 'Soldered joints' to read as follows:

605.12.3 **Soldered joints.** Solder joints shall be made in accordance with the methods of ASTM B 828 except a flux conforming to NSF 61 shall be used. Cut tube ends shall be reamed to the full inside diameter of the tube end. Joint surfaces shall be cleaned. The joint shall be soldered with a solder conforming to ASTM B 32. The joining of water supply piping shall be made with lead-free solder and fluxes. "Lead free" shall mean a chemical composition equal to or less than 0.2-percent lead.

(Effective January 1, 2020)

*Revise Section 605.13.6 'Soldered joints' to read as follows:

605.13.6 **Soldered joints.** Solder joints shall be made in accordance with the methods of ASTM B 828 except a flux conforming to NSF 61 shall be used. All cut tube ends shall be reamed to the full inside diameter of the tube end. All joint surfaces shall be cleaned. The joint shall be soldered with a solder conforming to ASTM B 32. The joining of water supply piping shall be made with lead-free solders and fluxes. "Lead free" shall mean a chemical composition equal to or less than 0.2-percent lead.

(Effective January 1, 2020)

SECTION 606

INSTALLATION OF THE BUILDING WATER DISTRIBUTION SYSTEM

*Revise Section 606.2 'Location of shutoff valves' to add new Location #4 to read as follows:

606.2 Location of shutoff valves.

4. Shutoff valves to water supplies for refrigerators with automatic icemakers shall have access on the same floor as said refrigerators.

(Effective January 1, 2020)

SECTION 607

HOT WATER SUPPLY SYSTEM

*Revise Section 607.1 'Where required' to read as follows:

607.1 **Where required.** In residential occupancies, hot water shall be supplied to plumbing fixtures and equipment utilized for bathing, washing, culinary purposes, cleansing, laundry or building maintenance. In nonresidential occupancies, hot water shall be supplied for culinary purposes, cleansing, laundry or building maintenance purposes. In nonresidential occupancies, hot water or tempered water shall be supplied for bathing and washing purposes except for hand-washing facilities. Accessible hand washing facilities regardless of the facility shall not be required to be supplied with hot water or tempered water.

(Effective January 1, 2020)

SECTION 608

PROTECTION OF POTABLE WATER SUPPLY

*Revise Section 608.17.5 'Connections to lawn irrigation systems' to read as follows:

608.17.5 Connections to lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check backflow prevention assembly or a reduced pressure principle backflow preventer. Valves shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system interconnected chemical dispensers are used in conjunction with the lawn irrigation systems, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

(Effective January 1, 2020)

SECTION 610

DISINFECTION OF POTABLE WATER SYSTEM

*Revise Section 610.1 'General' to read as follows:

610.1 General. New or repaired potable water systems shall be flushed and purged of deleterious matter and disinfected prior to utilization. The method to be followed shall be that prescribed by the health authority or water purveyor having jurisdiction. Systems that cannot be adequately flushed and purged may require disinfection in accordance with a prescribed method. In the absence of a prescribed method, the procedure described in either AWWA C651 or AWWA C652, or as described in this section shall apply. This requirement shall apply to "on-site" or "in-plant" fabrication of a system or to a modular portion of a system.

1. The pipe system shall be flushed with clean, potable water until dirty water does not appear at the points of outlet.
2. The system or part thereof shall be filled with a water/chlorine solution containing not less than 50 parts per million (50 mg/L) of chlorine, and the system or part thereof shall be valved off and allowed to stand for 24 hours; or the system or part thereof shall be filled with a water/chlorine solution containing not less than 200 parts per million (200 mg/L) of chlorine and allowed to stand for 3 hours.
3. Following the required standing time, the system shall be flushed with clean potable water until the chlorine is purged from the system.
4. The procedure shall be repeated where shown by a bacteriological examination.

(Effective January 1, 2020)

CHAPTER 7

SANITARY DRAINAGE

SECTION 705

JOINTS

*Revise Section 705.10.2 'Solvent cementing' to read as follows:

705.10.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. If a primer is required by the solvent manufacturer, a purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent-cement joints shall be permitted above or below ground.

(Effective January 1, 2020)

SECTION 706

CONNECTIONS BETWEEN DRAINAGE PIPING AND FITTINGS

*Revise Section 706.3 'Installation of fittings' to read as follows and delete the exception:

706.3 Installation of fittings. Fittings shall be installed to guide sewage and waste in the direction of flow. Change in direction shall be made by fittings installed in accordance with Table 706.3. Change in direction by combination fittings, side inlets or increasers shall be installed in accordance with Table 706.3 based on the pattern of flow created by the fitting. Double sanitary tee patterns shall not receive the discharge of back-to-back fixtures or appliances with pressure or pumping action discharge. Water closets shall not be combined with fixtures other than water closets on a double drainage fitting.

(Effective January 1, 2020)

*Delete Section 706.4 'Heel- or side-inlet quarter bends' entirely without substitution.

(Effective January 1, 2020)

SECTION 708

CLEANOUTS

*Revise Section 708.1.2 'Building sewers' to read as follows:

708.1.2 Building sewers. Building sewers shall be provided with cleanouts located not more than 100 feet (30480 mm) apart measured from the upstream entrance of the cleanout. An additional cleanout shall be provided within 10 feet (3048 mm) of the public right of way. For building sewers 8 inches (203 mm) and larger, manholes shall be provided and located at each change in direction and at intervals of not more than 400 feet (122 m). Manholes and manhole covers shall be of an approved type.

(Effective January 1, 2020)

*Revise Section 708.1.3 'Building drain and building sewer junction' to read as follows:

708.1.3 Building drain and building sewer junction. There shall be a cleanout installed at or near the junction of the building drain and the building sewer. The cleanout shall be outside the building wall unless otherwise approved and shall be brought up to finished ground level. An approved two-way cleanout is allowed to be used at this location to serve as a required cleanout for both the building drain and building sewer.

(Effective January 1, 2020)

*Revise Section 708.1.5 'Cleanout size' to read as follows:

708.1.5 Cleanout size. Cleanouts shall be the same nominal size as the pipe they are connected to except that cleanouts for pipes larger than 4 inches (102 mm) need not be larger than 4 inches (102 mm).

Exceptions:

1. A removable P-trap with slip or ground joint connections can serve as a clean-out for drain piping that is one size larger than the P-trap size.

2. Cleanouts located on *stacks* can be one size smaller than the stack size.
3. The size of cleanouts for cast-iron piping can be in accordance with the referenced standards for cast-iron fittings as indicated in Table 702.4.

(Effective January 1, 2020)

CHAPTER 9

VENTS

SECTION 903

VENT TERMINALS

*Revise Section 903.1 'Roof extension' to read as follows:

903.1 **Roof extension.** Open vent pipes that extend through a roof shall be terminated not less than 6 inches (155 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall terminate not less than 7 feet (2134 mm) above the roof.

(Effective January 1, 2020)

*Delete exception to Section 909.1 'Distance of trap from vent' entirely without substitution.

(Effective January 1, 2020)

SECTION 913

WASTE STACK VENT

*Revise Section 913.2 'Stack installation' to read as follows:

913.2 **Stack installation.** The waste stack shall be vertical. *Fixture* drains shall connect separately to the waste stack. The stack shall not receive the discharge of water closets or urinals.

(Effective January 1, 2020)

SECTION 914

CIRCUIT VENTING

*Revise Section 914.2 'Vent connection' to read as follows:

914.2 **Vent connection.** The circuit vent connection shall be located between the two most upstream fixture drains. The vent shall connect to the horizontal branch and shall be installed in accordance with Section 905. The circuit vent may receive waste discharge from fixtures located within the same branch interval, provided that the wet portion remains the same size as the horizontal branch.

(Effective January 1, 2020)

CHAPTER 10

TRAPS, INTERCEPTORS AND SEPARATORS

SECTION 1002

TRAP REQUIREMENTS

*Revise first paragraph of Section 1002.1 'Fixture traps' to read as follows:

1002.1 **Fixture traps.** Each plumbing fixture shall be separately trapped by a water-seal trap, except as otherwise permitted by this code. The trap shall be placed as close as possible to the fixture outlet. The vertical distance from the fixture outlet to the trap weir shall not exceed 24 inches (610 mm). The distance of a clothes washer standpipe above a trap shall conform to Section 802.4.3. A fixture shall not be double trapped. Remainder of section unchanged.

(Effective January 1, 2020)

CHAPTER 13

NONPOTABLE WATER SYSTEMS

SECTION 1304

RECLAIMED WATER SYSTEMS

*Add new Section 1304.3.2 'Connections to water supply' to read as follows:

1304.3.2 **Connections to water supply.** Reclaimed water provided from a reclaimed wastewater treatment facility permitted by the Environmental Protection Division may be used to supply water closets, urinals, trap primers for floor drains and floor sinks, water features and other uses approved by the Authority Having Jurisdiction, in motels, hotels, apartment and condominium buildings, and commercial, industrial, and institutional buildings, where the individual guest or occupant does not have access to plumbing. Also, other systems that may use a lesser quality of water than potable water such as water chillers, carwashes or an industrial process may be supplied with reclaimed water provided from a reclaimed wastewater treatment facility permitted by the Environmental Protection Division.

(Effective January 1, 2020)

CHAPTER 14

SUBSURFACE LANDSCAPE IRRIGATIONS SYSTEMS

SECTION 1401

GENERAL

*Add new Section 1401.7 'Gray water' to read as follows:

1401.7 **Gray water.** Gray water may be used for subsurface irrigation of landscape and shall be permitted by the local county health department in accordance with Georgia Department of Human Resources regulations as a separate onsite sewage management system. Permits and inspections are required by the local county health department.

(Effective January 1, 2020)

CHAPTER 15

REFERENCED STANDARDS

*Revise Chapter 15 'Referenced standards' to add the following new reference standards for WaterSense:

WATERSENSE

WaterSense
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

WaterSense: Tank-Type High Efficiency Toilet Specification

202, 420.1

WaterSense: Specification for Flushing Urinals

202, 419.1

WaterSense: High-Efficiency Lavatory Faucet Specification

202

End of Amendments.

Cite as Ga. Comp. R. & Regs. R. 110-11-1-.26

AUTHORITY: O.C.G.A. § [8-2-20](#) *et seq.*

HISTORY: Original Rule entitled "International Plumbing Code (IPC), 2012 Edition with 2014 Georgia State Amendments" adopted. F. Nov. 13, 2013; eff. Jan. 1, 2014, as specified by the Agency.

Amended: New title "International Plumbing Code (IPC), 2012 Edition with 2014 and 2015 Georgia State Amendments." F. Nov. 12, 2014; eff. Jan. 1, 2015, as specified by the Agency.

Amended: New title "International Plumbing Code (IPC), 2018 Edition with 2020 Georgia State Amendments." F. Oct. 30, 2019; eff. Jan. 1, 2020, as specified by the Agency.

Amended: New title, "International Plumbing Code (IPC), 2018 Edition with 2020 and 2022 Georgia State Amendments." F. Nov. 18, 2021; eff. Jan. 1, 2022, as specified by the Agency.

Amended: New title, "International Plumbing Code (IPC), 2018 Edition with 2020, 2022 and 2023 Georgia State Amendments." F. Aug. 10, 2022; eff. Jan. 1, 2023, as specified by the Agency.

Amended: New title, "International Plumbing Code (IPC), 2018 Edition with 2020, 2022, 2023 and 2024 Georgia State Amendments." F. Oct. 11, 2023; eff. Jan. 1, 2024, as specified by the Agency.

110-11-1-.27 [Effective 1/1/2024] International Mechanical Code (IMC), 2018 Edition with 2020 and 2024 Georgia State Amendments



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



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Revised January 1, 2024

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 requirements for sprinkler protection related to minimum building construction types.	IBC	LSC
Means of Egress	LSC	NONE

CODES REFERENCE GUIDE		
Area	Primary	Supplement
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 and LSC	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, 2018 Edition, as follows:*

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 instructions. Factory-built cooling towers shall be listed in accordance with UL 1995 or UL/CSA 60335-2-40. The standards related to high efficiency cooling towers shall include without limitation the minimum standards prescribed by ASHRAE 90.1.

(Effective January 1, 2024)

SECTION 918

FORCED-AIR WARM-AIR FURNACES

*Revise Section 918.1 'Forced-air furnaces' to read as follows:

918.1 Forced-air furnaces

Oil-fired furnaces shall be tested in accordance with UL 727. Electric furnaces shall be tested in accordance with UL 1995 or UL/CSA 60335-2-40. Solid fuel furnaces shall be tested in accordance with UL 391. Forced-air furnaces shall be installed in accordance with the listings and the manufacturer's instructions.

(Effective January 1, 2024)

*Revise Section 918.2 'Heat pumps' to read as follows:

918.2 Heat pumps

Electric heat pumps shall be tested in accordance with UL 1995 or UL/CSA 60335-2-40.

(Effective January 1, 2024)

CHAPTER 11

REFRIGERATION

SECTION 1101

GENERAL

*Revise Section 1101.2 'Factory-built equipment and appliances' to read as follows:

1101.2 Factory-Built Equipment and Appliances. Listed and labeled self-contained, factory-built equipment and appliances shall be tested in accordance with the applicable standards specified in Table 1101.2. Such equipment and appliances are deemed to meet the design, manufacture and factory test requirements of this code if installed in accordance with their listing and the manufacturer's instructions.

TABLE 1101.2

FACTORY-BUILT EQUIPMENT AND APPLIANCES

EQUIPMENT	STANDARDS
Refrigeration fittings, including press-connect, flared and threaded	UL 109 and UL 207
Air-conditioning equipment	UL 1995 or UL/CSA 60335-2-40
Packaged terminal air conditioners and heat pumps	UL 484 or UL/CSA 60335-2-40
Split-system air conditioners and heat pumps	UL 1995 or UL/CSA 60335-2-40
Dehumidifiers	UL 474 or UL/CSA 60335-2-40
Unit coolers	UL 412 or UL/CSA 60335-2-89
Commercial refrigerators, freezers, beverage coolers and walk-in coolers	UL 471 or UL/CSA 60335-2-89
Refrigerating units and walk-in coolers	UL 427 or UL 60335-2-89
Refrigerant-containing components and accessories	UL 207

(Effective January 1, 2024)

SECTION 1103

REFRIGERATION SYSTEM CLASSIFICATION

*Revise Footnote f of Table 1103.1 'Refrigerant Classification, amount and OEL' to read as follows:

f. The ASHRAE Standard 34 flammability classification for this refrigerant is 2L.

(Effective January 1, 2024)

SECTION 1104

SYSTEM APPLICATION REQUIREMENTS

*Revise Section 1104.3.1 'Air conditioning for human comfort' to read as follows:

1104.3.1 Air conditioning for human comfort.

High probability systems used for human comfort shall use Group A1 or A2L refrigerant. In other than industrial occupancies where the quantity in a single independent circuit does not exceed the amount in Table 1103.1, Group B1, B2 and B3 refrigerants shall not be used in high-probability systems for air conditioning for human comfort.

(Effective January 1, 2024)

*Rename Section 1104.3.2 'Nonindustrial occupancies' to 'Group A2, A3, B2 and B3 refrigerants', delete Table 1104.3.2 'Maximum Permissible Quantities of Refrigerants' and revise to read as follows:

1104.3.2 Group A2, A3, B2 and B3 refrigerants.

Group A2 and B2 refrigerants shall not be used in high-probability systems. Group A3 and B3 refrigerants shall not be used except where approved.

Exceptions: This section does not apply to:

1. Laboratories where the floor area per occupant is not less than 100 square feet (9.3 m²).
2. Listed self-contained systems having a maximum of 0.331 pounds (150 g) of Group A3 refrigerant.
3. Industrial occupancies.
4. Equipment listed for and used in residential occupancies containing a maximum of 6.6 pounds (3 kg) of Group A2 or B2 refrigerant.
5. Equipment listed for and used in commercial occupancies containing a maximum of 22 pounds (10 kg) of Group A2 or B2 refrigerant.

(Effective January 1, 2024)

CHAPTER 15

REFERENCED STANDARDS

*Revise Chapter 15 'Referenced Standards' to read as follows:

ASHRAE

ASHRAE
1791 Tullie Circle, NE
Atlanta, GA 30329

15-2022	Safety Standards for Refrigeration Systems	1105.3, 1106.6, 1106.7, GA Amendments
34-2022	Designation and Safety Classification of Refrigerants	202, 1102.2.1, 1103.1

UL

UL LLC
333 Pfingsten Road
Northbrook, IL 60062-2096

1995-2015	Heating and Cooling Equipment	908.1, 916.1, 918.1, 918.2, 1101.2
UL/CSA 60335-2-40-2022	Household And Similar Electric Appliances - Safety - Part 2-40: Particular Requirements for Electric Heat Pumps, Air-Conditioners and Dehumidifiers	908.1, 916.1, 918.1, 918.2, 1101.2
UL/CSA 60335-2-89-2021	Household And Similar Electric Appliances - Safety - Part 2-89: Particular Requirements for Commercial Refrigerating Appliances with an Incorporated or Remote Refrigerant Units or Compressor	1101.2

(Effective January 1, 2024)



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



Georgia Department of Community Affairs
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Revised January 1, 2020

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 requirements for sprinkler protection related to minimum building construction types.	IBC	LSC
Means of Egress	LSC	NONE

CODES REFERENCE GUIDE		
Area	Primary	Supplement
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 and LSC	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, 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)

*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 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, INTEGRAL 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:

ASHRAE

Atlanta, GA 30329-2305		
Standard reference number	Title	Referenced in code section number
90.1--2016	Energy Standard for Buildings Except Low-rise Residential Buildings	301.2, 908.1, GA Amendments
62.1--2016	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 number	Title	Referenced in code 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.

Cite as Ga. Comp. R. & Regs. R. 110-11-1-.27

AUTHORITY: O.C.G.A. § [8-2-20](#) *et seq.*

HISTORY: Original Rule entitled "International Mechanical Code (IMC), 2012 Edition with 2014 Georgia State Amendments" adopted. F. Nov. 13, 2013; eff. Jan. 1, 2014, as specified by the Agency.

Amended: New title "International Mechanical Code (IMC), 2012 Edition with 2014 and 2015 Georgia State Amendments." F. Nov. 12, 2014; eff. Jan. 1, 2015, as specified by the Agency.

Amended: New title "International Mechanical Code (IMC), 2018 Edition with 2020 Georgia State Amendments." F. Oct. 30, 2019; eff. Jan. 1, 2020, as specified by the Agency.

Amended: New title, "International Mechanical Code (IMC), 2018 Edition with 2020 and 2024 Georgia State Amendments." F. Oct. 11, 2023; eff. Jan. 1, 2024, as specified by the Agency.

Department 189. GEORGIA GOVERNMENT TRANSPARENCY AND CAMPAIGN FINANCE COMMISSION

Chapter 189-3. DISCLOSURE REPORTS

189-3-.12 [Repealed]

Cite as Ga. Comp. R. & Regs. R. 189-3-.12

AUTHORITY: O.C.G.A. § [21-5-6\(a\)\(7\)](#).

HISTORY: Original Rule entitled "Acceptance of Facsimile Signatures on Lobbyist Renewals and Registration" adopted. F. Jan. 11, 2016; eff. Jan. 31, 2016.

Repealed: F. Oct. 18, 2023; eff. Nov. 7, 2023.

Department 391. RULES OF GEORGIA DEPARTMENT OF NATURAL RESOURCES

Chapter 391-3. ENVIRONMENTAL PROTECTION

Subject 391-3-11. HAZARDOUS WASTE MANAGEMENT

391-3-11-.01 General Provisions

(1) Purpose - The purpose of these rules is to establish policies, procedures, requirements, and standards to implement the Georgia Hazardous Waste Management Act, O.C.G.A. [12-8-60](#), et seq. These rules are promulgated for the purpose of protecting and enhancing the quality of Georgia's environment and protecting the public health, safety and wellbeing of its citizens.

(2) Any reference in these rules to standards, procedures, and requirements of Title 40 of the Code of Federal Regulations (40 C.F.R.) Parts 124, 260-266, 268, 270, 273 and 279 shall constitute the full adoption by reference of the Part, Subpart, and Paragraph of the Federal Regulations so referenced including any notes and appendices as may be associated as amended through October 1, 2021, unless otherwise stated. Provided, however, nothing in 40 C.F.R. Parts 124, 260-266, 268, 270, 273 and 279, as pertains to any exclusion for carbon dioxide streams in geologic sequestration activities, or standardized permits (including all references to 40 C.F.R. Part 267, Part 270 Subpart J, Part 124 Subpart G), the May 2018 Response to Vacatur of Certain Provisions of the Definition of Solid Waste, or enforceable documents as defined in 270.1(c)(7), is adopted or included by reference herein.

