

# GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

## CODE AMENDMENT FORM

ITEM NO: \_\_\_\_\_ (DCA USE ONLY)

PAGE 1 OF 3

2018 International Fire Code w/GA  
CODE: Amendments

SECTION: IFC Section 608

PROPONENT: Mary Koban

DATE: 12/15/2022

EMAIL: Mkoban@ahrinet.org

ADDRESS: 2311 Wilson Blvd Arlington, VA 22201

TELEPHONE NUMBER: (484)-220-3011

FAX NUMBER: ( ) -

CHECK X Revise section to read as follows:

Add new section to read as follows:

ONE:  Delete section and substitute the following:

Delete without substitution:

~~LINE THROUGH MATERIAL TO BE DELETED:~~

UNDERLINE MATERIAL TO BE ADDED

Approve

Approve as amended

(DCA STAFF ONLY)

Disapprove

Withdrawn

---

## DESCRIPTION

### IFC

#### Revise as follows:

**608.9 Refrigerant detection.** Machinery rooms shall be provided with a refrigerant detector with an audible and visible alarm. ~~Where ammonia is used as the refrigerant, detection shall comply with IAR 2. For refrigerants other than ammonia, refrigerant detection shall comply with Section 608.9.1.~~ A detector, or a sampling tube that draws air to a detector, shall be provided at an approved location where refrigerant from a leak is expected to accumulate. The system shall be designed to initiate audible and visible alarms inside of and outside each entrance to the refrigerating machinery room and transmit a signal to an approved location where the concentration of refrigerant detected exceeds the lesser of the following:

1. The corresponding TLV-TWA values shown in the International Mechanical Code for the refrigerant classification.
2. Twenty-five percent of the lower flammable limit (LFL).

Detection of a refrigerant concentration exceeding the upper detection limit or 25 percent of the lower flammable limit (LFL), whichever is lower, shall stop refrigerant equipment in the machinery room in accordance with Section 608.10.1.

#### Delete without substitution:

~~**608.9.1 Refrigerants other than ammonia.** A detector, or a sampling tube that draws air to a detector, shall be provided at an approved location where refrigerant from a leak is expected to accumulate. The system shall be designed to initiate audible and visible alarms inside of and outside each entrance to the refrigerating machinery room and transmit a signal to an approved location where the concentration of refrigerant detected exceeds the lesser of the following:~~

- ~~1. The corresponding TLV-TWA values shown in the International Mechanical Code for the refrigerant classification.~~
- ~~2. Twenty-five percent of the lower flammable limit (LFL).~~

~~Detection of a refrigerant concentration exceeding the upper detection limit or 25 percent of the lower flammable limit (LFL), whichever is lower, shall stop refrigerant equipment in the machinery room in accordance with Section 608.10.1.~~

#### Revise as follows:

**608.11 Emergency pressure control system.** Permanently installed refrigeration systems in machinery rooms containing more than 6.6 pounds (3 kg) of flammable, toxic or highly toxic refrigerant ~~or ammonia~~ shall be provided with an emergency pressure control system in accordance with Sections 608.11.1 and 608.11.2.

**608.13 Discharge and termination of pressure relief and purge systems.** Pressure relief devices, fusible plugs and purge systems discharging to the atmosphere from refrigeration systems containing flammable, toxic or highly toxic refrigerants ~~or ammonia~~ shall comply with Sections 608.13.2 through ~~608.13.4~~ and 608.13.3.

**608.13.2 Flammable refrigerants.** Systems containing more than 6.6 pounds (3 kg) of flammable refrigerants having a density equal to or greater than the density of air shall discharge vapor to the atmosphere only through an approved treatment system in accordance with Section ~~608.13.5~~ ~~608.13.4~~ or a flaring system in accordance with Section ~~608.13.6~~ 608.13.5. Systems containing more than 6.6 pounds (3 kg) of flammable refrigerants having a density less than the density of air shall be permitted to discharge vapor to the atmosphere provided that the point of discharge is located outside of the structure at not less than 15 feet (4572 mm) above the adjoining grade level and not less than 20 feet (6096 mm) from any window, ventilation opening or exit.

**608.13.3 Toxic and highly toxic refrigerants.** Systems containing more than 6.6 pounds (3 kg) of toxic or highly toxic refrigerants shall discharge vapor to the atmosphere only through an approved treatment system in accordance with Section ~~608.13.5~~ 608.13.4 or a flaring system in accordance with Section ~~608.13.6~~ 608.13.5.