(a) The text of the federal regulations incorporated by reference includes references to "RCRA", the "Resource Conservation and Recovery Act", "Subtitle C of RCRA", "the Act", and other general references that refer to the federal hazardous waste program as a whole. Unless otherwise noted, these references shall be construed to refer to the Georgia Hazardous Waste Management Act, O.C.G.A. [12-8-60](#), et seq. and the Georgia hazardous waste management program. References to "RCRA permits" or "RCRA Part B permits" shall refer to permits issued by the Environmental Protection Agency, the State of Georgia, or another authorized state. References to specific sections of RCRA shall refer to both the federal provisions of RCRA to be implemented by the Environmental Protection Agency, as well as analogous provisions of the Georgia Hazardous Waste Management Act, O.C.G.A. [12-8-60](#) et seq., to be implemented by the Georgia Environmental Protection Division. References to other federal statutes and regulations contained in the text of the federal regulations incorporated by reference that are not specifically adopted by reference, including, but not limited to, references to the Clean Water Act, the Clean Air Act, and the Safe Drinking Water Act, shall be used to assist in interpreting the federal regulations, and the authority and power of the analogous or related portions of the Georgia statutes and regulations shall also be considered to apply.

(b) When used in any provisions as may be adopted from 40 C.F.R. Parts 124, 260-266, 268, 270, 273, and 279, references to RCRA "Subtitle D" and 40 C.F.R. Part 258, including 258.40, shall also be construed to refer to the provisions contained in Sections [391-3-4-.01](#), [391-3-4-.05](#), [391-3-4-.07](#), and [391-3-4-.11](#) through [391-3-4-.14](#) of the Georgia Rules for Solid Waste Management, as amended.

(c) When used in any such provisions as may be adopted from 40 C.F.R. Parts 124, 260-266, 268, 270, 273, and 279: Environmental Protection Agency or EPA, except in reference to EPA ID numbers, EPA hazardous waste numbers, EPA publications or forms, regulations on international shipments, the electronic manifest system or its associated fee system, or manifest registry functions, pre-transport markings of hazardous waste, or EPA in "EPA or an authorized state" shall mean the Georgia Environmental Protection Division; and Administrator or Regional Administrator, except in reference to regulations on international shipments, shall mean Director of the Environmental Protection Division.

(d) Any reference to 40 C.F.R. Parts 124, 260-266, 268, 270, 273, and 279 in any provisions adopted by reference shall be construed to refer to the provisions contained in the following sections of these rules:

Federal Regulation Reference	Georgia Rules Reference
40 C.F.R. 260.2(d)	391-3-11-.03(4)
40 C.F.R. 260.3	391-3-11-.01(2)(e)
40 C.F.R. 260.4	391-3-11-.10(3)
40 C.F.R. 260.10-11	391-3-11-.02
40 C.F.R. 260.42	391-3-11-.04
40 C.F.R. Part 264 Subpart H	391-3-11-.05(1)
40 C.F.R. Part 265 Subpart H	391-3-11-.05(2)
40 C.F.R. Part 261 Subpart H	391-3-11-.05(5)
40 C.F.R. Part 260 Subpart C	391-3-11-.07(2)
40 C.F.R. Part 261 Subparts A-E, I-J, M, AA-CC	391-3-11-.07(1)
40 C.F.R. Part 262	391-3-11-.08(1)
40 C.F.R. Part 263	391-3-11-.09
40 C.F.R. Part 264 Subparts A-G, I-O, S, W, X, and AA-EE	391-3-11-.10(2)
40 C.F.R. Part 265 Subparts A-G, I-R, W, and AA-EE	391-3-11-.10(1)
40 C.F.R. Part 266	391-3-11-.19
40 C.F.R. Part 124	391-3-11-.11
40 C.F.R. Part 270	391-3-11-.11
40 C.F.R. Part 268	391-3-11-.16
40 C.F.R. Part 279	391-3-11-.17(1)
40 C.F.R. Part 273	391-3-11-.18

References to EPA forms or reports, except in reference to regulations on international shipments, manifests, or the electronic manifest system, shall mean EPD forms and reports as may be provided by the Director.

(e) [40 C.F.R. 260.3](#) is hereby incorporated by reference.

(3) As of July 10, 1992, any facility which failed to qualify for federal interim status for any waste code promulgated pursuant to the Hazardous and Solid Waste Amendments (HSWA) or who lost interim status for failing to certify under HSWA for any newly promulgated waste code, is also denied interim status under State law.

Cite as Ga. Comp. R. & Regs. R. 391-3-11-.01

AUTHORITY: O.C.G.A § [12-8-60](#), *et seq.*

HISTORY: Original Rule entitled "General Provisions" adopted. F. Aug. 28, 1980; eff. Sept. 17, 1980.

Amended: F. July 16, 1981; eff. August 5, 1981.

Amended: F. Dec. 9, 1982; eff. Dec. 29, 1982.

Amended: F. Sept. 6, 1985; eff. Sept. 26, 1985.

Amended: F. Sept. 5, 1986; eff. Sept. 25, 1986.

Amended: F. Oct. 7, 1987; eff. Oct. 27, 1987.

Amended: F. June 8, 1988; eff. June 28, 1988.

Amended: F. Oct. 31, 1989; eff. Nov. 20, 1989.

Amended: F. Nov. 2, 1990; eff. Nov. 22, 1990.

Amended: F. Dec. 9, 1991; eff. Dec. 29, 1991.

Amended: F. Oct. 29, 1992; eff. Nov. 18, 1992.

Amended: F. Jan. 27, 1994; eff. Feb. 16, 1994.

Amended: F. Dec. 6, 1994; eff. Dec. 26, 1994.

Amended: F. Dec. 8, 1995; eff. Dec. 28, 1995.

Amended: F. Dec. 10, 1996; eff. Dec. 30, 1996.

Amended: F. Dec. 4, 1997; eff. Dec. 24, 1997.

Amended: F. Dec. 3, 1998; eff. Dec. 23, 1998.

Amended: F. Oct. 29, 1999; eff. Nov. 18, 1999.

Amended: F. Oct. 27, 2000; eff. Nov. 16, 2000.

Amended: F. Feb. 5, 2002; eff. Feb. 25, 2002.

Amended: F. Dec. 10, 2002; eff. Dec. 30, 2002.

Amended: F. Feb. 2, 2004; eff. Feb. 22, 2004.

Amended: F. Dec. 20, 2004; eff. Jan. 9, 2005.

Amended: F. Feb. 21, 2006; eff. Mar. 13, 2006.

Amended: F. June 3, 2008; eff. June 23, 2008.

Amended: F. Jul. 18, 2012; eff. Aug. 7, 2012.

Amended: F. May 18, 2015; eff. June 7, 2015.

Amended: F. June 2, 2016; eff. June 22, 2016.

Amended: F. Sept. 8, 2017; eff. Sept. 28, 2017.

Amended: F. Dec. 16, 2019; eff. Jan. 5, 2020.

Amended: F. Sept. 15, 2020; eff. Oct. 5, 2020.

Amended: F. Oct. 3, 2023; eff. Oct. 23, 2023.

Department 391. RULES OF GEORGIA DEPARTMENT OF NATURAL RESOURCES

Chapter 391-3. ENVIRONMENTAL PROTECTION

Subject 391-3-21. GRANT PROGRAMS

391-3-21-.15 Georgia Diesel Emissions Reduction Program

(1) Diesel Emissions Reduction Act (DERA) Georgia Diesel Emissions Reduction Program Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for retrofitting diesel vehicles that are located or operated in the State of Georgia.

(a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the vehicles for retrofit and the type of emission control equipment to be used.

2. Submitted projects must conform to all applicable programmatic and administrative conditions including, without limitation, coordination with EPD personnel; use of retrofit technologies that have been or will be verified or certified under the U.S. Environmental Protection Agency's (EPA's) Retrofit Program or by the California Air Resources Board (CARB); submission of quarterly reports when applicable; submission of a final report when applicable; compliance with applicable Federal procurement and subgrant procedures; certification that the emission control equipment was properly installed and is in working condition; use of data-logging in accordance with manufacturer specifications of diesel vehicles that will be equipped with emission control equipment on existing routes to ensure proper exhaust temperature profiles; proper maintenance of vehicles and retrofit equipment and enforcement of warranty claims against vendors if a maintenance problem arises; and use of the emission control equipment on the vehicles for a minimum of four years unless the equipment is damaged beyond repair or the vehicle becomes inoperable and is unable to be repaired.

(b) Eligible Recipients of the Grant. An eligible applicant is any Georgia public school system that proposes to install emission control devices on school buses the system owns and operates.

(c) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:

1. First priority will be given for public school systems whose fleets are based in counties that are adjacent to designated PM2.5 nonattainment or maintenance counties.

2. Second priority will be given for public school systems whose fleets are based in counties that have not been designated as nonattainment for PM2.5 and are not adjacent to designated PM2.5 nonattainment or maintenance counties.

3. Third priority will be given for public school systems whose fleets are based in counties that have been officially designated as nonattainment or maintenance for the PM2.5 standard.

Within each priority, applications will be ranked according to the following criteria:

1. Retrofit of school buses with devices that reduce PM2.5 by a minimum of 50% on school bus engines with model years ranging from 2001 through 2006; and

2. Cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).

(d) Deadline For Submittal. EPD will issue the first solicitation for applications on or before April 18, 2011. Applications will be due within six weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after grants are awarded to all qualified projects from the first solicitation or additional funds are received for this program after the initial solicitation, additional solicitation(s) will be issued until all of the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria stated in Subsection (c).

(e) Directions For Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:

Georgia Environmental Protection Division
Mobile and Area Sources Program
Attn: Stacy Allman
4244 International Parkway, Suite 134
Atlanta, Georgia 30354
e-mail: stacy.allman@dnr.state.ga.us

(f) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts if necessary to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.

(2) Diesel Emissions Reduction Act (DERA) Georgia Diesel Emissions Reduction Program Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for retrofitting, replacing, repowering, and/or rebuilding diesel vehicles/engines that are located or operated in the State of Georgia.

(a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the school bus(es) proposed for:

(i) Early replacement and the model year of the new replacement bus(es);

(ii) Repowering and the replacement engine manufacturer, model, model year, and fuel type for each proposed repowered bus;

(iii) Existing engine(s) to be rebuilt and the standard the rebuilt engine is expected to meet; and/or

(iv) Identify the school buses for installing emission control devices and type of emission control equipment to be used.

2. Submitted projects must conform to all applicable programmatic and administrative conditions including, without limitation.

(i) Coordination with EPD personnel.

(ii) Use of verified emission control technologies under the U.S. Environmental Protection Agency's (EPA's) Retrofit Program or the California Air Resources Board (CARB) for projects including emission control equipment.

(iii) Use of engines certified by EPA or CARB to 2010 or newer heavy duty engine standards for projects including the early replacement of school buses.

(iv) Use of replacement engines certified by EPA or CARB to a cleaner emission standard than the original engine for projects including the repowering of school bus engines.

(v) Use of rebuilt engines certified to a cleaner EPA or CARB emission standard than the original engines for projects including the rebuilding of existing school bus engines.

(vi) Funds under this award cannot be used for emission reductions that result from school bus replacements or repowers that would have occurred through normal attrition/fleet turnover within three years of October 1, 2012.

(vii) Funds under this award cannot be used for the purchase of school buses or engines to expand a fleet.

(viii) Any proposed replacement bus or engine must perform the same function and operation as the bus or engine that is being replaced.

(ix) Any proposed replacement bus or engine must be of the same type and similar gross vehicle weight rating or horsepower as the bus or engine being replaced.

(x) Any proposed engine to be replaced must be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Remanufacturing must be completed during the project period. Permanently disabling the engine while retaining possession of the engine is an acceptable scrapping method. Disabling the engine may be completed by drilling a hole in the engine block (the part of the engine containing the cylinders). Alternatively, disabling the engine may be completed by removing the engine oil from the crankcase, replacing it with a 40 percent solution of sodium silicate and running the engine for a short period of time at low speeds, thus rendering the engine inoperable. Remanufacturing of school bus engines requires that the engine be returned to the original engine manufacturer for remanufacturing to MY 2007 or newer certified emission standards. Other acceptable scrappage methods may be considered and will require prior Division approval. If scrapped or remanufactured engines are to be sold, program income requirements apply.

(xi) Any school bus to be replaced must be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or its engine returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Remanufacturing must be completed during the project period. Permanently disabling the chassis and the engine (see (x) above) while retaining possession of the bus is an acceptable scrapping method. Disabling the chassis may be completed by cutting the chassis in half. Remanufacturing of a highway school bus requires that it be returned to the original engine manufacturer for remanufacturing to MY 2007 or newer certified emission standards. Other acceptable scrappage methods may be considered and will require prior Division approval. Components that are not part of the bus engine or chassis may be salvaged from the unit being replaced. If scrapped or remanufactured buses or salvaged bus chassis or components are to be sold, program income requirements apply.

(xii) Submit documentation on the decommissioning of the replaced school bus engine (as outlined in the above sections (x) and (xi)) in projects that include early bus replacement or bus repowering.

(xiii) Submission of quarterly and final reports when requested.

(xiv) Compliance with applicable Federal procurement and subgrant procedures.

(xv) Certification that the emission control equipment was properly installed and is in working condition when applicable.

(xvi) Use of data-logging in accordance with manufacturer specifications of diesel school buses that will be equipped with emission control equipment on existing routes to ensure proper exhaust temperature profiles.

(xvii) Proper maintenance of school buses and retrofit equipment and enforcement of warranty claims against vendors if a maintenance problem arises, as applicable.

(xviii) Use of the emission control equipment and/or rebuilt engine on the school buses and/or use of repowered and replacement school buses for a minimum of four years unless the equipment is damaged beyond repair and/or the vehicles become inoperable and are unable to be repaired.

(b) Eligible Recipients of the Grant. An eligible applicant is any Georgia public school system that owns and operates school buses. Eligible applicants can only receive funding for projects proposing to:

1. Retrofit school buses with pre-2007 model year engines with emission control devices;
2. Rebuild school bus pre-2007 engines to a cleaner engine standard;
3. Replace school buses with pre-2007 model year engines with school buses equipped with 2010 or newer model year engines; and/or
4. Repower school buses with pre-2007 model year engines with engines certified by EPA or CARB to a cleaner emission standard.

(c) Match Requirements. Project applicants shall be required to match a minimum of 50% of the project cost for purchasing and installing emissions control devices on diesel school buses and/or to rebuild school bus engines, to match a minimum of 65% of the project cost to purchase early replacement school buses, and/or match a minimum of 65% of the project cost to repower school bus engines.

(d) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:

1. First priority will be given for public school systems whose fleets are based in counties that are not designated as nonattainment or maintenance for PM_{2.5} and who submit projects to retrofit school buses with emission control devices.
2. Second priority will be given for public school systems whose fleets are based in counties that are not designated as nonattainment or maintenance for PM_{2.5} and who submit projects to replace school buses early, repower school buses, and/or rebuild school bus engines.
3. Third priority will be given for public school systems whose fleets are based in counties that are officially designated as nonattainment or maintenance for the PM_{2.5} standard and who submit projects to retrofit school buses with emission control devices.
4. Fourth priority will be given for public school systems whose fleets are based in counties that are officially designated as nonattainment or maintenance for the PM_{2.5} standard and who submit projects to replace school buses early, repower school buses, and/or rebuild school bus engines.
5. Within each priority, applications will be ranked according to cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).

(e) Deadline For Submittal. EPD will issue the first solicitation for applications on or before June 1, 2013. Applications will be due within four weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after

grants are awarded to all qualified projects from the first solicitation or additional funds are received for this program after the initial solicitation, additional solicitation(s) will be issued until all of the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria stated in Subsection (c).

(f) Directions For Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:

Georgia Environmental Protection Division
Mobile and Area Sources Program
Attn: Stacy Allman
4244 International Parkway, Suite 134
Atlanta, Georgia 30354
e-mail: stacy.allman@dnr.state.ga.us

(g) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts if necessary to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.

(3) Diesel Emissions Reduction Act (DERA) Georgia Diesel Emissions Reduction Program Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for replacing diesel vehicles that are located or operated in the State of Georgia.

(a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the school bus(es) proposed for early replacement and the model year of the new replacement bus(es).

2. Submitted projects must conform to all applicable programmatic and administrative conditions including but not limited to those in this subsection.

(i) Coordination with EPD personnel.

(ii) Use of engines certified by EPA or CARB to 2010 or newer heavy duty engine standards for projects including the early replacement of school buses.

(iii) Any proposed school bus(es) to be replaced must be between model year 1991-2003.

(iv) Funds under this award cannot be used for emission reductions that result from school bus replacements that would have occurred through normal attrition/fleet turnover within three years of October 1, 2014.

(v) Funds under this award cannot be used for the purchase of school buses to expand a fleet.

(vi) Any proposed replacement bus must perform the same function and operation as the bus or engine that is being replaced.

(vii) Any proposed replacement bus must be of the same type and similar gross vehicle weight rating or horsepower as the bus being replaced.

(viii) For any proposed school bus to be replaced, the bus engine must be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or returned to the original engine manufacturer for remanufacturing to a

certified cleaner emission standard. Permanently disabling the engine, while retaining possession of the engine, is an acceptable scrapping method. Disabling the engine may be completed by drilling a hole in the engine block (the part of the engine containing the cylinders) and manifold. Alternatively, disabling the engine may be completed by removing the engine oil from the crankcase, replacing it with a 40 percent solution of sodium silicate and running the engine for a short period of time at low speeds, thus rendering the engine inoperable. Remanufacturing shall be performed by the original engine manufacturer, or by a dealership/distributor that has a service program that is sponsored/backed by original engine manufacturer warranties (i.e. the new, remanufactured and upgraded engine is warranted by the OEM). Bus engines shall be remanufactured to Model Year (MY) 2007 or newer certified emission standards. Remanufacturing must be completed during the project period. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or remanufacturing the bus engine. If scrapped or remanufactured engines are to be sold, program income requirements apply.

(ix) For any school bus to be replaced, the chassis must be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or its engine returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Remanufacturing must be completed during the project period. Permanently disabling the chassis and the engine (see (viii) above), while retaining possession of the bus, is an acceptable scrapping method. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or refurbishing the bus chassis. Components that are not part of the bus engine or chassis may be salvaged from the unit being replaced. If scrapped or remanufactured buses or salvaged bus chassis or components are to be sold, program income requirements apply.

(x) Submit documentation on the decommissioning of the replaced school bus engine (as outlined in the above sections (viii) and (ix)) in projects that include early bus replacement.

(xi) Submission of quarterly and final reports when requested.

(xii) Compliance with applicable Federal procurement and subgrant procedures.

(xiii) Use of the replacement school buses for a minimum of four years unless the vehicles become inoperable and are unable to be repaired.

(b) Eligible Recipients and Projects for the Grant.

1. An eligible applicant is any Georgia public school system that owns and operates school buses.

2. Eligible applicants can only receive funding for projects proposing to replace model year 1991-2003 school buses equipped with pre-2007 model year engines with school buses equipped with 2013 or newer model year engines.

(c) Match Requirements. Project applicants shall be required to match a minimum of 75% of the project cost to purchase early replacement school buses. Solicitations may include an additional voluntary cost share so that additional federal funds may be received.

(d) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:

1. First priority will be given for public school systems whose fleets are based in counties that have been designated as nonattainment or maintenance for PM_{2.5}

2. Second priority will be given for public school systems whose fleets are based in counties that have not been designated as nonattainment or maintenance for PM_{2.5}

3. Within each priority, applications will be ranked according to cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).

(e) Deadline for Submittal. EPD will issue the first solicitation for applications on or before December 31, 2014. Applications will be due within four weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after grants are awarded to all qualified projects from the first solicitation or additional funds are received for this program after the initial solicitation, additional solicitation(s) will be issued until all of the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria and requirements included in this Subsection [391-3-21-.15\(3\)](#).

(f) Directions for Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:

Georgia Environmental Protection Division
Mobile and Area Sources Program
Attn: Stacy Allman
4244 International Parkway, Suite 134
Atlanta, Georgia 30354
e-mail: stacy.allman@dnr.state.ga.us

(g) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts if necessary to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.

(4) Diesel Emissions Reduction Act (DERA) Georgia Diesel Emissions Reduction Program Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for replacing diesel vehicles that are located or operated in the State of Georgia.

(a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the school bus(es) proposed for early replacement and the model year of the new replacement bus(es).

2. Submitted projects must conform to all applicable programmatic and administrative conditions including but not limited to those in this paragraph.

(i) Coordination with EPD personnel.

(ii) Use of engines certified by EPA or CARB to 2010 or newer heavy duty engine standards for projects including the early replacement of school buses.

(iii) Any proposed school bus(es) to be replaced must be between model year 1996-2006.

(iv) Funds under this award cannot be used for emission reductions that result from school bus replacements that would have occurred through normal attrition/fleet turnover within three years of notice of criteria approval.

(v) Funds under this award cannot be used for the purchase of school buses to expand a fleet.