#### Delete without substitution:

~~**608.13.4 Ammonia refrigerant.** Systems containing more than 6.6 pounds (3 kg) of ammonia refrigerant shall discharge vapor to the atmosphere in accordance with one of the following methods:~~

- ~~1. Directly to atmosphere where the fire code official determines, on review of an analysis prepared in accordance with Section 104.8.2, that a health hazard would not result from atmospheric discharge of ammonia.~~
- ~~2. Through an approved treatment system in accordance with Section 608.13.5.~~
- ~~3. Through a flaring system in accordance with Section 608.13.6.~~
- ~~4. Through an approved ammonia diffusion system in accordance with Section 608.13.7.~~
- ~~5. By other approved means.~~

~~**Exception:** Ammonia/water absorption systems containing less than 22 pounds (10 kg) of ammonia and for which the ammonia circuit is located entirely outdoors.~~

#### Revise as follows:

**608.13.4** ~~608.13.5~~ **Treatment systems.** Treatment systems shall be designed to reduce the allowable discharge concentration of the refrigerant gas to not more than 50 percent of the IDLH at the point of exhaust. Treatment systems shall be in accordance with Chapter 60.

**608.13.5** ~~608.13.6~~ **Flaring systems.** Flaring systems for incineration of flammable refrigerants shall be designed to incinerate the entire discharge. The products of refrigerant incineration shall not pose health or environmental hazards. Incineration shall be automatic upon initiation of discharge, shall be designed to prevent blowback and shall not expose structures or materials to threat of fire. Standby fuel, such as LP-gas, and standby power shall have the capacity to operate for one and one-half the required time for complete incineration of refrigerant in the system. Standby electrical power, where required to complete the incineration process, shall be in accordance with Section 1203.

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**Delete without substitution:**

~~**608.13.7 Ammonia diffusion systems.** Ammonia diffusion systems shall include a tank containing 1 gallon of water for each pound of ammonia (8.3 L of water for each 1 kg of ammonia) that will be released in 1 hour from the largest relief device connected to the discharge pipe. The water shall be prevented from freezing. The discharge pipe from the pressure relief device shall distribute ammonia in the bottom of the tank, but not lower than 33 feet (10 058 mm) below the maximum liquid level. The tank shall contain the volume of water and ammonia without overflowing.~~

**Revise as follows:**

**608.14 Mechanical ventilation exhaust.** Exhaust from mechanical ventilation systems serving refrigeration machinery rooms containing flammable, toxic or highly toxic refrigerants, ~~other than ammonia~~, capable of exceeding 25 percent of the LFL or 50 percent of the IDLH shall be equipped with approved treatment systems to reduce the discharge concentrations to those values or lower.

**Exception:** Refrigeration systems containing Group A2L complying with Section 608.18.

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**REASON/INTENT:**

This is a companion to the 2021 FCAC proposal that updates and correlates scoping of the IFC and IMC refrigeration system provisions. The 2021 IMC and all other model mechanical and fire codes no longer directly regulate ammonia refrigeration systems. Instead, they require compliance with ANSI/IIAR standards that provide comprehensive requirements for ammonia refrigeration, from system design through system decommissioning.

Revisions provided by this proposal duplicate that approach in the IFC. The 2020 edition of IIAR 2, which will be referenced by the 2024 IFC, serves as both a code and standard with respect to design of ammonia refrigeration systems, and it incorporates content that was previously handled by model fire and mechanical codes. A gap analysis between the IFC and IIAR 2 has been performed to verify that the 2020 edition of IIAR 2 includes 2021 IFC provisions.

This code proposal (referenced as F53\_Part I) was accepted and adopted in the 2024 IFC code cycle

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**FINANCIAL IMPACT OF PROPOSED AMENDMENT:**

The code change proposal will not increase or decrease the cost of construction. As a result, there is no impact to cost.

# GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

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10. **All proposed amendments must be typed and completed in full and the original submitted to the Codes and Industrialized Buildings Section of the Department of Community Affairs NO LATER THAN DECEMBER 15<sup>TH</sup>.** The proposed code change shall be submitted for review to the State Codes Advisory Committee at their quarterly meeting in January. An incomplete form will be sent back to the proponent for completion. An amendment submitted after the submittal deadline date will be returned to the proponent.
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12. Information concerning submittal of code amendments, including deadline dates for submittal, can be obtained by contacting the Codes and Industrialized Buildings Section at (404) 679-3118. All proposed code amendments should be submitted to:

The Department of Community Affairs  
Codes and Industrialized Buildings Section  
60 Executive Park South, NE  
Atlanta, Georgia 30329-2231

# GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

## CODE AMENDMENT FORM

ITEM NO: \_\_\_\_\_ (DCA USE ONLY)

PAGE 1 OF 3

CODE: 2018 International Fire Code and  
Building w/GA Amendments

SECTION: IFC [M] Section 608

PROPONENT: Mary Koban

DATE: 12/15/2022

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UNDERLINE MATERIAL TO BE ADDED

Approve

Approve as amended

(DCA STAFF ONLY)

Disapprove

Withdrawn

DESCRIPTION:

**IFC Section 608**

**[M]608.17 Electrical equipment.** Where refrigerant of Groups A2, A3, B2 and B3, as defined in the International Mechanical Code, are used, refrigeration machinery rooms shall conform to the Class I, Division 2, hazardous location classification requirements of NFPA 70.

Exceptions:

~~1. Ammonia machinery rooms that are provided with ventilation in accordance with Section 1101.1.2, Exception 1 of the International Mechanical~~

~~Code.~~

2. Machinery rooms for systems containing Group A2L refrigerants that are provided with ventilation in accordance with Section 608.18.

---

**REASON/INTENT:**

Information regarding machinery rooms with ammonia are now contained within IIAR. The 2020 edition of IIAR 2, which will be referenced by the 2024 IFC, serves as both a code and standard with respect to design of ammonia refrigeration systems, and it incorporates content that was previously handled by model fire and mechanical codes. A gap analysis between the IFC and IIAR 2 has been performed to verify that the 2020 edition of IIAR 2 includes 2021 IFC provisions.

This code proposal (F53 Part II) was accepted and adopted in the 2024 IFC code cycle.

---

**FINANCIAL IMPACT OF PROPOSED AMENDMENT:**

The code change proposal will not increase or decrease the cost of construction. As a result, there is no impact to cost.

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# GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

## CODE AMENDMENT FORM

ITEM NO: \_\_\_\_\_ (DCA USE ONLY) PAGE 1 OF 3

CODE: 2018 International Mechanical Building w/GA Amendments SECTION: IMC 1104.3.2

PROPONENT: Mary Koban DATE: 12/15/2022

EMAIL: Mkoban@ahrinet.org

ADDRESS: 2311 Wilson Blvd Suite 400, Arlington, VA 22201

TELEPHONE NUMBER: (484)-220-3011 FAX NUMBER: ( ) -

CHECK  ONE: X Revise section to read as follows:  Add new section to read as follows:  
 Delete section and substitute the following:  Delete without substitution:

~~LINE THROUGH MATERIAL TO BE DELETED:~~ UNDERLINE MATERIAL TO BE ADDED

Approve  Approve as amended (DCA STAFF ONLY)  Disapprove  Withdrawn

**DESCRIPTION:**

**1104.3.2 ~~Nonindustrial occupancies~~ Group A2, A3, B2, and B3 refrigerants.**

Group A2 and B2 refrigerants shall not be used in high-probability systems ~~where the quantity of refrigerant in any independent refrigerant circuit exceeds the amount shown in Table 1104.3.2.~~ Group A3 and B3 refrigerants shall not be used except where *approved*.

**Exceptions:** This section does not apply to laboratories :

1. Laboratories where the floor area per occupant is not less than 100 square feet (9.3 m ).
2. Listed self-contained systems having a maximum of 0.331 pounds (150 g) of Group A3 refrigerant.
3. Self-contained systems listed per UL 60335-2-89 having a maximum of 1.1 pounds (500g) of Group A3 refrigerant.
4. Industrial occupancies.
5. Equipment listed for and used in residential occupancies containing a maximum of 6.6 pounds (3 kg) of Group A2 or B2 refrigerant.
6. Equipment listed for and used in commercial occupancies containing a maximum of 22 pounds (10 kg) of Group A2 or B2 refrigerant.