(vi) Any proposed replacement bus must perform the same function and operation as the bus or engine that is being replaced.

(vii) Any proposed replacement bus must be of the same type and similar gross vehicle weight rating or horsepower as the bus being replaced.

(viii) For any proposed school bus to be replaced, the bus engine must be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Permanently disabling the engine, while retaining possession of the engine, is an acceptable scrapping method. Disabling the engine may be completed by drilling a hole in the engine block (the part of the engine containing the cylinders) and manifold. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or remanufacturing the bus engine. If scrapped or remanufactured engines are to be sold, program income requirements apply.

(ix) For any school bus to be replaced, the chassis must be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or its engine returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Remanufacturing must be completed during the project period. Permanently disabling the chassis and the engine (see (viii) above), while retaining possession of the bus, is an acceptable scrapping method. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or refurbishing the bus chassis. Components that are not part of the bus engine or chassis may be salvaged from the unit being replaced. If scrapped or remanufactured buses or salvaged bus chassis or components are to be sold, program income requirements apply.

(x) Submit documentation on the decommissioning of the replaced school bus engine (as outlined in the above subparagraphs (viii) and (ix)) in projects that include early bus replacement.

(xi) Submission of quarterly and final reports when requested.

(xii) Compliance with applicable Federal procurement and subgrant procedures.

(xiii) Use of the replacement school buses for a minimum of four years unless the vehicles become inoperable and are unable to be repaired.

(b) Eligible Recipients and Projects for the Grant.

1. An eligible applicant is any Georgia public school system that owns and operates school buses.

2. Eligible applicants can only receive funding for projects proposing to replace model year 1996-2006 school buses equipped with pre-2007 model year engines with school buses equipped with 2017 or newer model year engines.

(c) Match Requirements. Project applicants shall be required to match a minimum of 75% of the project cost to purchase early replacement school buses. Solicitations may include an additional voluntary cost share so that additional federal funds may be received.

(d) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:

1. First priority will be given for public school systems whose fleets are based in counties that have been designated as nonattainment or maintenance for the 2008 or 2015 Ozone National Ambient Air Quality Standards (NAAQS).

2. Second priority will be given for public school systems whose fleets are based in counties that have not been designated as nonattainment or maintenance for the 2008 or 2015 Ozone NAAQS.

3. Within each priority, applications will be ranked according to cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).

(e) Deadline for Submittal. EPD will issue the first solicitation for applications within 4 months of notice of criteria approval. Applications will be due within four weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after grants are awarded to all qualified projects from the first solicitation or additional funds are received for this program after the initial solicitation, additional solicitation(s) will be issued until all of the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria and requirements included in this paragraph [391-3-21-.15\(4\)](#).

(f) Directions for Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:

Georgia Environmental Protection Division
Planning and Support Program
4244 International Parkway, Suite 134
Atlanta, Georgia 30354

(g) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts if necessary to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.

(5) Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for replacing diesel school buses that are located or operated in the State of Georgia.

(a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the school bus(es) proposed for early replacement and the model year of the new replacement bus(es).

2. Submitted projects must conform to all applicable programmatic and administrative conditions including but not limited to those in this paragraph.

(i) Coordination with EPD personnel.

(ii) Use of engines certified by EPA or CARB to 2010 or newer heavy duty engine standards for projects including the early replacement of school buses.

(iii) Any proposed school bus(es) to be replaced must be between model year 1995-2006.

(iv) Funds under this award cannot be used for emission reductions that result from school bus replacements that would have occurred through normal attrition/fleet turnover within three years of notice of criteria approval.

(v) Funds under this award cannot be used for the purchase of school buses to expand a fleet.

(vi) Any proposed replacement bus must perform the same function and operation as the bus or engine that is being replaced.

(vii) Any proposed replacement bus must be of the same type and similar gross vehicle weight rating or horsepower as the bus being replaced.

(viii) For any proposed school bus to be replaced, the bus engine must be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Permanently disabling the engine, while retaining possession of the engine, is an acceptable scrapping method. Disabling the engine may be completed by drilling a hole in the engine block (the part of the engine containing the cylinders) and manifold. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or remanufacturing the bus engine. If scrapped or remanufactured engines are to be sold, program income requirements apply.

(ix) For any school bus to be replaced, the chassis must be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or its engine returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Remanufacturing must be completed during the project period. Permanently disabling the chassis and the engine (see (viii) above), while retaining possession of the bus, is an acceptable scrapping method. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or refurbishing the bus chassis. Components that are not part of the bus engine or chassis may be salvaged from the unit being replaced. If scrapped or remanufactured buses or salvaged bus chassis or components are to be sold, program income requirements apply.

(x) Submit documentation on the decommissioning of the replaced school bus engine (as outlined in the above subparagraphs (viii) and (ix)) in projects that include early bus replacement.

(xi) Submission of quarterly and final reports when requested.

(xii) Compliance with applicable Federal procurement and subgrant procedures.

(xiii) Use of the replacement school buses for a minimum of four years unless the vehicles become inoperable and are unable to be repaired.

(b) Eligible Recipients and Projects for the Grant.

1. An eligible applicant is any Georgia public school system that owns and operates school buses.

2. Eligible applicants can only receive funding for projects proposing to replace model year 1995-2006 school buses equipped with pre-2007 model year engines with school buses equipped with 2017 or newer model year engines.

(c) Match Requirements. Project applicants shall be required to match a minimum of 75% of the project cost to purchase early replacement school buses. Solicitations may include an additional voluntary cost share so that additional federal funds may be received.

(d) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:

1. First priority will be given for public school systems whose fleets are based in counties that have been designated as nonattainment for the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The counties included are Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry.

2. Second priority will be given for public school systems whose fleets are based in counties that have been designated as maintenance for the 2008 Ozone NAAQS and attainment for the 2015 Ozone NAAQS. These counties are Cherokee, Coweta, Douglas, Fayette, Forsyth, Newton, Paulding, and Rockdale.

3. Third priority will be given for public school systems whose fleets are based in counties that have not been designated as nonattainment or maintenance for the 2008 or 2015 Ozone NAAQS.

4. Within each priority, applications will be ranked according to cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).

(e) Deadline for Submittal. EPD will issue the first solicitation for applications within 4 months of notice of criteria approval. Applications will be due within four weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after grants are awarded to all qualified projects from the first solicitation or additional funds are received for this program after the initial solicitation, additional solicitation(s) will be issued until all of the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria and requirements included in this paragraph [391-3-21-.15\(5\)](#).

(f) Directions for Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:

Georgia Environmental Protection Division
Planning and Support Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

(g) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts if necessary to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.

(6) Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for replacing diesel school buses that are located or operated in the State of Georgia.

(a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the school bus(es) proposed for early replacement and the model year of the new replacement bus(es).

2. Submitted projects must conform to all applicable programmatic and administrative conditions including but not limited to those in this paragraph.

(i) Coordination with EPD personnel.

(ii) Use of engines certified by EPA or CARB to 2010 or newer heavy-duty engine standards for projects including the early replacement of school buses.

(iii) Any proposed school bus(es) to be replaced must be between model year 1996-2018.

(iv) Funds under this award cannot be used for emission reductions that result from school bus replacements that would have occurred through normal attrition/fleet turnover within three years of notice of criteria approval.

(v) Funds under this award cannot be used for the purchase of school buses to expand a fleet.

(vi) Any proposed replacement bus must perform the same function and operation as the bus or engine that is being replaced.

(vii) Any proposed replacement bus must be of the same type and similar gross vehicle weight rating or horsepower as the bus being replaced.

(viii) For any proposed school bus to be replaced, the bus engine must be scrapped or rendered permanently disabled within ninety (90) days of the replacement or returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Permanently disabling the engine, while retaining possession of the engine, is an acceptable scrapping method. Disabling the engine may be completed by drilling a hole in the engine block (the part of the engine containing the cylinders) and manifold. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or remanufacturing the bus engine. If scrapped or remanufactured engines are to be sold, program income requirements apply.

(ix) For any school bus to be replaced, the chassis must be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or its engine returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Remanufacturing must be completed during the project period. Permanently disabling the chassis and the engine (see (viii) above), while retaining possession of the bus, is an acceptable scrapping method. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or refurbishing the bus chassis. Components that are not part of the bus engine or chassis may be salvaged from the unit being replaced. If scrapped or remanufactured buses or salvaged bus chassis or components are to be sold, program income requirements apply.

(x) Submit documentation on the decommissioning of the replaced school bus engine (as outlined in the above subparagraphs (viii) and (ix)) in projects that include early bus replacement.

(xi) Submission of quarterly and final reports when requested.

(xii) Compliance with applicable Federal procurement and subgrant procedures.

(xiii) Use of the replacement school buses for a minimum of four years unless the vehicles become inoperable and are unable to be repaired.

(b) Eligible Recipients and Projects for the Grant.

1. An eligible applicant is any Georgia public school system that owns and operates school buses.

2. Eligible applicants can only receive funding for projects proposing to replace model year 1996-2009 school buses with school buses equipped with 2016 or newer model year engines; or replace 1996-2018 diesel school buses with 2016 or newer near zero NOx or zero emissions school buses.

(c) Match Requirements. Project applicants shall be required to match a minimum of 75% of the project cost to purchase early replacement school buses. Solicitations may include an additional voluntary cost share so that additional federal funds may be received.

(d) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:

1. First priority will be given for public school systems whose fleets are based in counties that have been designated as nonattainment for the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The counties included are Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry.

2. Second priority will be given for public school systems whose fleets are based in counties that have been designated as maintenance for the 2008 Ozone NAAQS and attainment for the 2015 Ozone NAAQS. These counties are Cherokee, Coweta, Douglas, Fayette, Forsyth, Newton, Paulding, and Rockdale.

3. Third priority will be given for public school systems whose fleets are based in counties that have not been designated as nonattainment or maintenance for the 2008 or 2015 Ozone NAAQS.

4. Within each priority, applications will be ranked according to cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).

(e) Deadline for Submittal. EPD will issue the first solicitation for applications within 4 months of notice of criteria approval. Applications will be due within four weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after grants are awarded to all qualified projects from the first solicitation or additional funds are received for this program after the initial solicitation, additional solicitation(s) will be issued until all the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria and requirements included in this paragraph [391-3-21-.15\(6\)](#).

(f) Directions for Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:

Georgia Environmental Protection Division
Planning and Support Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

(g) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts, if necessary, to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.

(7) Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for replacing diesel school buses that are located or operated in the State of Georgia.

(a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the school bus(es) proposed for early replacement and the model year of the new replacement bus(es).

2. Submitted projects must conform to all applicable programmatic and administrative conditions including but not limited to those in this paragraph.

(i) Coordination with EPD personnel.

(ii) Any proposed school bus(es) must be certified by EPA or CARB to meet the eligibility requirements in (b)2.

(iii) Any proposed school bus(es) to be replaced must be diesel-powered and the model year must be between 1996-2020.

(iv) Funds under this award cannot be used for emission reductions that result from school bus replacements that would have occurred through normal attrition/fleet turnover within three years of notice of criteria approval.

(v) Funds under this award cannot be used for the purchase of school buses to expand a fleet.

(vi) Any proposed replacement bus must perform the same function and operation as the bus or engine that is being replaced.

(vii) Any proposed replacement bus must be of the same type and similar gross vehicle weight rating or horsepower as the bus being replaced.

(viii) For any proposed school bus to be replaced, the bus engine must be scrapped or rendered permanently disabled within ninety (90) days of the replacement or returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Permanently disabling the engine, while retaining possession of the engine, is an acceptable scrapping method. Disabling the engine may be completed by cutting a three-inch hole in the engine block (the part of the engine containing the cylinders). Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or remanufacturing the bus engine. If scrapping is to be sold, program income requirements apply.

(ix) For any school bus to be replaced, the chassis must be scrapped or rendered permanently disabled within ninety (90) days of the replacement. Permanently disabling the chassis and the engine (see (viii) above), while retaining possession of the bus, is an acceptable scrapping method. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or refurbishing the bus chassis. Components that are not part of the bus engine or chassis may be salvaged from the unit being replaced. If scrapping is to be sold, program income requirements apply.

(x) Submit documentation on the decommissioning of the replaced school bus engine (as outlined in the above subparagraphs (viii) and (ix)) in projects that include early bus replacement.

(xi) Submission of quarterly and final reports when requested.

(xii) Compliance with applicable Federal procurement and subgrant procedures.

(xiii) Use of the replacement school buses for a minimum of four years unless the vehicles become inoperable and are unable to be repaired.

(xiv) If a 2010 engine model year (EMY) or newer bus is replaced, the 2010 EMY or newer bus may be retained by selling the bus within Georgia provided the 2010 EMY or newer bus replaces a 1996-2009 EMY bus, and the 1996-2009 EMY bus is scrapped. The retained bus must be sold, and the 1996-2009 replacement bus must be located within Georgia. It is preferred that the scrapped unit currently operates within the same project location(s) as the 2010 EMY or newer vehicle currently operates, however alternative scenarios will be considered. The option to sell a bus is only allowed if the NOx emission reduction benefits are retained or improved compared to the original application. A detailed scrapping plan must be submitted and approved by the Division prior to the sale. If the bus is sold, program income requirements apply.

(b) Eligible Recipients and Projects for the Grant.

1. An eligible applicant is any Georgia public school system that owns and operates school buses.

2. Eligible applicants can only receive funding for projects proposing to replace model year 1996-2009 diesel school buses with school buses equipped with 2016 or newer model year engines; or replace 1996-2020 diesel school buses with 2016 or newer low-NOx or zero emissions school buses.

(c) Match Requirements. Project applicants shall be required to match a minimum of 75% of the project cost to purchase early replacement school buses. Solicitations may include an additional voluntary cost share so that additional federal funds may be received.

(d) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:

1. First priority will be given for public school systems whose fleets are based in counties that have been designated as nonattainment for the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The counties included are Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry.
2. Second priority will be given for public school systems whose fleets are based in counties that have been designated as maintenance for the 2008 Ozone NAAQS and attainment for the 2015 Ozone NAAQS. These counties are Cherokee, Coweta, Douglas, Fayette, Forsyth, Newton, Paulding, and Rockdale.
3. Third priority will be given for public school systems whose fleets are based in counties that have not been designated as nonattainment or maintenance for the 2008 or 2015 Ozone NAAQS.
4. Within each priority, applications will be ranked according to cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).

(e) Deadline for Submittal. EPD will issue the first solicitation for applications within 4 months of notice of criteria approval. Applications will be due within four weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after grants are awarded to all qualified projects from the first solicitation or additional funds are received for this program after the initial solicitation, additional solicitation(s) will be issued until all the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria and requirements included in this paragraph [391-3-21-.15\(7\)](#).

(f) Directions for Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:

Georgia Environmental Protection Division
Planning and Support Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

(g) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts, if necessary, to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.

(8) Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for replacing diesel school buses that are located or operated in the State of Georgia.

(a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the school bus(es) proposed for early replacement and the model year of the new replacement bus(es).
2. Submitted projects must conform to all applicable programmatic and administrative conditions including but not limited to those in this paragraph.

(i) Coordination with EPD personnel.

(ii) Any proposed school bus(es) must be certified by EPA or CARB to meet the eligibility requirements in (b)2.

(iii) Any proposed school bus(es) to be replaced must be diesel-powered and the model year must be 2021 or older.

(iv) Funds under this award cannot be used for emission reductions that result from school bus replacements that would have occurred through normal attrition/fleet turnover within three years of notice of criteria approval.

(v) Funds under this award cannot be used for the purchase of school buses to expand a fleet.

(vi) Any proposed replacement bus must perform the same function and operation as the bus or engine that is being replaced.

(vii) Any proposed replacement bus must be of the same type and similar gross vehicle weight rating or horsepower as the bus being replaced (e.g., replace Type D bus with another Type D bus). Alternately, the proposed replacement bus may be one type smaller and of less gross vehicle weight rating or horsepower as the bus being replaced (e.g., replace Type D bus with a Type C bus).

(viii) For any proposed school bus to be replaced, the bus engine must be scrapped or rendered permanently disabled within ninety (90) days of the replacement or returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Permanently disabling the engine, while retaining possession of the engine, is an acceptable scrapping method. Disabling the engine may be completed by cutting a three-inch hole in the engine block (the part of the engine containing the cylinders). Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or remanufacturing the bus engine. If scrapping is to be sold, program income requirements apply.

(ix) For any school bus to be replaced, the chassis must be scrapped or rendered permanently disabled within ninety (90) days of the replacement. Permanently disabling the chassis and the engine (see (viii) above), while retaining possession of the bus, is an acceptable scrapping method. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or refurbishing the bus chassis. Components that are not part of the bus engine or chassis may be salvaged from the unit being replaced. If scrapping is to be sold, program income requirements apply.

(x) Submit documentation on the decommissioning of the replaced school bus engine (as outlined in the above subparagraphs (viii) and (ix)) in projects that include early bus replacement.

(xi) Submission of quarterly and final reports when requested.

(xii) Compliance with applicable Federal procurement and subgrant procedures.

(xiii) Use of the replacement school buses for a minimum of four years unless the vehicles become inoperable and are unable to be repaired.

(xiv) If a 2010 engine model year (EMY) or newer bus is replaced, the 2010 EMY or newer bus may be retained by selling the bus within Georgia provided the 2010 EMY or newer bus replaces a pre-2009 EMY bus, and the pre-2009 EMY bus is scrapped. The retained bus must be sold, and the pre-2009 replacement bus must be located within Georgia. It is preferred that the scrapped unit currently operates within the same project location(s) as the 2010 EMY or newer vehicle currently operates, however alternative scenarios will be considered. The option to sell a bus is only allowed if the NOx emission reduction benefits are retained or improved compared to the original application. A detailed scrapping plan must be submitted and approved by the Division prior to the sale. If the bus is sold, program income requirements apply.

(b) Eligible Recipients and Projects for the Grant.

1. An eligible applicant is any Georgia public school system that owns and operates school buses.
 2. Eligible applicants can only receive funding for projects proposing to replace model year 2009 or older diesel school buses with school buses equipped with 2019 or newer model year engines; or replace 2021 or older diesel school buses with 2019 or newer low-NOx or zero emissions school buses.
- (c) Match Requirements. Project applicants shall be required to match a minimum of 75% of the project cost to purchase early replacement school buses. Solicitations may include an additional voluntary cost share so that additional federal funds may be received.
- (d) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:
1. First priority will be given for public school systems whose fleets are based in counties that have been designated as nonattainment for the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The counties included are Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry.
 2. Second priority will be given for public school systems whose fleets are based in counties that have been designated as maintenance for the 2008 Ozone NAAQS and attainment for the 2015 Ozone NAAQS. These counties are Cherokee, Coweta, Douglas, Fayette, Forsyth, Newton, Paulding, and Rockdale.
 3. Third priority will be given for public school systems whose fleets are based in counties that have not been designated as nonattainment or maintenance for the 2008 or 2015 Ozone NAAQS.
 4. Within each priority, applications will be ranked according to cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).
- (e) Deadline for Submittal. EPD will issue the first solicitation for applications within 4 months of notice of criteria approval. Applications will be due within four weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after grants are awarded to all qualified projects from the first solicitation or additional funds are received for this program after the initial solicitation, additional solicitation(s) will be issued until all the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria and requirements included in this paragraph [391-3-21-.15\(8\)](#).
- (f) Directions for Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:
- Georgia Environmental Protection Division
Planning and Support Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354
- (g) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts, if necessary, to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.
- (9) Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for replacing diesel school buses that are located or operated in the State of Georgia.
- (a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the school bus(es) proposed for early replacement and the model year of the new replacement bus(es).

2. Submitted projects must conform to all applicable programmatic and administrative conditions including but not limited to those in this paragraph.

(i) Coordination with EPD personnel.

(ii) Any proposed school bus(es) must be certified by EPA or CARB to meet the eligibility requirements in (b)2.

(iii) Any proposed school bus(es) to be replaced must be diesel-powered and the model year must be 2022 or older.

(iv) Funds under this award cannot be used for emission reductions that result from school bus replacements that would have occurred through normal attrition/fleet turnover within three years of notice of criteria approval.

(v) Funds under this award cannot be used for the purchase of school buses to expand a fleet.

(vi) Any proposed replacement bus must perform the same function and operation as the bus or engine that is being replaced.

(vii) Any proposed replacement bus must be of the same type and similar gross vehicle weight rating or horsepower as the bus being replaced (e.g., replace Type D bus with another Type D bus). Alternately, the proposed replacement bus may be one type smaller and of less gross vehicle weight rating or horsepower as the bus being replaced (e.g., replace Type D bus with a Type C bus).

(viii) For any proposed school bus to be replaced, the bus engine must be scrapped or rendered permanently disabled within ninety (90) days of the replacement or returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Permanently disabling the engine, while retaining possession of the engine, is an acceptable scrapping method. Disabling the engine may be completed by cutting a three-inch hole in the engine block (the part of the engine containing the cylinders). Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or remanufacturing the bus engine. If scrapping is to be sold, program income requirements apply.

(ix) For any school bus to be replaced, the chassis must be scrapped or rendered permanently disabled within ninety (90) days of the replacement. Permanently disabling the chassis and the engine (see (viii) above), while retaining possession of the bus, is an acceptable scrapping method. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or refurbishing the bus chassis. Components that are not part of the bus engine or chassis may be salvaged from the unit being replaced. If scrapping is to be sold, program income requirements apply.

(x) Submit documentation on the decommissioning of the replaced school bus engine (as outlined in the above subparagraphs (viii) and (ix)) in projects that include early bus replacement.

(xi) Submission of quarterly and final reports when requested.

(xii) Compliance with applicable Federal procurement and subgrant procedures.

(xiii) Use of the replacement school buses for a minimum of four years unless the vehicles become inoperable and are unable to be repaired.

(xiv) If a 2010 engine model year (EMY) or newer bus is replaced, the 2010 EMY or newer bus may be retained by selling the bus within Georgia provided the 2010 EMY or newer bus replaces a pre-2009 EMY bus, and the pre-2009 EMY bus is scrapped. The retained bus must be sold, and the pre-2009 replacement bus must be located within Georgia. It is preferred that the scrapped unit currently operates within the same project location(s) as the 2010 EMY or newer vehicle currently operates, however alternative scenarios will be considered. The option to sell a bus is only allowed if the NOx emission reduction benefits are retained or improved compared to the original application. A detailed scrappage plan must be submitted and approved by the Division prior to the sale. If the bus is sold, program income requirements apply.

(b) Eligible Recipients and Projects for the Grant.

1. An eligible applicant is any Georgia public school system that owns and operates school buses.

2. Eligible applicants can only receive funding for projects proposing to replace engine model year 2009 or older diesel school buses with school buses equipped with 2019 or newer model year engines; or replace 2022 or older diesel school buses with 2019 or newer low-NOx or zero emissions school buses.

(c) Match Requirements. Project applicants shall be required to match a minimum of 75% of the project cost to purchase early replacement school buses. Solicitations may include an additional voluntary cost share so that additional federal funds may be received.

(d) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:

1. First priority will be given for public school systems whose fleets are based in counties that have been designated as nonattainment for the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The counties included are Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry.

2. Second priority will be given for public school systems whose fleets are based in counties that have been designated as maintenance for the 2008 Ozone NAAQS and attainment for the 2015 Ozone NAAQS. These counties are Cherokee, Coweta, Douglas, Fayette, Forsyth, Newton, Paulding, and Rockdale.

3. Third priority will be given for public school systems whose fleets are based in counties that have not been designated as nonattainment or maintenance for the 2008 or 2015 Ozone NAAQS.

4. Within each priority, applications will be ranked according to cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).

(e) Deadline for Submittal. EPD will issue the first solicitation for applications within 4 months of notice of criteria approval. Applications will be due within four weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after grants are awarded to all qualified projects from the first solicitation or additional funds are received for this program after the initial solicitation, additional solicitation(s) will be issued until all the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria and requirements included in this paragraph [391-3-21-.15\(9\)](#).

(f) Directions for Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:

Georgia Environmental Protection Division
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(g) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts, if necessary, to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.

(10) Scope and Purpose. Grants are available under the Diesel Emissions Reduction Act (DERA) State Clean Diesel Grant Program for replacing diesel school buses that are located or operated in the State of Georgia.

(a) General Terms and Conditions of the Grant.

1. Projects submitted for funding under this Grant must identify the school bus(es) proposed for early replacement and the model year of the new replacement bus(es).

2. Submitted projects must conform to all applicable programmatic and administrative conditions including but not limited to those in this paragraph.

(i) Coordination with EPD personnel.

(ii) Any proposed school bus(es) must be certified by EPA or CARB to meet the eligibility requirements in (b)2.

(iii) Any proposed school bus(es) to be replaced must be diesel-powered and the model year must be 2023 or older.

(iv) Funds under this award cannot be used for emission reductions that result from school bus replacements that would have occurred through normal attrition/fleet turnover within three years of notice of criteria approval.

(v) Funds under this award cannot be used for the purchase of school buses to expand a fleet.

(vi) Any proposed replacement bus must perform the same function and operation as the bus or engine that is being replaced.

(vii) Any proposed replacement bus must be of the same type and similar gross vehicle weight rating or horsepower as the bus being replaced (e.g., replace Type D bus with another Type D bus). Alternately, the proposed replacement bus may be one type smaller and of less gross vehicle weight rating or horsepower as the bus being replaced (e.g., replace Type D bus with a Type C bus).

(viii) For any proposed school bus to be replaced, the bus engine must be scrapped or rendered permanently disabled within ninety (90) days of the replacement or returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard. Permanently disabling the engine, while retaining possession of the engine, is an acceptable scrapping method. Disabling the engine may be completed by cutting a three-inch hole in the engine block (the part of the engine containing the cylinders). Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or remanufacturing the bus engine. If scrapping is to be sold, program income requirements apply.

(ix) For any school bus to be replaced, the chassis must be scrapped or rendered permanently disabled within ninety (90) days of the replacement. Permanently disabling the chassis and the engine (see (viii) above), while retaining possession of the bus, is an acceptable scrapping method. Cutting a three-inch-by-three-inch hole in the engine block (the part containing the cylinders) is the preferred scrapping method. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrapping methods may be considered and will require prior Division approval. This grant does not cover the cost of scrapping or refurbishing the bus chassis. Components that are not part of the bus engine or chassis may be salvaged from the unit being replaced. If scrapping is to be sold, program income requirements apply.

(x) Submit documentation on the decommissioning of the replaced school bus engine (as outlined in the above subparagraphs (viii) and (ix)) in projects that include early bus replacement.

(xi) Submission of quarterly and final reports when requested.

(xii) Compliance with applicable Federal procurement and subgrant procedures.

(xiii) Use of the replacement school buses for a minimum of four years unless the vehicles become inoperable and are unable to be repaired.

(xiv) If a 2010 engine model year (EMY) or newer bus is replaced, the 2010 EMY or newer bus may be retained by selling the bus within Georgia provided the 2010 EMY or newer bus replaces a pre-2009 EMY bus, and the pre-2009 EMY bus is scrapped. The retained bus must be sold, and the pre-2009 replacement bus must be located within Georgia. It is preferred that the scrapped unit currently operates within the same project location(s) as the 2010 EMY or newer vehicle currently operates, however alternative scenarios will be considered. The option to sell a bus is only allowed if the NOx emission reduction benefits are retained or improved compared to the original application. A detailed scrappage plan must be submitted and approved by the EPA prior to the sale. If the bus is sold, program income requirements apply.

(b) Eligible Recipients and Projects for the Grant.

1. An eligible applicant is any Georgia public school system that owns and operates school buses.

2. Eligible applicants can only receive funding for projects proposing to replace engine model year 2009 or older diesel school buses with school buses equipped with 2021 or newer model year engines; or replace 2023 or older diesel school buses with 2021 or newer low-NOx or zero emissions school buses.

(c) Match Requirements. Project applicants shall be required to match a minimum of 75% of the project cost to purchase early replacement school buses. Solicitations may include an additional voluntary cost share so that additional federal funds may be received.

(d) Criteria for the Award. In the event that the costs of the applications submitted for eligible projects exceed the available funding, EPD will determine the projects to be selected as follows:

1. First priority will be given for public school systems whose fleets are based in counties that have been designated as maintenance for the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The counties included are Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry.

2. Second priority will be given for public school systems whose fleets are based in counties that have been designated as maintenance for the 2008 Ozone NAAQS and attainment for the 2015 Ozone NAAQS. These counties are Cherokee, Coweta, Douglas, Fayette, Forsyth, Newton, Paulding, and Rockdale.

3. Third priority will be given for public school systems whose fleets are based in counties that have not been designated as nonattainment or maintenance for the 2008 or 2015 Ozone NAAQS.

4. Within each priority, applications will be ranked according to cost effectiveness of the project (cost per ton of emission reduced over the lifetime of the project).

(e) Deadline for Submittal. EPD will issue the first solicitation for applications within 4 months of notice of criteria approval. Applications will be due within four weeks after release of the solicitation. Funding will be distributed based on the criteria for award between eligible applicants that reply within the first solicitation period. If funds remain after grants are awarded to all qualified projects from the first solicitation or additional funds are received for

this program after the initial solicitation, additional solicitation(s) will be issued until all the funds have been obligated. For each solicitation, retrofit projects will be awarded based on the priority and order in which projects rank within the criteria selection process. The applications will be evaluated based on the criteria and requirements included in this paragraph [391-3-21-.15\(10\)](#).

(f) Directions for Submitting Applications for the Georgia Diesel Emission Reduction Program. Requests for copies of the general guidelines and proposal forms and submittal of applications for the DERA Georgia Diesel Emission Reduction Program should be made to:

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4244 International Parkway, Suite 120
Atlanta, Georgia 30354

(g) Award of the Georgia Diesel Emission Reduction Program grants is subject to Federal funding provided to EPD. EPD may fund individual projects less than the requested amounts, if necessary, to distribute funds among equally ranked projects or to reduce the project cost to the maximum allowable distribution.

Cite as Ga. Comp. R. & Regs. R. 391-3-21-.15

AUTHORITY: O.C.G.A. § [12-9-1](#) *et seq.*, as amended.

HISTORY: Original grant description entitled "Georgia Diesel Emissions Reduction Program" submitted May 16, 2011.

Submitted: May 2, 2013.

Submitted: Nov. 10, 2017.

Submitted: Oct. 29, 2018.

Submitted: Sep. 6, 2019.

Submitted: Sep. 15, 2020.

Submitted: Oct. 13, 2021.

Submitted: Nov. 10, 2022.

Submitted: Oct. 30, 2023.

Department 515. RULES OF GEORGIA PUBLIC SERVICE COMMISSION

Chapter 515-7. GAS UTILITIES

Subject 515-7-3. MARKETERS' CERTIFICATES OF AUTHORITY

515-7-3-.03 Application for a Certificate of Authority

(1) Any person seeking to sell or offer to sell natural gas on a firm basis pursuant to O.C.G.A. § [46-4-153](#) is required to file an application with the Commission on a form approved for a certificate of authority. No person other than a gas company or a regulated provider shall sell or offer to sell natural gas to any person who primarily receives firm service in any delivery group(s) in Georgia unless and until such time as a certificate of authority has been issued by the Commission.

(2) Applications shall contain the following:

(a) the legal name of the Applicant and the name under which it proposes to do business in Georgia, as well as its mailing and business address(es), telephone number(s), facsimile number(s), and internet e-mail address, if any;

(b) the name(s) and current business address(es) of the Applicant's principal corporate officers;

(c) the name(s) and current business address(es) of the Applicant's principal and corporate officer(s) in Georgia, if different from those identified in subparagraph (b) above;

(d) the name, title, address, and telephone number(s), facsimile number(s), and internet e-mail address of employee designated to receive and respond to Commission requests and who will notify the Commission of any changes to the information provided in this application while pending;

(e) if the Applicant is a non-resident of Georgia, give name, address, and telephone number(s), facsimile number(s), and internet e-mail address of an agent or attorney in fact in this state upon whom process may be served in any suit against Applicant;

(f) a description of the Applicant's business, ownership structure, affiliates, date of formation, tax identification number, Georgia Secretary of State's charter or identification number and Georgia revenue sales tax number;

(g) Attach a list of principal officers, whether the Applicant is a corporation or other legal entity; if a corporation, a copy of the charter articles of incorporation, articles of organization or certificate, as applicable marked as **Exhibit A**; a list of all directors, managers, members, and limited partners and principal stockholders with the number of shares held by each, or percentage of ownership interest as applicable marked as **Exhibit B**, and the name and addresses of the president, vice president, treasurer, and secretary;

(h) State and date of incorporation for corporate entities and formation for non-corporate entities, and attach an organizational chart marked as **Exhibit C**;

(i) If applicable, provide the name(s) and business address(es) of the Applicant's principle and corporate officers in Georgia, if different from those above;

(j) If Applicant is a partnership or cooperative, give names and addresses of partners, officers and/or members;

(k) the financial capability information shall include, but is not limited to:

1. a demonstration that the Applicant's capital base or other financial resources are sufficient to withstand the business risk, financial risk and absorb losses that might be incurred in providing primarily firm gas service to retail customers. Such demonstration should include lines of credit, letters of credit, or other financial instruments, as well as loans from financial institutions, a parent corporation or affiliate, a subsidiary, or other entity. In the event that start-up costs and expected losses projected during the initial period of operations may require working capital, detailed and comprehensive documentation of the sources of such anticipated working capital shall be provided in hard copy and electronic format (Excel format with all formulas unlocked). Any and all documentation required by an Applicant's lender, line of credit or surety provider shall be included as part of the application;

i. Applicant's credit rating and/or bond rating made by a national rating agency.

ii. Credit facilities/Credit Agreements that include the total credit facility dollar amount of the facility and the dollar amount available for use.

iii. Loans/Loan Agreements that include a breakdown of the dollar amount(s) of each loan, the name of the lender, and provide the terms of the loan(s).

iv. Parental Guarantees/Terms of Guarantees that include any parental guarantee as a separate attachment with a dollar amount, if any, and any written terms. A **sworn statement** must be signed by a corporate officer of the parent company affirming the parental guarantee.

v. The Applicant shall provide Bank Statements generated by the Applicant's bank that are no more than 30 days old prior to the filing date of the application.

vi. Other Liquid Assets/List of Assets

2. a sworn statement that the Applicant has met or has the ability to meet the creditworthiness standards of the interstate pipelines serving the State of Georgia and the Commission-approved creditworthiness standards, and the EDC's credit-worthiness standards, and the Applicant has been or is currently participating in discussions with the EDC and/or interstate pipeline regarding the Applicant's creditworthiness;

3. An explanation of how the Applicant's financial backing, plans and resources provide the requisite support for the implementation of the business/marketing plans for providing primarily firm gas service to retail customers, including a 36-month breakeven analysis in electronic Excel format with all formulas unlocked demonstrating projected customer growth, gas volumes in therms, revenues, costs, expenses, and net income. Any and all documentation required by the Applicant's lender, line of credit or surety provider shall be included. The breakeven analysis must include monthly projections for customers and gas load in therms.

4. the audited financial statements (balance sheets, income statements, and cash flow statements) of the Applicant for the last three (3) years; if audited financial statements are unavailable, then unaudited financial statements supported by the sworn certification of an officer, general partner, or managing agent will be accepted. If a parent corporation, Applicant affiliate or other entity will support the Applicant, the parent corporation, affiliate or other entity's audited financial statements for the last three (3) years should be provided;

5. the most recent annual reports filed with the stockholders and the Securities and Exchange Commission (Form 10K/Form 10Q) if Applicant and/or parent corporation is a publicly held company;

6. detailed pro forma balance sheets, income statements and statements of cash flow for the next three (3) years for the Applicant as well as the Applicant's business and marketing plans for the certificated area of service in Georgia;

7. the details of any unconditional purchase obligations that require payments by the Applicant in future periods;

8. a schedule of the Applicant's non-cancelable operating lease commitments;
 9. the schedules detailing the Applicant's long-term debt and available credit facilities, including installments due on long-term debt; for five (5) years following the date of this application;
 10. the details of any joint ventures or general partnership agreements between the Applicant and other parties;
 11. the information as to whether an estimated claim from a loss contingency has been accrued by a charge to income as it relates to any pending or known litigation or actual claims;
 12. the management's plan for dealing with matters relating to an Applicant's ability to continue as a going concern;
 13. the Applicant's plan to provide for funds to be held in escrow by an independent third party in the event that prepaid services are to be offered or deposits are required; and
 14. If the Applicant had any of the following conditions or events in the past ten (10) years or anticipates any of the following conditions or events within the next twelve months, the Applicant's plans (with respect to the Applicant's ability to continue as a going concern) for dealing with any of the following conditions or events:
 - (i) Recurring operating losses;
 - (ii) Working capital deficiencies;
 - (iii) Negative cash flows from operating activities;
 - (iv) Denial of credit from suppliers;
 - (v) Restructuring of debt;
 - (vi) Need to dispose of substantial assets;
 - (vii) Substantial dependence on the success of a particular project;
 - (viii) Uneconomic long-term commitments;
 - (ix) Need to significantly revise operations;
 - (x) Legal proceedings, legislation or similar matters that might jeopardize the Applicant's ability to continue operations;
 - (xi) Loss of a key franchise;
 - (xii) Loss of a certificate of authority to provide natural gas or electricity in another jurisdiction;
 - (xiii) Loss of a principal or key customer or supplier; or
 - (xiv) Loss of principal or key management or technical personnel.
 15. any other information that the Applicant believes is relevant to the evaluation of its financial capability.
- (l) the technical information shall include, but is not limited to:

1. the names, current business address(es), and principal place(s) of business of employees that will direct the Georgia operations, including an employee of the Applicant that will serve as a contact person for the Commission;
2. in the past ten (10) years, the information as to whether certificates of authority for the sale of natural gas have ever been issued by any other state(s) and whether such certificates are current. An Applicant shall also disclose to the Commission whether any application for certification has ever been denied and whether any certificate of authority issued to it or an affiliate has ever been suspended, revoked, modified, or sanctioned;
3. a list of the Applicant's comparable gas marketing activities by jurisdiction, to include the name of the companies with annual sales revenues, volumes of gas in therms or other measures of activity;
4. select the delivery group(s) that the Applicant seeks to serve; select the customer classes the Applicant seeks to serve: residential, commercial, and/or industrial;
5. The Applicant's forecast of estimated or anticipated gas supply and capacity needed to serve the Georgia market based upon the Applicant's marketing strategy to acquire customers, as well as limitations, if any, on gas supply. This data can be included in the 36-month breakeven analysis located in [515-7-3-.03\(2\)\(k\)\(2\)](#). This may include providing Staff access to applicable gas supply and capacity contracts. If applicable, these items may be filed pursuant to Commission Rule [515-3-1-.11](#) as trade secret material;
6. a list of all current contracts with interstate pipelines that the Applicant may use in conjunction with or in lieu of those provided by the EDC upon acquisition of market share in the respective delivery groups. If applicable, these items may be filed pursuant to Commission Rule [515-3-1-.11](#) as trade secret material;
7. a detailed description of the tools, strategy, and/or other information that the Applicant will utilize to mitigate natural gas price volatility;
8. a detailed description of the Applicant's natural gas purchasing strategy for the various customer classes (fixed, variable, commercial, etc.);
9. a projection of the percentage of base load, seasonal, and spot gas supply contract the Applicant plans to utilize in its operations. The Applicant shall provide an explanation for the projected amounts;
10. a detailed description of the Applicant's contingency plan to provide gas to firm customers in the event that a supply disruption occurs;
11. the detailed procedures that will be employed by the Applicant in a gas-related emergency (i.e., force majeure, interstate capacity limitation);
12. a detailed description of the Applicant's operating experience and qualifications of principal management employees involved in the day-to-day activities of the entity's operation in Georgia;
13. the proposed terms of service as required by Chapter 515-7-9 of the Commission Utility Rules;
14. the rules for contracting with firm customers as referenced in O.C.G.A. §§ [46-4-153\(a\)\(2\)\(C\)](#), [46-4-158.2](#), [46-4-158.3](#), [46-4-160\(a\)](#), [46-4-160\(h\)](#), [46-4-160\(i\)](#), [46-4-160\(j\)](#), and [46-4-160\(k\)](#), and Commission Utility Rules Chapter 515-7-6;
 - (i) the rules for contracting with firm customers shall include, but are not limited to:
 - (I) the bills and contracts must be written in clear and plain language;
 - (II) the bills must contain sufficient information to allow customers to verify the accuracy of their bills;

(III) the pricing structure must be clearly explained, including any late fees or interest charges;

(IV) the contract term must be specified along with any termination rights;

I. the firm customers must be allowed to cancel their contract without penalty within 72 hours of signing it.

II. the firm customer must be given the right to cancel their fixed rate contract with their current marketer without an exit fee only if they relocate to a different delivery group and a fixed rate is not offered by their current marketer in the new delivery group. However, if the customer refuses to continue the term of their current fixed rate contract with their current marketer, an exit fee may be charged.

(V) the bill must include the EDC's 24-hour emergency telephone number;

(VI) the EDC's active customer account number must be placed on each bill; and

(VII) the bill must comply with all requirements of Commission Rules that specifically address marketer billing practices and marketer bills.

(ii) the Applicant acknowledges that it must comply with federal telemarketing rules and Georgia consumer protection laws.

15. the Applicant's plan to provide for funds to be held in escrow by an independent third party in the event that prepaid services are to be offered or deposits are required;

16. a statement as to whether day-to-day operations such as gas procurement, nominations and planning will be provided by in house personnel or will be contracted for by a third party; and

17. any other information that the Applicant believes is relevant to the evaluation of its technical capability.