**TABLE 1104.3.2 MAXIMUM PERMISSIBLE QUANTITIES OF REFRIGERANTS**

TYPE OF REFRIGERATION SYSTEM	MAXIMUM POUNDS FOR VARIOUS OCCUPANCIES			
	Institutional	Public assembly	Residential	All other occupancies
<b>Sealed absorption system</b>				
In exit access	0	0	3.3	3.3
In adjacent outdoor locations	0	0	22	22
In other than exit access	0	6.6	6.6	6.6
<b>Unit systems</b>				
In other than exit access	0	0	6.6	6.6

For SI: 1 pound = 0.454 kg

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**REASON/INTENT:**

These requirements being stricken are based on previous editions of ASHRAE 15. ASHRAE 15 has been updated numerous times resulting in the modification to the requirement similar to this proposal. High probability direct systems for human comfort must use either Group A1 or A2L refrigerant. Other refrigerants can be used provided the maximum charge does not exceed 6.6 pound for residential applications and 22 pounds for commercial units. Plus, these unit must be listed for use with these other refrigerants.

This section is being further updated after the 2024 cycle to incorporate new information regarding equipment listed to UL 60335-2-89. This is a modification of IMC Code submission M75. The standard was published in October 2021 following the close of the 2024 cycle. Therefore, the updates incorporate the newest information and align with the equipment listing and most recent updates to ASHRAE 15.

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**FINANCIAL IMPACT OF PROPOSED AMENDMENT:**

The code change proposal will not increase or decrease the cost of construction. As a result, there is no impact to cost.

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# GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

## CODE AMENDMENT FORM

ITEM NO: \_\_\_\_\_ (DCA USE ONLY)

PAGE 1 OF 3

CODE: 2018 International Fire Code and  
Building w/GA Amendments

SECTION: IFC Table 911.1, 3307.2.1;  
IBC 414.5.1

PROPONENT: Mary Koban

DATE: 12/15/2022

EMAIL: Mkoban@ahrinet.org

ADDRESS: 2311 Wilson Blvd Arlington, VA 22201

TELEPHONE NUMBER: (484)-220-3011

FAX NUMBER: ( ) -

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Add new section to read as follows:

ONE:  Delete section and substitute the following:

Delete without substitution:

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UNDERLINE MATERIAL TO BE ADDED

Approve

Approve as amended

(DCA STAFF ONLY)

Disapprove

Withdrawn

## DESCRIPTION

### IFC

**TABLE 911.1 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 <sup>d</sup>
	Liquefied	Not required	Required <sup>d</sup>

- a. Combustible dusts where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 104.8.2. See definition of "Combustible dust" in Chapter 2.
- b. Storage or use.
- c. In open use or dispensing.
- d. Rooms containing dispensing and use of hazardous materials where an explosive environment can occur because of the characteristics or nature of the hazardous materials or as a result of the dispensing or use process.
- e. A method of explosion control shall be provided where Class 2 water-reactive materials can form potentially explosive mixtures.
- f. Explosion venting is not required for Group H-5 Fabrication Areas complying with Chapter 27 and the International Building Code.
- g. Where explosion control is required in Section 1207.6.3.
- h. Not required for Category 1B Flammable Gases having a burning velocity not exceeding 3.9 in/s (10 cm/s).

**3307.2.1 Pipe cleaning and purging.** The cleaning and purging of flammable gas piping systems, including cleaning new or existing piping systems, purging piping systems into service and purging piping systems out of service, shall comply with NFPA 56.

**Exceptions:**

1. Compressed gas piping systems other than fuel gas piping systems where in accordance with Chapter 53.
2. Piping systems regulated by the International Fuel Gas Code.
3. Liquefied petroleum gas systems in accordance with Chapter 61.
4. Cleaning and purging of refrigerant piping systems shall comply with the International Mechanical Code.

### IBC

**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 <sup>b</sup>
HAZARD CATEGORY			
Flammable gas	Gaseous	Not Required	Required <sup>k</sup>
	Liquefied	Not Required	Required <sup>k</sup>

- a. See Section 414.1.3.
- b. See the International Fire Code.
- c. Combustible dusts where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 104.8.2 of the International Fire Code. See definition of "Combustible dust" in Chapter 2.
- d. Storage or use.
- e. In open use or dispensing.
- f. Rooms containing dispensing and use of hazardous materials where an explosive environment can occur because of the characteristics or nature of the hazardous materials or as a result of the dispensing or use process.
- g. A method of explosion control shall be provided where Class 2 water-reactive materials can form potentially explosive mixtures.

h. Explosion venting is not required for Group H-5 fabrication areas complying with Section 415.11.1 and the International Fire Code.

i. Where explosion control is required in Section 1207 of the International Fire Code.