(m) Legal disclosures shall include, but are not limited to:

1. a statement, to include supporting documentation, as to whether the Applicant, the Applicant's officers and/or its directors, partners, or employees in managerial positions, who have declared bankruptcy or had a civil judgment rendered against it/him/her in the past ten (10) years;

2. a statement, to include supporting certified copies of dispositions, as to whether the Applicant, any of its officers and/or directors, partners, or employees in managerial positions who have been fined and/or found guilty/liable by a state public service commission, or other state or federal court or agency, for any violations in the past ten (10) years.

3. a statement, to include supporting certified copies of legal dispositions, as to whether the Applicant, any of its officers and/or its directors, partners, or employees in managerial positions who have been fined and/or found guilty/liable by a State public service commission, or other State or Federal court or agency, for predatory marketing practices in the past ten (10) years, whether such marketing practices were managed in-house or by an outside third-party.

4. a statement as to whether the Applicant, any of its officers and/or its directors, partners, or employees in managerial positions who have entered into a settlement agreement or been fined or found liable by a state public service commission, or other state or federal court or agency, for any violations in the past ten (10) years; and

5. a statement disclosing any existing, pending or past adverse rulings, judgments, litigation, contingent liabilities, revocations of authority, administrative regulatory investigations (i.e., FERC, SEC) related to the Applicant, any of its officers and/or its directors, partners, owners, or employees in managerial positions for the past ten (10) years.

(3) Applicants that are EMC gas affiliates shall provide, but are not limited to, the following:

(a) In addition to providing the information set forth in its Utility Rule [515-7-3-.03\(2\)](#), an Applicant that is an EMC gas affiliate shall include with its application for a certificate of authority proposed terms and conditions to govern the relationship between the electric membership corporation and its EMC gas affiliate as contemplated in O.C.G.A. § [46-4-153](#).

(b) As proposed, these terms and conditions shall be designed to prevent cross-subsidization between the provision of electricity and the provision of natural gas services, to encourage and promote fair competition in the overall retail natural gas market, and to protect the privacy of both electric and natural gas consumers.

(c) The order subsequently issued by the Commission in response to the EMC gas affiliate's application shall meet the objectives set forth in O.C.G.A. § [46-4-153.1](#), as well as such other requirements the Commission shall determine are necessary to protect electric and natural gas consumers and promote competition.

(d) To ensure that cross-subsidizations do not occur between the electricity services of an electric membership corporation and the gas activities of its gas affiliate, the terms and conditions ordered by the Commission shall provide that each electric membership corporation having a gas affiliate shall:

1. Fully allocate all electricity activities costs and gas activities costs, including costs for any shared services, between the electric membership corporation's electricity activities and the gas activities of its gas affiliate, in accordance with the applicable uniform system of accounts and generally accepted accounting principles, as applicable;

2. Develop and maintain a cost allocation manual, approved by the Commission, describing the electric membership corporation's methods of cost allocation and such other information and policies reasonably required by the Commission to ensure compliance with Article 5 of Chapter 4 of Title 46 of the Official Code of Georgia Annotated and the terms and conditions ordered by the Commission. Such manual shall:

(i) Establish rules for the pricing of transactions between an electric membership corporation and its gas affiliate, including the transfer of assets between the two, which rules shall provide that any transfer of assets shall be the greater between market rates or book value;

(ii) Provide that any loans from the electric membership corporation to its gas affiliate shall be at market rates, shall not reflect rates which are generally available through the use of any tax exempt financing, and may not be tied to any loans from the federal or state government;

(iii) Require the electric membership corporation and its gas affiliate to maintain separate books of accounts and records which shall, subject to the Commission's rules for treatment of trade secrets, be subject to production and inspection by the Commission for the sole purpose of confirming compliance with this article, the cost allocation manual, and the terms and conditions of the gas affiliate's certificate; and

(iv) Require the annual filing of a statement with the Commission certifying the compliance by the electric membership corporation and its gas affiliate with the approved cost allocation manual, which annual filing shall itemize financial summary information in the form of Federal Energy Regulatory Commission (FERC) account codes as requested by the Commission Staff.

3. Not charge any costs of the gas affiliate to the electricity customers of the electric membership corporation.

(e) To protect customer privacy and prevent the misuse of customer information, the terms and conditions ordered by the Commission shall provide that no electric membership corporation shall release any proprietary customer information to its gas affiliate without obtaining prior verifiable authorization from the customer, as determined in accordance with rules established by the Commission.

(f) The Commission may require that any customer service that an electric membership corporation provides to its gas affiliate be offered to all marketers at the same rate and on the same terms and conditions as provided to the gas affiliate. Any such services provided to the gas affiliate or marketers must be on a strictly confidential basis, such that the electric membership corporation does not share information regarding one marketer with any other marketer, including an EMC gas affiliate.

(g) The terms and conditions shall accommodate the organizational structures of electric membership corporations.

(h) To assure separate but coordinating governance of an electric membership corporation and its gas affiliate, the terms and conditions shall prohibit more than one half of the persons serving as members of the board of directors of a gas affiliate from at the same time serving on the board of directors of an electric membership corporation.

(i) The Commission shall make accommodation for the specific legal requirements imposed by state or federal laws applicable to electric membership corporations and other cooperatives.

(4) Any information that the Applicant deems to be proprietary or confidential may be filed pursuant to Commission Rule Chapter [515-3-1-.11](#), Trade Secrets.

(5) An Applicant shall submit to the Executive Secretary of the Commission the number of copies indicated on the application form. The original, signed by the Applicant, must accompany the copies. Failure to provide the appropriate number of copies or the signed original will result in the rejection and return of the application.

(6) Any application that is deemed to be incomplete after it is filed with the Commission shall not be considered until such time as all of the information requested therein has been furnished. The sixty (60) day time frame during which the Commission is charged with conducting a public hearing or hearings on an application shall not commence unless and until a completed application has been submitted by the Applicant. The Commission shall provide the Applicant with a notification within fifteen (15) days after filing whether said application is deemed to be complete, or, if incomplete, what information is lacking. The Commission shall notify the Applicant no later than fifteen (15) days following its receipt of any additional information whether such information is sufficient to regard the application as complete. If the additional information is not sufficient, the notification sent to the Applicant by the Commission shall include a specific statement detailing the information that must be clarified or which otherwise does not adequately respond to the original request.

(7) The Commission shall deem an application to be withdrawn if the Applicant fails to furnish any information requested in a notice of incompleteness within fifteen (15) business days after the date on which the request for additional information was issued.

(8) A certificate of authority may not be transferred, assigned, or leased except upon application to and approval by the Commission.

Cite as Ga. Comp. R. & Regs. R. 515-7-3-.03

AUTHORITY: O.C.G.A. [46-4-153](#).

HISTORY: Original Rule entitled "Complaints" adopted as ER. 515-7-3-0.5-.03. F. Nov. 12, 1996; eff. Nov. 5, 1996, the date of adoption.

Amended: New Rule entitled "Application for a Certificate of Authority" adopted. F. Feb. 10, 1998; eff. Mar. 2, 1998.

Amended: F. May 23, 2000; eff. June 12, 2000.

Amended: F. Aug. 13, 2002; eff. Sept. 2, 2002.

Amended: F. Sept. 3, 2002; eff. Sept. 23, 2002.

Repealed: New Rule of same title adopted. F. Feb. 15, 2008; eff. Mar. 6, 2008.

Amended: F. June 18, 2018; eff. July 8, 2018.

Amended: F. Oct. 25, 2023; eff. Nov. 14, 2023.

Department 560. RULES OF DEPARTMENT OF REVENUE

Chapter 560-2. ALCOHOL AND TOBACCO DIVISION

Subject 560-2-2. GENERAL PROVISIONS

560-2-2-.02 Licensing Qualifications

(1) No Person shall manufacture, distribute, sell, handle, possess for sale, or otherwise deal in Alcoholic Beverages or non-beverage Alcohol without first obtaining all applicable licenses required by the Act and these regulations.

(2) Every Person applying for a state license, permit, or registration to deal in Alcoholic Beverages shall make application on forms through the Georgia Tax Center, accessible through the Department's website, or in any other manner prescribed by the Commissioner, and under oath shall answer all questions, supply all information and statements (including information regarding applicant's employees and all Persons with a beneficial interest in the applicant), furnish all certificates, affidavits, bonds and other supporting data or documents as reasonably required by the Commissioner.

(a) All license applications under these regulations shall be a permanent record.

(b) Willful failure to furnish the Department with any of the information required by these regulations or by law shall constitute grounds for denial or revocation of a license.

(3) Applications for a state license, permit, or registration shall state the identical name and address of the applicant as stated in the application for a license required by local governing authorities.

(a) Every license shall specify the premises where the Licensee shall have its Place of Business and such location shall not be changed during the term of the license.

(b) Any Fraternal Organization shall be permitted to apply for a license in the name of any qualified officer or member of such organization.

(c) Any legal entity, including but not limited to, all partnerships, limited liability companies, domestic or foreign corporations, lawfully registered and doing business under the laws of Georgia or the laws of another state and authorized by the Secretary of State to do business in Georgia which seeks to obtain an Alcoholic Beverage or non-beverage Alcohol license may be permitted to apply for a license in the name of the legal entity as it is registered in the Office of the Secretary of State of Georgia. Notwithstanding the foregoing, however:

1. In its application for an Alcoholic Beverage or non-beverage Alcohol license, the legal entity shall provide the Commissioner with the name and address of its agent authorized to receive service of process under the laws of Georgia, together with a listing of its current officers and their respective addresses.

2. Any change in the status of the Licensee's registered agent, including but not limited to, change of address, or name, shall be reported to the Commissioner within five (5) days of such occurrence.

3. In the event that a legal entity fails to appoint or maintain a registered agent in Georgia as required by law, or whenever its registered agent cannot with due diligence be found at the registered office of the corporation as designated in its application for license, the Commissioner shall be appointed agent to receive any citation for violation of these regulations.

4. Process may be served upon the Commissioner by leaving with the Commissioner duplicate copies of such citations.
5. In the event that the notice of citation is served upon the Commissioner or one of the Commissioner's designated agents, the Commissioner shall immediately forward one of the copies to the corporation at its registered office.
6. Any service made upon the Commissioner shall be answerable within thirty (30) days.
7. The Commissioner shall keep a record of all citations served upon the Commissioner under this Regulation, and shall record the time of service and the disposition of that service.
- (4) The state license issued shall be valid for the calendar year indicated; provided that:
- (a) The Licensee is actively engaged in business; and
- (b) If applicable, has a valid county or municipal license.
- (5) In the event a Licensee ceases to be actively engaged in business, or if a Licensee's local license becomes invalid in any way, the state license shall be invalid and the Licensee of that business shall immediately notify and return the state license to the Department.
- (a) Any license issued to a Retailer after November 1, 2023 by a local licensing jurisdiction that does not conform with the requirements of O.C.G.A. § [3-2-7.1](#) shall be deemed an invalid license until the local licensing jurisdiction satisfies the requirements of O.C.G.A. § [3-2-7.1](#) and, until such requirements are met, no state license shall be issued to any such Retailer.
- (6) No alcohol license application will be granted where it would lead to a violation of or is in conflict with any Department regulations or other laws of the State of Georgia.
- (7) A Licensee that desires to continue in business during the next calendar year must make a new application for that year on or before November 1 of the preceding year.
- (8) Any untrue, misleading, or omitted statement or information contained in an application shall be cause for denial and, if any license has been granted, shall be cause for its revocation.
- (9) The failure of any applicant, or failure of any Person, firm, corporation, legal entity, or organization having any interest in any operation for which an application has been submitted, to meet any obligations imposed by the tax laws or other law or regulation of Georgia shall be grounds for denial of the license, permit or registration for which an application is made.
- (10) To protect the public interest or welfare, no license to sell Alcoholic Beverages of any kind shall be issued by the Commissioner to:
- (a) Any person as determined by the Commissioner, who, by reason of that person's business experience, financial standing, trade associations, personal associations, records of arrests, or reputation in any community in which the person has resided, is not likely to maintain the operation for which the person is seeking a license in conformity with federal, state or local laws;
- (b) Any person convicted of a felony who served any part of a criminal sentence, including probation, within the ten (10) years immediately preceding the date of receipt of submission of the application; or
- (c) Any person who has been convicted of a misdemeanor who served any part of a criminal sentence, including probation, within the five (5) years immediately preceding the date of receipt of submission of the application.

(11) The Commissioner may decline to issue a state license to a person for the operation of a Place of Business when any person having any interest in the operation of that Place of Business or control over such Place of Business does not meet the same requirements as set forth in these regulations for the Licensee.

(12) If the Commissioner has reason to believe that the applicant is not entitled to the license for which the applicant has applied, the Commissioner shall notify the applicant in writing.

(a) The applicant shall have fifteen (15) days from the date of the notice to request, in writing, a hearing on the application.

(b) Upon receipt of applicant's written request, the Commissioner shall provide the applicant with due notice and opportunity for a hearing on the application pursuant to Subject 560-2-16.

(c) If the Commissioner, after providing notice and an opportunity for a hearing, finds the applicant is not entitled to a license, the applicant shall be advised in writing of the findings upon which that denial is based.

(13) In order to ensure correspondence is timely received, any change to an applicant's or licensee's contact information including, but not limited to, a change of mailing address, email address, or telephone number, shall be updated via the Georgia Tax Center, or in any other manner prescribed by the Commissioner, within five (5) days of such change.

Cite as Ga. Comp. R. & Regs. R. 560-2-2-.02

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [3-2-3](#), [3-2-7.1](#), [48-2-12](#).

HISTORY: Original Rule entitled "License Application" adopted. F. and eff. June 30, 1965.

Repealed: New Rule of same title adopted. F. Oct. 23, 1969; eff. Nov. 1, 1969, as specified by the Agency.

Repealed: New Rule entitled "Financial Transactions" adopted. F. May 5, 1982; eff. May 25, 1982.

Repealed: F. Sept. 6, 2006; eff. Sept. 26, 2006.

Amended: New Rule entitled "Licensing Qualifications" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

560-2-2-.08 Providing Testimony and Documents

(1) By the application for, the acceptance of, or the conduct of business under any license or permit issued pursuant to this Act, every holder of a license or permit issued and every employee or officer of such Licensee agrees to appear and give sworn testimony and produce documents and records reasonably calculated to aid the Commissioner in any investigation or hearing held under this Act or under these regulations.

(2) Each such person shall appear and produce the required documents at the office of the Commissioner or at such other place as he may reasonably designate, at a time as the Commissioner may designate in writing and with reasonable notice.

Cite as Ga. Comp. R. & Regs. R. 560-2-2-.08

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [3-2-3](#).

HISTORY: Original Rule entitled "Separation of Georgia Products" adopted. F. and eff. June 30, 1965.

Repealed: New Rule entitled "Notification of Disciplinary Action" adopted. F. May 5, 1982; eff. May 25, 1982.

Repealed: New Rule entitled "Providing Testimony and Documents" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

560-2-2-.12 Measurement of Distances

(1) Unless otherwise provided by law, all measurements to determine compliance with distance requirements under the Act for the issuance of an initial state Alcoholic Beverages license shall be measured by the most direct route of travel on the ground and shall be measured in the following manner:

(a) Prior to April 1, 2007:

1. From the front door of the structure which Alcoholic Beverages are sold or offered for sale;
2. In a straight line to the nearest public sidewalk, walkway, street, road or highway;
3. Along such public sidewalk, walkway, street, road or highway by the nearest route;
4. To the front door of the building or to the nearest portion of the grounds, whichever is applicable under the appropriate statute.

(b) After March 31, 2007:

1. In a straight line from the front door of the structure from which Alcoholic Beverages are sold or offered for sale;
2. To the front door of the building of a church, government-owned treatment center or a retail package store; or
3. To the nearest property line of the real property being used for school or educational purposes.

(2) When measuring distances pursuant to this Rule, the Department will ignore obstacles added by the licensee or any other party, such as fences or other improvements or obstructions, added with the purpose of increasing the measurement of distance, and where removal of all such obstacles would result in the premises not satisfying any applicable distance requirement. The Department will measure over or through any such obstacles, as the Department deems appropriate, to obtain the proper distance measurement.

(3) All renewal applications shall use the measurements required in the initial application and license.

Cite as Ga. Comp. R. & Regs. R. 560-2-2-.12

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [3-3-21](#).

HISTORY: Original Rule entitled "Compliance With Transportation Rules and Regulations" adopted. F. and eff. June 30, 1965.

Repealed: New Rule entitled "Validity of License" adopted. F. May 5, 1982; eff. May 25, 1982.

Repealed: New Rule entitled "Measurement of Distances" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

560-2-2-.13 Refunds; Discounts; Gifts; All Sales Final

(1) Unless otherwise specifically permitted by this Act and these regulations, no Manufacturer, Shipper, Importer, Broker, or Wholesaler, nor their employees, agents, Representatives, or anyone acting on their behalf, shall directly or indirectly:

(a) Make any gift, refund, price concession, discount, joint offer, or any concession of any kind or character;

(b) Give or offer to give any sample, free goods, articles, or things of value in connection with the sale of Alcoholic Beverages, except to the extent expressly authorized in Subject 560-2-4 and Subject 560-2-5;

(c) Compensate any Retailer or Retail Consumption Dealer or their employees for interior or exterior beautification, improvement in premises, displaying any merchandise, or displaying the same merchandise in a particular position or manner;

(d) Make any inducement to any Retailer or Retail Consumption Dealer or their employees, agents, buyers, or purchasing agents by:

1. Furnishing, giving, or lending any equipment, fixtures, signs, supplies, money, services, or other things of value. Social Media posts or messages used to inform the public where a Manufacturer or Wholesaler's products are available for purchase at retail shall not be considered a thing of value.

2. Guaranteeing any loan or repayment of any financial obligation, paying total or partial payment of salary, or promoting any promotion or sales contest for such persons.

(2) Nothing shall prohibit quantity discounts by Wholesalers to Retailers or Retail Consumption Dealers provided such quantity discounts are for sale and delivery to a single retail location and are available to all Retailers and Retail Consumption Dealers within that Wholesaler's designated sales territory upon equal terms.

(3) It shall be a violation of this Rule for any Retailer or Retail Consumption Dealer, their employees, agents, buyers, purchasing agents, or anyone acting directly or indirectly on their behalf to accept, acquiesce, or otherwise participate in the prohibited acts contained in the Act or this Chapter or to coerce or attempt to coerce, entice, request, or solicit any prohibited acts.

(4) Alcoholic Beverages shall be inspected at the time of delivery for breakage, damage, shortage, and for any other condition which would render delivery unacceptable to the Retailer or Retail Consumption Dealer.

(a) No adjustment or exchange subsequent to delivery shall be permitted where breakage, shortage, or other conditions are evident to the extent that such conditions would have been obvious upon casual inspection at the time of delivery.

(5) A licensed Wholesaler may accept from any licensed Retailer or Retail Consumption Dealer any quantity of Alcoholic Beverages and give that Retailer or Retail Consumption Dealer credit for the same, but only if on the same day the Retailer or Retail Consumption Dealer buys from the Wholesaler, at prevailing prices, a like quantity, measured in case lots, of the same Alcohol Type and Brand, and copies of the invoices evidencing such transfer are promptly filed at the Wholesaler's Place of Business for inspection by the Commissioner or his agents.

(6) Exchanges of identical Brands and quantities of Alcoholic Beverages shall be authorized for "leakers" or "short fills," provided at the time of such exchange the tops of the containers are affixed and such leakage is apparent.

(a) No adjustment, credit, or exchange subsequent to delivery shall be permitted for chipped bottle necks of Malt Beverages;

(b) Within thirty (30) days of Malt Beverage Brands becoming outdated in accordance with written brewery or Wholesaler's quality control standards and provided the Malt Beverages were sold to the Retailer or Retail Consumption Dealer at the Wholesaler's posted unit price at the time of sale, Wholesalers:

1. May exchange identical Brands and quantities of Malt Beverages.
2. May exchange the Malt Beverage for identical quantities of the same or other Brands within the mix and match assortment sold under authority of Rule [560-2-4-.07](#) and the Malt Beverages have the same single case price as products being exchanged.
3. Shall retain copies of invoices evidencing such exchanges and promptly file same at the Wholesaler's Place of Business for inspection by the Commissioner or the Commissioner's agents.
4. Shall not issue a credit, rebate, or refund of excise taxes for such an exchange.

Cite as Ga. Comp. R. & Regs. R. 560-2-2-.13

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [48-2-12](#).

HISTORY: Original Rule entitled "Intra-State Transportation Via Licensed Common Carriers" adopted. F. and eff. June 30, 1965.

Repealed: New Rule of same title adopted. F. Sept. 25, 1978; eff. Oct. 15, 1978.

Repealed: New Rule entitled "Other Beverage Alcohol Prohibited" adopted. F. May 5, 1982; eff. May 25, 1982.

Repealed: New Rule entitled "Refunds; Discounts; Gifts; All Sales Final" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: F. May 6, 2016; eff. May 26, 2016.

Amended: F. May 31, 2023; eff. June 20, 2023.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

Department 560. RULES OF DEPARTMENT OF REVENUE

Chapter 560-2. ALCOHOL AND TOBACCO DIVISION

Subject 560-2-3. RETAILER/RETAIL CONSUMPTION DEALER

560-2-3-.04 Products Other than Distilled Spirits for Sale, Display, or Offer

No Retailer of Distilled Spirits shall sell, offer for sale, display, furnish, or keep in stock for sale at its licensed Premises where Distilled Spirits are offered for sale, any other products or services except the following:

- (a) Wines, if the Retailer holds a valid and current license to sell Wine at that Place of Business;
- (b) Malt Beverages, if the Retailer holds a valid and current license to sell Malt Beverages at that Place of Business;
- (c) Cigarettes, cigars, chewing tobacco, alternative nicotine products, or vapor products, snuff, if properly licensed to do so, cigarette papers, lighters and matches, chewing gum, breath mints, manufactured packaged consumable single-serving snack items not requiring any preparation for consumption, single-serving pain medications, and over-the-counter birth control devices;
- (d) Beverages containing no Alcohol and which are commonly used to dilute Distilled Spirits;
- (e) Packaged ice, ice chests, and "koozies" (individual can and bottle coolers).
 - 1. The term "packaged ice" shall refer only to ice in packages of five pounds or greater that is also in compliance with Georgia Department of Agriculture Rule [40-7-1-.08](#), entitled "Food from Approved Source," and the packaging complies with Georgia Department of Agriculture Rule [40-7-1-.26](#), entitled "Labeling."
- (f) Paper, Styrofoam, or plastic cups, gift bags, which are limited in size to accommodate one 750 milliliter size bottle of Wine or Distilled Spirits, and contain only products approved for sale or display by this regulation.
- (g) Lottery tickets issued by the Georgia Lottery Corporation and any approved Georgia Lottery Corporation lottery materials, provided such Retailer is also an authorized retailer of the Georgia Lottery Corporation;
- (h) Bar supplies, limited to:
 - 1. Corkscrews, openers, straws, swizzle stirrers, and bar-related containers, and wares made of glass, plastic, metal, or ceramic materials.
 - 2. Items customarily used in the preparation of Alcoholic Beverage drinks, including but not limited to cocktail olives, onions, cherries, lemons, limes, and sugars or salts, provided such products are produced and marketed specifically for the preparation of Alcoholic Beverage drinks.
 - 3. Alcoholic Beverage drink recipe booklets, bar guides, and consumer-oriented Alcoholic Beverage publications.
- (i) Products co-packaged with Alcoholic Beverages, provided that the products are limited to items approved for sale or display by this regulation, are offered for sale and sold as a single unit, and do not include more than one type of Alcoholic Beverage product;
- (j) Check cashing services arising out of the sale of any product lawfully sold under this Rule;

- (k) Money order sales arising out of check cashing services;
- (l) Automated teller machine service for customer use;
- (m) Gift certificates for use only at the issuing licensed Retailer; and
- (n) Devices and related accessories designed primarily for accessing or extracting alcohol and/or flavorings from prepackaged containers, including pods, pouches, capsules or similar containers, to mix or prepare alcoholic beverages. Devices which are not designed primarily for these purposes, including but not limited to household blenders, are not eligible under this subparagraph.

Cite as Ga. Comp. R. & Regs. R. 560-2-3-.04

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [48-2-12](#).

HISTORY: Original Rule entitled "Brand Registration Conditional to Sale" adopted. F. and eff. June 30, 1965.

Amended: F. Dec. 24, 1974; eff. Jan. 13, 1975.

Repealed: New Rule entitled "Brand Registration; Labels; Conditional to Sale" adopted. F. May 13, 1975; eff. June 2, 1975.

Repealed: New Rule entitled "Joint Registrant" adopted. F. May 5, 1982; eff. May 25, 1982.

Repealed: F. Sept. 6, 2006; eff. Sept. 26, 2006.

Amended: New Rule entitled "Products Other than Distilled Spirits for Sale, Display, or Offer" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: F. Jul. 24, 2014; eff. Aug. 13, 2014.

Amended: F. Nov. 18, 2020; eff. Dec. 8, 2020.

Amended: F. May 31, 2023; eff. June 20, 2023.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

Department 560. RULES OF DEPARTMENT OF REVENUE

Chapter 560-2. ALCOHOL AND TOBACCO DIVISION

Subject 560-2-5. MANUFACTURERS, SHIPPERS, IMPORTERS, & BROKERS

560-2-5-.09 Registering Additional Brands and Brand Labels for Designation of Wholesalers and Sales Territories; Notice to Previously Designated Wholesaler(s)

(1) After a Manufacturer, Shipper, Importer, or Broker has made any registration pursuant to Rule [560-2-5-.08](#), such Manufacturer, Shipper, Importer, or Broker may register additional Brands or Brand Labels subject to the following terms:

(a) Such Manufacturer, Shipper, Importer, or Broker shall, at least thirty (30) days in advance of offering such additional Brands or Brand Labels, submit the following through the Georgia Tax Center:

1. Except where not required by law, one U.S. Alcohol and Tobacco Tax and Trade Beverage approved Brand Label for each such Brand and Brand Label of Alcoholic Beverage to be shipped into, or within, Georgia;

2. If such Manufacturer, Shipper, Importer, or Broker is not listed as the applicant on the U.S. Alcohol and Tobacco Tax and Trade Beverage Certification/Exemption of Label/Bottle Approval for such Brand or Brand Label, submit a letter of authorization from such applicant granting such Manufacturer, Shipper, Importer, or Broker the authority to register such Brand or Brand Label in Georgia;

3. Designate, in the application for registration, sales territories for each Brand or Brand Label to be sold into, or within, Georgia; and

4. Name one Licensed Wholesaler in each territory who shall be the exclusive Wholesaler of such Brand or Brand Label within that territory.

(b) Such designations of Wholesalers or Wholesalers' territories shall be initially approved by the Commissioner and shall not be changed nor initially disapproved except for cause, and the Commissioner shall determine cause after a hearing pursuant to these regulations.

(c) Submit a request through the Georgia Tax Center at least thirty (30) days in advance of offering such Alcoholic Beverages for sale in Georgia. The registration of additional Brands or Brand Labels shall be limited to a maximum of ten (10) Brands and Brand Labels per submission, with unlimited submissions;

(d) Any application for the registration of Brands or Brand Labels that tends to create a monopoly or lessen competition with respect to Alcoholic Beverages will not be approved. A proposed change or transfer that will place more than 25% of the case volume of all Distilled Spirits sold in Georgia under one Wholesaler or controlled group is presumed to be an attempt to create a monopoly and lessen competition.

(2) If any Brands or Brand Labels submitted for registration pursuant to Rule [560-2-5-.08](#) or this Rule have been previously designated to a different Wholesaler or if such Brands or Brand Labels or any material portions thereof are the same as, or similar to, or such a modification, substitution, upgrade, or extension of, a Brand or Brand Label that has been previously designated to a different Wholesaler, the Manufacturer, Shipper, Importer, or Broker shall:

(a) Notify the previously designated Wholesaler(s) by mailing, via U.S. certified mail, a copy of the request to register such Brands or Brand Labels that designate different Wholesalers or sales territories.

(3) The previously designated Wholesaler(s) shall have thirty (30) days from receipt of the notification in paragraph (2) of this Rule above to file an objection with the Commissioner. If an objection is not filed with the Commissioner within the thirty (30) day period, the right to file such objection shall be waived.

(a) Objections shall state the specific reasons which form the basis of the objection;

(b) Any Brands or Brand Labels previously registered in Georgia and which have subsequently been withdrawn from distribution for a period of less than four (4) years shall be treated in the same manner as registering additional Brands or Brand Labels and are subject to the provisions in this Rule;

(c) Any Brands or Brand Labels previously registered in Georgia which have subsequently been withdrawn from distribution for a period equal to or greater than four (4) years shall be deemed an initial application to register the Brands or Brand Labels pursuant to Rule [560-2-5-.08](#);

(d) Any previously designated Wholesaler filing an objection after the Brand or Brand Label has been withdrawn for a period equal to or greater than four (4) years and for which an initial application has been deemed filed pursuant to subparagraph (3)(c) above, and Rule [560-2-5-.08](#), shall only have the right to a hearing if an objection is filed with the Commissioner within six (6) months of the date of registration and a determination is made by the Commissioner that a hearing is warranted;

(e) The objection should include information showing that the last date the Manufacturer shipped Alcoholic Beverages to the Wholesaler was within the previous four (4) years;

(f) Maintaining an inventory of the withdrawn Brand or Brand Label showing subsequent sales of that Brand or Brand Label to Retailers and/or Retail Consumption Dealers shall NOT constitute sufficient grounds for a determination that a hearing is warranted;

(g) A Brand or Brand Label is considered withdrawn as of the date of the letter of withdrawal pursuant to Rule [560-2-5-10\(8\)](#), or if sooner, the date the license expires or is relinquished by the Manufacturer, Shipper, Importer, or Broker.

(4) The Commissioner shall set a hearing and provide at least sixty (60) days notice of such hearing via U.S. certified mail to the previously designated Wholesaler(s), the proposed designated Wholesaler(s) for such Brands or Brand Labels, and the Manufacturer, Shipper, Importer or Broker, as provided in subparagraph (a) below:

(a) The Commissioner shall set a hearing as provided in this Rule if any of the following occur:

1. Any objecting party notifies the Commissioner that the Manufacturer, Shipper, Importer, or Broker has failed to provide notice pursuant to paragraph (2) of this Rule above;

2. An objection is filed pursuant to paragraph (3) of this Rule above within the thirty (30) day period;

3. A Wholesaler notifies the Commissioner that it believes such Brands or Brand Labels or any material portions thereof are the same as, or similar to, or such modification, substitution, upgrade or extension of, a Brand or Brand Label which has already been registered; or

4. A motion is filed by the Commissioner.

(b) If it is determined from the evidence adduced at the hearing that the Brand or Brand Label involved, including any material portion thereof, is the same as or similar to or is such a modification, substitution, upgrade or extension

of, a Brand or Brand Label which has already been registered by the Manufacturer, Shipper, Importer or Broker (or a predecessor of such Brand or Brand Label) so as to render it unjust or inequitable (without cause being shown) to designate the Brand or Brand Label being so modified, substituted, upgraded or extended; then such request shall be denied or reversed, as the case may be;

(c) Provided however, that nothing in this Regulation shall be construed to prevent the Manufacturer, Shipper, Importer or Broker from treating the matter as a desire to change Wholesalers, and from proceeding under Regulation [560-2-5-.10](#), either before or after such determination;

(d) Any inventory of the released Brand may no longer be distributed by the Wholesaler as of the date of the letter of release as specified in Rule [560-2-5-.10\(7\)](#).

Cite as Ga. Comp. R. & Regs. R. 560-2-5-.09

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [3-4-152](#), [3-5-31](#), [3-6-22](#), [48-2-12](#).

HISTORY: Original Rule entitled "Place of Sale or Delivery of Goods" adopted. F. and eff. June 30, 1965.

Repealed: New Rule of same title adopted. F. Mar. 23, 1977; eff. Apr. 12, 1977.

Repealed: New Rule of same title adopted. F. May 25, 1977; eff. June 14, 1977.

Amended: F. Nov. 2, 1977; eff. Nov. 22, 1977.

Repealed: F. May 5, 1982; eff. May 25, 1982.

Amended: New Rule entitled "Farm Winery Retail Sales in Tasting Rooms" adopted. Sept. 19, 1983; eff. Oct. 9, 1983.

Repealed: New Rule entitled "Registering Additional Brand Labels" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: New title, "Registering Additional Brands and Brand Labels for Designation of Wholesalers and Sales Territories; Notice to Previously Designated Wholesaler(s)." F. May 31, 2023; eff. June 20, 2023.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

560-2-5-.10 Changing Brands and Brand Labels Registration, Designation of Wholesalers or Sales Territories

(1) Any Manufacturer, Shipper, Importer, or Broker desiring to change Wholesalers with respect to any Brand or Brand Label or to change the territory of a designated Wholesaler, shall file with the Commissioner, a Notice of Intention containing the following information:

(a) Name of each Brand or Brand Label involved;

(b) Case volume in Georgia for each Brand or Brand Label for the current year and the two previous years;

(c) Name of the Wholesaler currently distributing each such Brand or Brand Label;

(d) Name of the proposed new Wholesaler, the proposed scope of the sales territory, and whether such territory is different from that of the currently designated Wholesaler;

(e) Case volume of all Brands or Brand Labels of the proposed new Wholesaler for the current year and the two preceding years;

(f) Name of all persons, firms or corporations having any financial interest in the proposed new Wholesaler;

(g) If any person, firm or corporation named in subparagraph (f) above has any financial interest in any other business engaged in the sale of Alcoholic Beverages, the Department requires additional information including, but not limited to, the following:

1. Business name and address;
2. Alcohol license number;
3. Ownership interest and/or offices held; and
4. Business relationship or association.

(h) A detailed explanation of the specific business reasons for the request to change Wholesalers or to change the territory of a designated Wholesaler.

(2) Business reasons which may be considered by the Commissioner in determining cause for authorizing a change of Wholesalers or to change the territory of a designated Wholesaler include:

(a) A Wholesaler's bankruptcy or serious financial instability, including its failure consistently to pay its debts timely or its failure to meet or maintain any objective standards of capitalization expressly agreed to between the Wholesaler and the Manufacturer, Shipper, Importer, or Broker, provided such standards are determined by the Commissioner to be reasonable;

(b) A Wholesaler's repeated violation of any provision of federal or state law or regulation whether or not such violation resulted in official action;

(c) A Wholesaler's failure to maintain sales volume of the Brand or Brand Label reasonably consistent with sales volumes of other Wholesalers of that Brand or Brand Label, or a Wholesaler's failure to otherwise promote the product effectively; and

(d) Any other factors relevant to such proposed change that will aid the Commissioner in determining cause.

(3) At the same time that the original Notice of Intention is filed with the Commissioner, a copy shall be served via U.S. certified mail by the Manufacturer, Shipper, Importer, or Broker, upon each Wholesaler who may be affected by the proposed changes and a certificate of such service shall accompany the original Notice of Intention filed with the Commissioner.

(4) Any person, including the Commissioner, may file an objection to the request to change Wholesalers or to change territory designations within thirty (30) days of the date of Notice of Intention. Such written objections shall be filed with the office of the Commissioner. The objecting party shall serve a copy of the objection upon all Wholesalers who may be affected by the proposed change via U.S. certified mail.

(a) Upon the request of any party or upon motion by the Commissioner, the Commissioner shall provide at least sixty (60) days notice via U.S. certified mail to all applicable parties, hold a hearing, for the purpose of determining the truth of any matters of fact alleged by any party and determining whether the proposed changes are based upon sufficient cause and are otherwise consistent with the policies set forth in Rules [560-2-5-.08](#) and [560-2-5-.09](#);

(b) Proposed changes will not be approved for the following reasons:

1. Any change that tends to create a monopoly or lessen competition with respect to any type of Alcoholic Beverage. A proposed change or transfer that will place more than 25% of the case volume of all Distilled Spirits sold in Georgia under one Wholesaler or controlled group is presumed to be an attempt to create a monopoly and lessen competition.

2. The failure or refusal of a Wholesaler to comply with any demand or request of a Manufacturer, Shipper, Importer, or Broker which would result in a violation of any provision of federal or state law or regulation.

(c) During the thirty (30) day period as provided in paragraph (4) above, and until the proposed changes have been finally approved by the Commissioner, the party proposing the change shall continue to supply the designated Wholesaler, upon commercially reasonable terms, such reasonable quantities of the Brands or Brand Labels involved as the Wholesaler may require.

(5) If no objection is filed to the Notice of Intention as provided in this Rule, the proposed changes shall stand automatically approved by the Commissioner at the expiration of such thirty (30) day period.

(6) Any Manufacturer, Shipper, Importer, or Broker who obtains or acquires in any manner, the right to sell, ship, or distribute any Brand or Brand Label shall for the purpose of these regulations stand in the place of, and be subject to, all of the rights, privileges, duties and obligations of its predecessor or its predecessors from whom such Brands or Brand Labels were obtained or acquired.

(7) When a Brand or Brand Label is voluntarily released by a Georgia Wholesaler from distribution in Georgia, the Wholesaler must mail a letter of release to the Manufacturer, Shipper, Importer, or Broker on company letterhead. Wholesaler shall provide a copy of the letter of release to the Alcohol and Tobacco Division of the Department within thirty (30) days of the date of the letter of release.

(a) The date of the letter of release will be considered the date upon which the Brand was withdrawn from distribution;

(b) Letters of release received by the Department after the thirty (30) day requirement will not be considered valid, and a new letter of release must be provided pursuant to the requirements in this Rule;

(c) Any inventory of the released Brand or Brand Label may no longer be distributed by the Wholesaler as of the date of the letter of release.

(8) When a Brand or Brand Label is voluntarily withdrawn from distribution in Georgia, the Manufacturer, Shipper, Importer, or Broker must mail a letter of withdrawal to the Wholesaler on company letterhead. The Manufacturer, Shipper, Importer, or Broker shall provide a copy of the letter of withdrawal to the Alcohol and Tobacco Division of the Department within thirty (30) days of the date of the letter of withdrawal.

(a) The date of the letter of withdrawal will be considered the date upon which the Brand or Brand Label is withdrawn from distribution;

(b) Letters of withdrawal received after the thirty (30) day requirement will not be considered valid, and a new letter of withdrawal must be provided pursuant to the requirements in this Rule;

(c) Any inventory of the withdrawn Brand or Brand Label may still be distributed after receipt of the letter of withdrawal by the Wholesaler.

Cite as Ga. Comp. R. & Regs. R. 560-2-5-.10

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [3-4-152](#), [3-5-31](#), [3-6-22](#), [48-2-12](#).

HISTORY: Original Rule entitled "Restriction to Retailers: Business Hours" was filed and effective on June 30, 1965.

Amended: Filed August 18, 1965; effective September 6, 1965.

Amended: Rule repealed and a new Rule of the same title adopted. Filed June 29, 1972; effective July 19, 1972.

Amended: Rule repealed and a new Rule of the same title adopted. Filed April 4, 1973; effective April 24, 1973. (This amendment was not printed because a new Rule repealing said amendment was filed a day prior to the effective date of said amendment).

Amended: Rule repealed and a new Rule of the same title adopted. Filed April 23, 1973; effective May 13, 1973.

Amended. Rule repealed and a new Rule entitled "Restriction to Retailer Business Hours: Exception: Restrictions on Other Mercantile Establishments: Manner of Operation" adopted. Filed May 25, 1977; effective June 14, 1977.

Amended: Rule repealed. Filed May 5, 1982; effective May 25, 1982.

Amended: Rule entitled "Farm Winery as Wholesaler" adopted. Filed September 19, 1983; effective October 9, 1983.

Repealed: New Rule entitled "Changing Brand or Territory Designations" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: New title, "Changing Brands and Brand Labels Registration, Designation of Wholesalers or Sales Territories." F. May 31, 2023; eff. June 20, 2023.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

Department 560. RULES OF DEPARTMENT OF REVENUE

Chapter 560-2. ALCOHOL AND TOBACCO DIVISION

Subject 560-2-11. HOTELS, CHARITABLE EVENTS & REAPS

560-2-11-.01 Hotel Catered Functions; In-Room Service License - Hotels, Charitable Events & REAPs

(1) Licensed Hotels shall be permitted to cater Hotel functions in ballrooms, meeting rooms, reception rooms, or patio areas of the licensed premises, provided that the functions are catered in connection with a meeting, conference, convention, or other similar type of gathering at the licensed premises.

(2) Any Hotel is authorized to provide in-room service as defined in O.C.G.A. § [3-9-10](#), provided the establishment:

- (a) Is licensed to sell Alcoholic Beverages;
- (b) Applies for a hotel in-room service license through the Georgia Tax Center; and
- (c) Is approved for a valid hotel in-room service license issued by the Department.

(3) In order to qualify for a hotel in-room service license, an applicant must be a Hotel and:

- (a) Have a valid Retailer license; or
- (b) Have a valid Retail Consumption Dealer license.

(4) Applicant may only qualify for a hotel in-room service license for the types of Alcoholic Beverages for which the Hotel has a Retailer license or Retail Consumption Dealer license.

(5) A hotel in-room service Licensee shall be authorized to:

(a) Deliver Alcoholic Beverages of the types for which the Hotel has a Retailer license or Retail Consumption Dealer license and a hotel in-room service license to a registered guest's room when:

1. The Alcoholic Beverages have been ordered by the guest; and
2. The guest is billed for the cost of the Alcoholic Beverages at the time of delivery.

(6) The sale shall be evidenced by a signed receipt providing the following:

- (a) The name of the registered guest who purchased the Alcoholic Beverages; and
- (b) The type and quantity of Alcoholic Beverages delivered.

(7) A cabinet may be located in a Hotel's guest room which:

(a) Contains Alcoholic Beverages of the types for which the Hotel has a Retailer license or Retail Consumption Dealer license and a hotel in-room service license; and

- (b) Is accessible by lock and key only to the guest.
- (8) A credit may be given to the guest for any unused and unopened Alcoholic Beverages upon request.
- (9) After receipt of the guest request for credit, the Hotel will maintain a written record of the request which shall:
 - (a) Specify the name of the guest;
 - (b) Provide an inventory of the quantity of Alcoholic Beverages contained in the cabinet; and
 - (c) Indicate the amount of credit, if any, given for any unused and unopened Alcoholic Beverages at the time of the guest's departure.
- (10) All documents as set forth in this Rule shall constitute an essential record to be maintained and stored in accordance with this Title and these regulations.
- (11) All Hotels having a hotel in-room service license shall:
 - (a) Maintain and store all Alcoholic Beverages for use in connection with the license for in-room service in an area that is not accessible to the public and that is separate from any other Alcoholic Beverages purchased for use in any other licensed premises of the Hotel;
 - (b) Not consummate sales in the storage area; and
 - (c) Maintain separate records relating to the purchase and sale of Alcoholic Beverages for in-room service as specified in O.C.G.A. § [3-3-6](#) and these regulations.
- (12) Nothing contained in this Rule shall be construed to restrict or prohibit the possession of Alcoholic Beverages by Hotel guests in quantities otherwise permitted under these regulations and Title 3 of the Code.

Cite as Ga. Comp. R. & Regs. R. 560-2-11-.01

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [3-3-6](#), [3-9-10](#), [48-12-2](#).

HISTORY: Original Rule entitled "License from Local Authority" was filed and effective on June 30, 1965.

Amended: Rule repealed and a new Rule of the same title adopted. Filed October 23, 1969; effective November 1, 1969, as specified by the Agency.

Amended: Rule repealed and a new Rule of the same title adopted. Filed November 29, 1973; effective December 19, 1973.

Amended: Rule repealed. Filed May 5, 1982; effective May 25, 1982.

Amended: New Rule entitled "Hotel Catered Functions; In-Room Service License - Hotels, Charitable Events & REAP" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: New title, "Hotel Catered Functions; In-Room Service License - Hotels, Charitable Events & REAPs." F. Oct. 5, 2023; eff. Oct. 25, 2023.

560-2-11-.02 Charitable Events Permit

(1) (a) Bona fide nonprofit charitable and civic organizations desiring to sell Alcoholic Beverages may apply for a permit authorizing the organization to sell or distribute Alcoholic Beverages for consumption on the premises only for a period not to exceed three (3) days.

(b) Applications for such temporary permit must include the following:

1. A copy of an official document, such as nonprofit certification by the Internal Revenue Service, the constitution and by-laws of the organization, or a corporate charter, which clearly states the purpose of the organization; and
2. A letter of authorization or local permit for the event from the local governing authority, or a signed affidavit from the applicant, confirming that applicant is in compliance with all local ordinances and regulations concerning special or charitable events.

(2) Applications must be submitted using the Georgia Tax Center, accessible through the Department's website. The permittee shall submit an application to the Department no later than ten (10) business days prior to the event.

(3) No permit shall be issued unless the applicant is in full compliance with the laws and regulations governing the sale of Alcoholic Beverages, including alcohol excise tax laws.

(4) Except as provided in this paragraph, Manufacturers, Brokers, Importers, Shippers, Wholesalers, and Retailers shall not make any donations of Alcoholic Beverages to any nonprofit charitable or civic organization that has obtained a permit. If a nonprofit charitable or civic organization has obtained a special event permit, Wholesalers shall be authorized to make donations of Alcoholic Beverages, provided that the Alcoholic Beverages were obtained through proper distribution channels and all applicable state and local taxes have been paid.

(a) No Alcoholic Beverages shall be donated to a nonprofit charitable or civic organization unless the organization has the appropriate state charitable event permit provided in this Rule.

(b) The amount of Alcoholic Beverages donated by the Wholesaler shall not exceed the amount reasonably necessary for the event for which a charitable event permit has been obtained.

(5) (a) At the request of a nonprofit charitable or civic organization that holds a charitable event permit under this Rule, Manufacturers, Brokers, Importers, Shippers, and Wholesalers may donate services to the organization by having permitted Representatives provide pouring services and product information during the event.

(b) The permittee shall be liable, in addition to the liability of the Licensee and its permitted Representative, for all acts or omissions in violation of Title 3 of the Code committed by the Licensee or any of Licensee's permitted Representatives.

(6) Provided a permit has been issued to a nonprofit charitable or civic organization, the organization shall be considered the same as any retail Licensee and subject to all laws, rules, and regulations under Title 3 of the Code.

(7) Nothing shall prohibit cash donations by Licensees under Title 3 of the Code to charitable and civic organizations provided that such donations are unconditional and not related to the purchase of a particular Brand or Brand Label of Alcoholic Beverage.

(8) No more than six (6) temporary charitable event permits may be issued to an organization in any one calendar year.

(9) Permittees may conduct such events on the Premises of a licensed Manufacturer or Wholesaler provided that all Alcoholic Beverages to be served or sold at the event are purchased from a licensed Wholesaler or donated pursuant to this Rule.

Cite as Ga. Comp. R. & Regs. R. 560-2-11-.02

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [3-9-3](#), [3-9-4](#), [48-2-12](#).

HISTORY: Original Rule entitled "Location Near Church or School" was filed and effective on June 30, 1965.

Amended: Rule repealed and a new Rule entitled "Application" adopted. Filed October 23, 1969; effective November 1, 1969, as specified by the Agency.

Amended: Filed November 29, 1973; effective December 19, 1973.

Amended: Rule repealed. Filed May 5, 1982; effective May 25, 1982.

Amended: New Rule entitled "Charitable Events" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: F. Sept. 9, 2011; eff. Sept. 29, 2011.

Amended: New title "Charitable Events Permit." F. May 6, 2016; eff. May 26, 2016.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

560-2-11-.03 Charitable Auctions; Wine

(1) Bona fide nonprofit charitable and civic organizations desiring to sell Wine at auction may apply for a temporary special use permit authorizing the organization to auction Wine in unbroken Packages for consumption off premises only for a period not to exceed three (3) days.

(a) Applications must be submitted using the Georgia Tax Center, accessible through the Department's website. Applications for the temporary special use permit for Wine auctions must include the following:

1. A copy of an official document, such as nonprofit certification by the Internal Revenue Service or constitution and by-laws of the organization, or a corporate charter, which clearly states the purpose of the organization; and
2. A letter of authorization or a local permit issued for the event from local governing authorities.

(2) Unlicensed individuals, licensed Retailers, and licensed Wholesalers shall be authorized to make donations of Alcoholic Beverages to a nonprofit organization to be sold at an auction permitted under this Rule, provided that the Alcoholic Beverages were obtained through proper distribution channels and all applicable state and local taxes have been paid or will be paid.

(a) Alcoholic Beverages may not be donated to a nonprofit charitable or civic organization unless the organization has the appropriate state special use temporary permit provided for under this Rule.

(b) The amount of Wine donated under paragraph (2) shall not exceed the amount necessary for the event for which a permit has been obtained.

(3) The nonprofit charitable or civic organization holding a temporary special use permit for Wine auctions under this Rule may ship or otherwise transport donated Wine to the location specified in the temporary special use permit for Wine auctions. This paragraph (3) only applies to Wine donated by a person who does not currently hold a license that has been issued by the Department pursuant to this Title or Wine donated by a Georgia licensed Retailer.

(4) Prior to the commencement of the event for which a temporary special use permit for Wine auctions has been issued under this Rule, the nonprofit charitable or civic organization shall furnish to the Department through the Georgia Tax Center a detailed inventory of the Wine to be auctioned, which shall include the following information:

(a) The name, address, telephone number, and Taxpayer Identification Number of any person furnishing Wine for the event; and

(b) The type, Brand, Brand Label, and quantity of each Wine to be sold at auction.

(5) Georgia excise tax is due on all donated Wine.

(a) In the event the nonprofit charitable or civic organization cannot verify that Georgia excise tax for the Wine was previously paid to the Department within ten (10) days of the conclusion of the permitted event, the nonprofit or charitable civic organization shall pay to the Department the appropriate excise tax as required by law on Form ATT-75 or its equivalent in the Georgia Tax Center, as provided by the Department.

(6) At the request of a nonprofit charitable or civic organization that holds a temporary special use permit for Wine auctions under this Rule, Manufacturers, Brokers, Importers, Shippers, and Wholesalers may donate services to the organization by having permitted Representatives provide product information during the event.

(7) Provided a temporary special use permit for Wine Auctions has been issued to a nonprofit charitable or civic organization, the organization shall be considered the same as any other Licensee and subject to all laws, rules, and regulations under this Title.

(8) Nothing shall prohibit cash donations by Licensees under Title 3 of the Code to charitable and civic organizations provided that such donations are unconditional and not related to the purchase of a particular Brand or Brand Label of Alcoholic Beverage.

(9) No more than six (6) temporary special use permits for Wine auctions may be issued to an organization in any one calendar year.

Cite as Ga. Comp. R. & Regs. R. 560-2-11-.03

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [3-9-4](#), [48-2-12](#).

HISTORY: Original Rule entitled "Annual Fee; Surety Bond" was filed and effective on June 30, 1965.

Amended: Rule repealed and a new Rule of the same title adopted. Filed November 29, 1973; effective December 19, 1973.

Amended: Rule repealed and a new Rule of the same title adopted. Filed May 13, 1974; effective June 2, 1974.

Amended: Rule repealed. Filed May 5, 1982; effective May 25, 1982.

Amended: New Rule entitled "Charitable Auctions; Wine" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

560-2-11-.04 Regional Economic Assistance Projects (REAPs)

(1) Once a Regional Economic Assistance Project (REAP) has received certification through the Department of Community Affairs, all licensing requirements under these regulations must be satisfied in order to obtain a license to sell Alcoholic Beverages.

(2) In addition to providing all licensing information as required under these regulations, the applicant shall send the Department a copy of the certification received from the Department of Community Affairs.

Cite as Ga. Comp. R. & Regs. R. 560-2-11-.04

AUTHORITY: O.C.G.A. §§ [3-2-2](#), [3-13-2](#), [3-13-4](#), [48-2-12](#).

HISTORY: Original Rule entitled "Character Requirements" was filed and effective on June 30, 1965.

Amended: Rule repealed and a new Rule entitled "Annual Filing; Due Date" adopted. Filed November 29, 1973; effective December 19, 1973.

Amended: Rule repealed and a new Rule of the same title adopted. Filed May 13, 1974; effective June 2, 1974.

Amended: Rule repealed. Filed May 5, 1982; effective May 25, 1982.

Amended: New Rule entitled "Regional Economic Assistance Project (REAP)" adopted. F. Oct. 1, 2010; eff. Oct. 21, 2010.

Amended: New title, "Regional Economic Assistance Projects (REAPs)." F. Oct. 5, 2023; eff. Oct. 25, 2023.

Department 560. RULES OF DEPARTMENT OF REVENUE
Chapter 560-11. LOCAL GOVERNMENT SERVICES DIVISION
Subject 560-11-16. QUALIFIED TIMBERLAND PROPERTY

560-11-16-.05 Table of Commercial Timberland Per Acre Values by Ecological Region and Soil Productivity Classification

(1) For the purpose of prescribing the 2024 table of values for use in the appraisal of Qualified Timberland Property, the state shall be divided into four ecological regional valuation areas, and per acre values shall be assigned to qualified land according to soil productivity classifications 1 - 9 (W1-W9).

(a) Ecological region #1 includes the following counties: Appling, Atkinson, Bacon, Brantley, Bryan, Camden, Charlton, Chatham, Clinch, Echols, Effingham, Glynn, Jeff Davis, Lanier, Liberty, Long, McIntosh, Pierce, Ware, and Wayne. The following per acre values shall be applied to each qualified acre according to soil productivity classifications W1 - W9:

W1-1,943, W2-1,591, W3-1,299, W4-1,069, W5-887, W6-726, W7-553, W8-443, W9-367.

(b) Ecological region #2 includes the following counties: Baker, Ben Hill, Berrien, Bibb, Bleckley, Brooks, Bulloch, Burke, Calhoun, Candler, Chattahoochee, Clay, Coffee, Colquitt, Cook, Crawford, Crisp, Decatur, Dodge, Dooley, Dougherty, Early, Emanuel, Evans, Glascock, Grady, Houston, Irwin, Jefferson, Jenkins, Johnson, Laurens, Lee, Lowndes, Macon, Marion, Miller, Mitchell, Montgomery, Muscogee, Peach, Pulaski, Quitman, Randolph, Richmond, Schley, Screven, Seminole, Stewart, Sumter, Tattnall, Taylor, Telfair, Terrell, Thomas, Tift, Toombs, Treutlen, Turner, Twiggs, Washington, Webster, Wheeler, Wilcox, and Wilkinson. The following per acre values shall be applied to each qualified acre according to soil productivity classifications W1 - W9:

W1-1,349, W2-1,152, W3-979, W4-840, W5-725, W6-638, W7-520, W8-443, W9-388.

(c) Ecological region #3 includes the following counties: Baldwin, Banks, Barrow, Bartow, Butts, Carroll, Catoosa, Chattooga, Cherokee, Clarke, Clayton, Cobb, Columbia, Coweta, Dade, Dawson, DeKalb, Douglas, Elbert, Fayette, Floyd, Forsyth, Franklin, Fulton, Gordon, Greene, Gwinnett, Habersham, Hall, Hancock, Haralson, Harris, Hart, Heard, Henry, Jackson, Jasper, Jones, Lamar, Lincoln, Madison, McDuffie, Meriwether, Monroe, Morgan, Murray, Newton, Oconee, Oglethorpe, Paulding, Pickens, Pike, Polk, Putnam, Rockdale, Spalding, Stephens, Talbot, Taliaferro, Troup, Upson, Walker, Walton, Warren, White, Whitfield, and Wilkes. The following per acre values shall be applied to each qualified acre according to soil productivity classifications W1 - W9:

W1-1,277, W2-1,173, W3-1,073, W4-979, W5-897, W6-842, W7-755, W8-695, W9-649.

(d) Ecological region #4 includes the following counties: Fannin, Gilmer, Lumpkin, Rabun, Towns, and Union. The following per acre values shall be applied to each qualified acre according to soil productivity classifications W1 - W9:

W1-2,780, W2-2,582, W3-2,401, W4-2,213, W5-2,043, W6-1,898, W7-1,730, W8-1,605, W9-1,495.

(2) The appraised value produced using the table of values in paragraph (1) of this Rule shall be determined and, if needed, adjusted so that the final value is at least 175% of such property's forest land conservation use value.

Cite as Ga. Comp. R. & Regs. R. 560-11-16-.05

AUTHORITY: O.C.G.A. §§ [48-2-12](#), [48-5-7](#), [48-5-602](#), [48-5-607](#).

HISTORY: Original Rule entitled "Table of Commercial Timberland Per Acre Values by Ecological Region and Soil Productivity Classification" adopted. F. Feb. 5, 2021; eff. Feb. 25, 2021.

Amended: F. Mar. 31, 2022; eff. Apr. 20, 2022.

Amended: F. Oct. 4, 2022; eff. Oct. 24, 2022.

Amended: F. Oct. 5, 2023; eff. Oct. 25, 2023.

Department 560. RULES OF DEPARTMENT OF REVENUE

Chapter 560-12. SALES AND USE TAX DIVISION

Subject 560-12-2. SUBSTANTIVE RULES AND REGULATIONS

560-12-2-.117 High-Technology Data Center Equipment

(1) **Purpose.** This Rule addresses the sales and use tax exemption in O.C.G.A. § [48-8-3](#)(68.1) for certain High-Technology Data Center Equipment.

(2) **Definitions.** For purposes of this Rule, the following definitions apply:

(a) "Data Center Owner" means the owner of a High-Technology Data Center or any Related Members.

(b) "Exemption Start Date," used synonymously with the term "Investment Start Date," means the date on or after July 1, 2018, chosen by the Data Center Owner and indicated on its certificate of exemption application, which begins the seven-year period during which the Minimum Investment Threshold must be met.

(c) "High-Technology Data Center" means a facility, campus of facilities, or array of interconnected facilities in this state that:

1. Is developed to power, cool, secure, and connect the Data Center Owner's equipment or the computer equipment of the Data Center Owner's High-Technology Data Center Customers;
2. Has an investment budget plan that meets the High-Technology Data Center Minimum Investment Threshold; and
3. Is located wholly within one county in this state, unless otherwise approved by the Commissioner.

(d) "High-Technology Data Center Customer" means a client, tenant, licensee, or end user of a High-Technology Data Center that is a party to a contract with a Data Center Owner that holds a High-Technology Data Center exemption certificate under this Rule. The contract is subject to the requirements in paragraph (2)(d)1.

1. Contract Requirements.

(i) The Data Center Owner must be a party to the contract;

(ii) The contract must be for data center services provided by the Data Center Owner at the High-Technology Data Center location stated on the Data Center Owner's High-Technology Data Center exemption certificate; and

(iii) The initial term of the contract must be at least 36 months.

2. A client, tenant, licensee, or end user of a High-Technology Data Center is a High-Technology Data Center Customer only while such client, tenant, licensee, or end user is a party to a contract described in paragraph (2)(d)1.

3. The initial term of the contract may begin before the Exemption Start Date for purposes of meeting the initial 36-month term. However, the High-Technology Data Center Customer may only make exempt purchases and uses of High-Technology Data Center Equipment during the period set forth in paragraph (3)(b).

4. If a qualifying contract is extended for any consecutive term after the initial term, the customer remains a High-Technology Data Center Customer during such term so long as the requirements of this Rule are met.

(e) "High-Technology Data Center Equipment."

1. Subject to the exclusion in paragraph (2)(e)2., High-Technology Data Center Equipment means

(i) Computer equipment, as defined in O.C.G.A. § [48-8-3\(68\)](#), of a Data Center Owner or such equipment of a High-Technology Data Center Customer that is used or deployed in the High-Technology Data Center; and

(ii) The Data Center Owner's or High-Technology Data Center Customer's materials, components, machinery, hardware, software, or equipment, including but not limited to, emergency backup generators, air handling units, cooling towers, energy storage or energy efficiency technology, switches, power distribution units, switching gear, peripheral computer devices, routers, batteries, wiring, cabling, or conduit, which equipment or materials are used to

(I) Create, manage, facilitate, or maintain the physical and digital environments for computer equipment in the High-Technology Data Center;

(II) Protect the High-Technology Data Center Equipment from physical, environmental, or digital threats; or

(III) Generate or provide constant delivery of power, environmental conditioning, air cooling, or telecommunications services for the High-Technology Data Center.

2. This term does not include Real Property, as defined in this Rule.

(f) "High-Technology Data Center Minimum Investment Threshold," used synonymously with the term "Minimum Investment Threshold," means:

1. Creating and maintaining an average of the qualifying number of New Quality Jobs during the Investment Period as described in paragraph (4); and

2. Making the qualifying aggregate expenditures during the Investment Period, as described in paragraph (4).

(g) "Investment Period" means the seven-year period, chosen by the Data Center Owner, during which the Minimum Investment Threshold must be met.

1. The Investment Period begins on the Investment Start Date.

2. The Investment Period ends seven consecutive years after the Investment Start Date on the same month and date as the Investment Start Date.

3. The Investment Period may be any consecutive seven-year period that begins on or after July 1, 2018, and ends on or before December 31, 2031.

(h) "New Quality Job" means a new quality job, as defined in O.C.G.A. § [48-7-40.17\(a\)\(2\)](#), that is created and maintained by the Data Center Owner or its High-Technology Data Center Customers and that meets the requirements in paragraph (4).

(i) "Real Property" means land, any buildings thereon, and any fixtures attached thereto. Fixtures are tangible personal property that has been installed or attached to land or to any building thereon and that is intended to remain permanently in its place. A consideration for whether tangible property is a fixture is whether its removal would cause significant damage to such property or to the real property to which it is attached.

(j) "Related Member" means a related member as defined in O.C.G.A. § [48-7-28.3](#) with respect to the owner of a High-Technology Data Center.

(3) Scope of the Exemption.

(a) The purchase and use of High-Technology Data Center Equipment to be incorporated or used in a High-Technology Data Center are exempt from state and local sales and use tax, subject to the following conditions:

1. The High-Technology Data Center Equipment must be incorporated or used at the High-Technology Data Center named or described on the Data Center Owner's exemption certificate;
2. The purchaser must be a Data Center Owner or a High Technology Data Center Customer;
3. Such Data Center Owner must meet the High-Technology Data Center Minimum Investment Threshold at the High-Technology Data Center named or described on the Data Center Owner's exemption certificate;
4. Such Data Center Owner must obtain a certificate of exemption; and
5. If the purchaser is a High-Technology Data Center Customer, the High-Technology Data Center Customer must obtain a certificate of exemption.

(b) Subject to the terms and conditions of this Rule,

1. A Data Center Owner holding a High-Technology Data Center exemption certificate may make exempt purchases and uses of High-Technology Data Center Equipment from the Exemption Start Date through and including December 31, 2031; and

2. A High-Technology Data Center Customer holding an exemption certificate may make exempt purchases and uses of High-Technology Data Center Equipment only during the effective dates on its exemption certificate.

(i) A High-Technology Data Center Customer exemption certificate is effective beginning the later of the Data Center Owner's Exemption Start Date or the start date of the contract for data center services between the Data Center Owner and the High-Technology Data Center Customer. A High-Technology Data Center Customer exemption certificate ends the earlier of the date such contract ends or December 31, 2031.

(4) Minimum Investment Threshold.

(a) To meet the High-Technology Data Center's Minimum Investment Threshold, the following conditions must be met:

1. An average of the qualifying number of New Quality Jobs must be created and maintained, as set forth in paragraphs (4)(b) and (c), during the Investment Period; and

2. The required amount of qualifying aggregate expenditures must be spent, as set forth in paragraphs (4)(b) and (d), during the Investment Period.

(b) The New Quality Jobs and aggregate expenditure requirements are based on the population of the county in which the High-Technology Data Center is located as reported in the United States decennial census of 2010. If county population data from a more recent United States decennial census is available as of the Investment Start Date, county population must be based upon such data.

1. For Data Center Owners that apply for and receive a High-Technology Data Center exemption certificate prior to May 9, 2022, the New Quality Jobs and aggregate expenditure requirements are as follows:

(i) For a High-Technology Data Center located in a county in this state having a population greater than 50,000:

(I) An average of 20 New Quality Jobs; and

(II) \$250 million in qualifying aggregate expenditures.

(ii) For a High-Technology Data Center located in a county in this state having a population greater than 30,000 and less than 50,001:

(I) An average of 20 New Quality Jobs; and

(II) \$150 million in qualifying aggregate expenditures.

(iii) For a High-Technology Data Center located in a county in this state having a population less than 30,001:

(I) An average of 20 New Quality Jobs; and

(II) \$100 million in qualifying aggregate expenditures.

2. For Data Center Owners that apply for and receive a High-Technology Data Center exemption certificate on or after May 9, 2022, the Data Center Owner must meet the following New Quality Jobs and aggregate expenditure requirements during the Investment Period, even if the Investment Start Date begins before May 9, 2022:

(i) For a High-Technology Data Center located in a county in this state having a population greater than 50,000:

(I) An average of 25 New Quality Jobs; and

(II) \$250 million in qualifying aggregate expenditures.

(ii) For a High-Technology Data Center in a county in this state having a population greater than 30,000 and less than 50,001:

(I) An average of 10 New Quality Jobs; and

(II) \$75 million in qualifying aggregate expenditures.

(iii) For a High-Technology Data Center located in a county in this state having a population less than 30,001:

(I) An average of 5 New Quality Jobs; and

(II) \$25 million in qualifying aggregate expenditures.

(c) New Quality Jobs.

1. An employee occupying a New Quality Job must:

(i) Regularly work 30 hours or more per week in the county where the High-Technology Data Center is located on matters directly related to the High-Technology Data Center; and

(ii) Receive compensation for such work described in paragraph (4)(c)1.(i) in an amount equaling or exceeding 110% of the average wage of the county where the High-Technology Data Center is located, as reported in the most recent Georgia Employment & Wages report available on the day that the New Quality Job is first filled during the Investment Period. The county average wage remains constant with respect to that job position for the duration of the Investment Period.

2. For purposes of satisfying the Minimum Investment Threshold, a Data Center Owner may count New Quality Jobs created and maintained by the Data Center Owner and New Quality Jobs created and maintained by the Data Center Owner's High-Technology Data Center Customers.

3. To determine the average number of New Quality Jobs created and maintained during the Investment Period, a Data Center Owner must count the number of New Quality Jobs on the payroll by the last payroll period of each month during the Investment Period, add the monthly numbers, and divide the sum by the number of months in the Investment Period.

(d) Qualifying Aggregate Expenditures.

1. Qualifying expenditures are:

(i) Expenditures on the design and construction of the High-Technology Data Center (including expenditures on Real Property); and

(ii) High-Technology Data Center Equipment to be used or incorporated in the High-Technology Data Center.

2. Qualifying expenditures made by either the Data Center Owner or the High-Technology Data Center Customer may count towards the Minimum Investment Threshold.

3. Real Property expenditures count towards the Minimum Investment Threshold only to the extent that the expenditures are made by the Data Center Owner as part of the construction and design of the High-Technology Data Center. The purchase of a pre-existing High-Technology Data Center campus does not constitute "the construction and design of the High-Technology Data Center" and therefore does not count toward the Minimum Investment Threshold. While Real Property expenditures may count toward the Minimum Investment Threshold, Real Property is not exempt under this Rule.

4. If a qualifying expenditure is made pursuant to a lease, the term of which extends before or after the Investment Period, the expenditure amount that may be used for purposes of satisfying the expenditure requirement must be determined by dividing the total amount to be paid pursuant to the lease by the number of calendar years in the lease term and then multiplying that quotient by the number of calendar years in the lease term that are during the Investment Period.

5. A Data Center Owner may not count the purchase or lease of the same High-Technology Data Center Equipment more than once. For example, if a Data Center Owner purchases High-Technology Data Center Equipment and subsequently leases it to a High-Technology Data Center Customer or a related member (as defined at O.C.G.A. § [48-7-28.3](#)), only one transaction, either the original purchase or the subsequent lease, may count for purposes of satisfying the Minimum Investment Threshold.

(5) Certificates of Exemption.

(a) Application Process.

1. A Data Center Owner or High-Technology Data Center Customer desiring to secure the benefits of the exemption provided by O.C.G.A. § [48-8-3](#)(68.1) must file an application for a certificate of exemption.

2. Only the owner of the High-Technology Data Center or one Related Member may apply for a certificate of exemption for a High-Technology Data Center.

3. Applications must be filed electronically with the Department.

4. A High-Technology Data Center exemption application may request the applicant's legal name, mailing address, the High-Technology Data Center location, Investment Start Date, the applicant's Georgia income tax filing and payment history, the value of the applicant's title or interest in Real Property owned in this state, a limited waiver of confidentiality for the administration of this exemption, documentation sufficient to show the likelihood of satisfying the High-Technology Data Center Minimum Investment Threshold, and any other information required by the Department for the determination of the claim for exemption.

5. A High-Technology Data Center Customer exemption application may request the applicant's legal name, mailing address, name of the Data Center Owner that holds an exemption certificate and that has contract with the applicant to provide data services at the High-Technology Data Center listed on the Data Center Owner's exemption certificate, a copy of such contract for data center services, and any other information required by the Department for the determination of the claim for exemption.

(i) The Department will not issue a certificate of exemption to a High-Technology Data Center Customer until a certificate of exemption has been issued to its corresponding Data Center Owner.

6. This application requirement is applicable to holders of direct payment permits granted under Regulation [560-12-1-.16](#).

(b) Issuance of Certificate.

1. Upon approval of the application, including a determination that a Data Center Owner will more likely than not meet the Minimum Investment Threshold, the Department will issue a certificate of exemption to such Data Center Owner.

2. A certificate of exemption issued to a High-Technology Data Center Customer is for the exclusive use of the qualifying applicant. A certificate of exemption issued to a Data Center Owner is for the exclusive use of the owner of the High-Technology Data Center and its Related Members but may be transferrable upon the sale of the High-Technology Data Center and the approval of the Commissioner.

(c) Bond.

1. As a condition precedent to the issuance of a certificate of exemption to a Data Center Owner, the Department, in the Commissioner's discretion, may require a good and valid bond with a surety company authorized to do business in this state.

2. In determining whether to require a bond and the value of such bond, the Commissioner will consider factors, including, but not limited to, the value of the Data Center Owner's title or interest in Real Property owned in this state as of the application date and the Data Center Owner's Georgia tax filing and payment history.

3. If required, the bond must be in an amount fixed by the Department, not to exceed \$20 million.

4. Such bond must be forfeited and paid to the general fund in an amount representing all taxes and interest required to be repaid if the Data Center Owner fails to meet the Minimum Investment Threshold prior to the expiration of the seven-year Investment Period.

5. Such bond will be released when the Data Center Owner timely meets the Minimum Investment Threshold.

6. High-Technology Data Center Customers are not required to obtain a bond.

(d) Revocation.

1. A certificate of exemption issued pursuant to this exemption to a Data Center Owner is subject to revocation if the Department determines that such Data Center Owner has not complied with the provisions of the exemption, including, but not limited to, the following:

- (i) During the Investment Period, the Department determines that the Data Center Owner is not likely to meet the applicable Minimum Investment Threshold;
- (ii) At the conclusion of the Investment Period, the Department determines the Data Center Owner failed to meet the applicable Minimum Investment Threshold;
- (iii) The Data Center Owner does not file the Annual Report as required in paragraph (7); or
- (iv) The Data Center Owner claims an income tax credit in violation of paragraph (9).

2. A certificate of exemption issued pursuant to this Rule to a High-Technology Data Center Customer is subject to revocation if the Department determines that such certificate holder has not complied with the provisions of the exemption, including, but not limited to, the following:

- (i) The certificate of exemption of its corresponding Data Center Owner is revoked; or
- (ii) The High-Technology Data Center Customer is not, or is no longer, a party to a contract in accordance with paragraph (2)(d).

3. Revocation procedures for Data Center Owner's certificates of exemption.

(i) If it is determined that there are grounds for revocation of a Data Center Owner's certificate of exemption, the Department will send written notice to the Data Center Owner stating the grounds for revocation. Effective the 31st day following the date of the notice, the Department will revoke the Data Center Owner's certificate of exemption, unless:

1. within 30 days from the date of the notice, the Data Center Owner provides the Department with a detailed plan to remedy each cause for revocation; and

2. the Department determines that the Data Center owner is more likely than not to remedy each cause for revocation within 90 days from the Department's receipt of the plan.

(ii) If the Department determines that the Data Center Owner has failed to remedy each cause for revocation within 90 days from the Department's receipt of the plan, then the Department will revoke the Data Center Owner's certificate of exemption effective the 91st day after the Department's receipt of the plan. The Department will notify the Data Center Owner in writing of the grounds for revocation, the revocation date, and the procedure by which the certificate holder may dispute the revocation.

4. Once a certificate of exemption has been revoked, the certificate holder must immediately notify all vendors to which such certificate holder furnished the certificate of exemption that such certificate of exemption is no longer valid. The certificate holder must maintain records of notifications of revocation sent to vendors.

5. It is unlawful for any person to attempt to evade sales and use taxes by using a certificate of exemption obtained through fraud or by using a certificate of exemption to which a purchaser is not entitled.

6. Upon the revocation of the Data Center Owner's certificate of exemption, the owner of the High-Technology Data Center and its Related Members will be liable for all tax exempted or refunded under this exemption, plus interest as computed under O.C.G.A. § [48-2-40](#). If tax and interest are not paid within 90 days of the revocation of the certificate of exemption, penalties will accrue pursuant to O.C.G.A. § [48-8-66](#).

7. If a High-Technology Data Center Customer's certificate of exemption is revoked, the customer, the owner of the customer's corresponding High-Technology Data Center, and the owner's Related Members may be liable, as provided below, for all tax exempted or refunded under this exemption on the customer's purchases, plus interest as computed under O.C.G.A. § [48-2-40](#). If tax and interest are not paid within 90 days of the revocation of the certificate of exemption, penalties will accrue pursuant to O.C.G.A. § [48-8-66](#).

(i) If a High-Technology Data Center Customer's certificate of exemption is revoked solely because its corresponding Data Center Owner's certificate of exemption is revoked, the High-Technology Data Center Customer is not required to repay the tax exempted or refunded under this exemption on the customer's purchases. The owner of the customer's corresponding High-Technology Data Center and the owner's Related Members are required to repay such tax.

(ii) If a High-Technology Data Center Customer certificate of exemption is revoked because the certificate holder does not meet the definition of High-Technology Data Center Customer, the purported customer is required to repay the tax exempted or refunded under this exemption for periods when the purported customer did not meet the definition of High-Technology Data Center Customer.

(iii) If a High-Technology Data Center Customer's certificate of exemption is revoked solely because of the expiration of a qualifying contract with a certificated Data Center Owner, neither the High-Technology Data Center Customer nor the Data Center Owner is required to repay the tax exempted or refunded for periods when the customer met the definition of a High-Technology Data Center Customer.

8. Nothing in this Rule prohibits the reinstatement or reissuance of a certificate of exemption to a qualified Data Center Owner or High-Technology Data Center Customer.

(e) All certificates of exemption issued to Data Center Owners pursuant to this exemption expire on December 31, 2031, by operation of law.

(6) Claiming the Benefit of the Exemption.

(a) Any person making a sale or lease of High-Technology Data Center Equipment must collect the sales and use tax unless the purchaser furnishes such seller with a valid and complete certificate of exemption.

(b) A High-Technology Data Center Equipment supplier is relieved from the collection of sales and use tax on the sale or lease of High-Technology Data Center Equipment if the supplier takes a certificate of exemption from a certificate holder in good faith.

(c) Refund Claims.

1. Subject to paragraph (6)(c)5. of this Rule and other applicable laws, a refund claim may be filed for taxes paid on purchases qualifying for this exemption for any period on or after July 1, 2018, during which the Data Center Owner or High-Technology Data Center Customer had not yet applied for or received its certificate of exemption from the Department.

2. Claimants must submit refund claims electronically.

3. As a condition precedent to the issuance of a refund, the claimant must apply for and receive its certificate of exemption.

4. As provided by O.C.G.A. § [48-2-35.1](#), refunds issued pursuant to this exemption do not bear interest.

5. A refund claim may be filed by the taxpayer at any time within three years after the date of the payment of the tax to the Department.

(d) Notwithstanding otherwise applicable recordkeeping requirements, any Data Center Owner or High-Technology Data Center Customer claiming the benefit of this exemption must keep and preserve all books and records as long as needed to support such claim.

(7) Annual Report.

(a) Each Data Center Owner holding an exemption certificate pursuant to this Rule must submit an annual report electronically to the Department. The annual report is due on the dates set forth in this paragraph or the first day following that is not a Saturday, Sunday, legal holiday, or day on which the Federal Reserve Bank is closed.

1. The annual report must be submitted by April 30 of each calendar year if the Data Center Owner or its High-Technology Data Center Customer claimed or will claim the benefit of the exemption for purchases in the prior calendar year.

2. Notwithstanding paragraph (7)(a)(1), if the Data Center Owner's Investment Start Date begins in a calendar year prior to the calendar year of application, the annual report(s) for those prior year(s) are due 30 days following the date the Department grants the exemption certificate or April 30th of the year of application, whichever is later.

(i) Example: If the Department grants an exemption certificate on January 1, 2021 to a Data Center Owner with an investment start date of July 1, 2018, the annual reports for years 2018 through 2020 are due on April 30, 2021. The annual report for 2021 is due May 2, 2022 (because April 30, 2022 is a Saturday).

(ii) Example: If the Department grants an exemption certificate on April 15, 2021 to a Data Center Owner with an investment start date of July 1, 2018, the annual reports for years 2018 to 2020 are due May 17, 2021 (because May 15, 2021 is a Saturday). The annual report for 2021 is due May 2, 2022 (because April 30, 2022 is a Saturday).

3. The annual reporting requirement does not end at the expiration of the Investment Period. The annual report is required for every year in which the Data Center Owner holds a valid exemption certificate pursuant to this Rule.

(b) The annual report must include the following:

1. The amount of tax exempted or refunded under this exemption on purchases by the owner of the High-Technology Data Center and its Related Members during the preceding calendar year;

2. A list of the Data Center Owner's High-Technology Data Center Customers holding exemption certificates under this Rule;

3. The amount of tax exempted or refunded under this exemption on purchases by each High-Technology Data Center Customer during the preceding calendar year;

4. The number of New Quality Jobs created or maintained in accordance with paragraph (4) on a monthly basis during the preceding calendar year;

5. A list of each New Quality Job created and maintained in accordance with paragraph (4), including a description of each position, each position's wage, each position's regular work hours, and the location at which each position's job duties are performed;

6. A methodology to verify that employees are working at least 30 hours per week on matters directly related to the High-Technology Data Center in the county where the High-Technology Data Center is located;

7. The total amount of High-Technology Data Center's employee payroll during the preceding calendar year;
8. The total amount of qualifying aggregate expenditures made since the Investment Start Date that the Data Center Owner counts for purposes of satisfying the expenditure requirement of its Minimum Investment Threshold. This amount does not need to be reported after the Data Center Owner submits its investment report as described in Paragraph (8) of this Rule at the conclusion of the Investment Period; and
9. A list of expenditures that count toward the Data Center Owner's Minimum Investment Threshold, including the dollar amount of each purchase, the name of the purchaser, the date of purchase, the vendor, and description of the purchase. This list is not required after the Data Center Owner submits its investment report as described in paragraph (8) of this Rule at the conclusion of the Investment Period.

(c) A Data Center Owner's failure to submit a complete and accurate annual report is grounds for the revocation of the Data Center Owner's certificate of exemption.

(8) Investment Report.

(a) Within 60 days after the end of the Investment Period, the Data Center Owner must file a report electronically with the Department.

(b) The report must detail the following:

1. The expenditures incurred that count toward its Minimum Investment Threshold, including the name of the purchaser, the expenditure date, the vendor, the dollar amount, and a description of each purchase;
2. The average number of New Quality Jobs created and maintained during the Investment Period, as calculated in paragraph (4)(c);
3. A description of each position and each position's wage and regular work hours; and
4. Any other information that the Commissioner may reasonably require to determine whether the Data Center Owner has met the Minimum Investment Threshold.

(c) If it is determined that a Data Center Owner failed to meet its Minimum Investment Threshold, such owner of the High-Technology Data Center and its Related Members must repay all taxes exempted or refunded pursuant to the Data Center Owner's certificate of exemption and all taxes exempted or refunded pursuant to the certificates of exemption of the Data Center Owner's High-Technology Data Center Customers.

1. Interest will be due at the rate specified in O.C.G.A. § [48-2-40](#) computed from the date such taxes would have been due but for this exemption.
2. Such repayment of taxes and interest must be made within 90 days after notification of such failure.
3. Such repayment will be calculated notwithstanding otherwise applicable periods of limitation for assessment.

(9) Impact on Certain Income Tax Credits.

(a) During any tax year in which a Data Center Owner holds a valid exemption certificate under this Rule with respect to a High-Technology Data Center, the owner of such High-Technology Data Center is not entitled to claim any credit authorized under O.C.G.A. §§ [48-7-40](#) through [48-7-40.33](#) or O.C.G.A. § [36-62-5.1](#) for jobs, investments, or any business activity created by, arising from, related to, or connected in any way with such High-Technology Data Center.

(b) A Related Member is not entitled to claim any credit authorized under O.C.G.A. §§ [48-7-40](#) through [48-7-40.33](#) or O.C.G.A. § [36-62-5.1](#) in any tax year for jobs, investments, or any business activity created by, arising from, related to, or connected in any way with a High-Technology Data Center, if, during that tax year such Related Member or the associated owner of such High-Technology Data Center holds a valid exemption certificate and the Related Member takes any of the following actions:

1. Makes expenditures for such High-Technology Data Center that count toward the Minimum Investment Threshold;
2. Makes exempt purchases of High-Technology Data Center Equipment that is used or deployed in such High-Technology Data Center;
3. Employs persons to fill New Quality Jobs at such High-Technology Data Center; or
4. Contracts with High-Technology Data Center Customers for data center services at such High-Technology Data Center.

(c) If a determination is made by the Department that the Data Center Owner must repay all taxes exempted or refunded pursuant this exemption, the owner of the High-Technology Data Center and its Related Members may, notwithstanding otherwise applicable periods of limitation, file amended income tax returns claiming any credit to which they would have been entitled under O.C.G.A. §§ [48-7-40](#) through [48-7-40.33](#) or O.C.G.A. § [36-62-5.1](#) but for having claimed the exemption set forth in this Rule.

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AUTHORITY: O.C.G.A. §§ [48-2-12](#), [48-7-40.17](#), [48-8-3](#), [48-8-3.2](#).

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