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

---

**REASON/INTENT:**

This change coordinates with the change in the definition of flammable gas. Explosive flammable gases do not include Category 1B flammable gases having a burning velocity of 3.9 in/s or less (Low BV). Table 911.1 has been modified accordingly. Category 1B low burning velocity flammable gases are excluded from the explosive flammable gas requirements. A reference to the International Mechanical Code has been added as an exception for the cleaning and purging of flammable gas piping systems requirements. Chapter 11 of the International Mechanical Code includes requirements for cleaning and purging using Category 1B low burning velocity flammable gases.

This proposal is submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at:

<https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>.

This code proposal (referenced as F98) was accepted and adopted in the 2024 IFC code cycle

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**FINANCIAL IMPACT OF PROPOSED AMENDMENT:**

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## CODE AMENDMENT FORM

ITEM NO: \_\_\_\_\_ (DCA USE ONLY)

PAGE 1 OF 3

CODE: 2018 International Fire Code and  
Building w/GA Amendments

SECTION: F202; B202

PROPONENT: Mary Koban

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Approve as amended

(DCA STAFF ONLY)

Disapprove

Withdrawn

### DESCRIPTION:

#### IFC Section 202

**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)] ~~which~~ 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; or
- ~~2. Has 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. limit, unless data shows 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% 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 1B.

#### IBC Section 202

**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)] ~~which~~ 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; or
- ~~2. Has 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. limit, unless data shows 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% 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 1B.

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**REASON/INTENT:** In the 7th edition of the Global Harmonization System of Classification and Labelling of Chemicals (GHS) the classification of flammable gas was expanded. Flammable gases have three categories, Category 1A, Category 1B, and Category 2. The definition is revised to be consistent with the GHS. However, some of the subgroups of Category 1A are not identified since all of the subclass still fall within Category 1A. Not included in the definition are pyrophoric (flammable) gas and chemically unstable (flammable) gas. Within these two additional terms is a requirement that the gas must first meet the Category 1A definition. Hence, including these terms becomes unnecessary in the Fire Code. GHS also defines a Category 2 flammable gas. The definition of a Category 2 flammable gas is: Category 2 - A gas not meeting the criteria of Category 1A or 1B, which, at 68°F (20 °C) and a pressure of 14.7 psia (101 kPa), has a flammable range while mixed in air. It is recommended that ICC consider adding a note in the commentary that Category 2 flammable gases are not regulated as flammable gases in the Fire Code, however, GHS has a classification for such flammable gases.

The GHS table on flammable gases is as follows:

**Table 2.2.1: Criteria for categorisation of flammable gases**

Category		Criteria
1A	Flammable gas	Gases, which at 20 °C and a standard pressure of 101.3 kPa: (a) are ignitable when in a mixture of 13% or less by volume in air; or (b) have a flammable range with air of at least 12 percentage points regardless of the lower flammability limit unless data show they meet the criteria for Category 1B
	Pyrophoric gas	Flammable gases that ignite spontaneously in air at a temperature of 54 °C or below
	Chemically unstable gas	A
B		Flammable gases which are chemically unstable at a temperature greater than 20°C and/or a pressure greater than 101.3 kPa
1B	Flammable gas	Gases which meet the flammability criteria for Category 1A, but which are not pyrophoric, nor chemically unstable, and which have at least either: (a) a lower flammability limit of more than 6% by volume in air; or (b) a fundamental burning velocity of less than 10 cm/s;
2	Flammable gas	Gases, other than those of Category 1A or 1B, which, at 20 °C and a standard pressure of 101.3 kPa, have a flammable range while mixed in air

**NOTE 1:** Ammonia and methyl bromide may be regarded as special cases for some regulatory purposes.

**NOTE 2:** Aerosols should not be classified as flammable gases. See Chapter 2.3.

**NOTE 3:** In the absence of data allowing classification into Category 1B, a flammable gas that meets the criteria for Category 1A is classified per default in Category 1A.

**NOTE 4:** Spontaneous ignition for pyrophoric gases is not always immediate, and there may be a delay.

**NOTE 5:** In the absence of data on its pyrophoricity, a flammable gas mixture should be classified as a pyrophoric gas if it contains more than 1% (by volume) of pyrophoric component(s).

Category 1A flammable gases have a higher flammability and become explosive. These are the flammable gases typically understood such as propane, acetylene, and butane. Category 1B flammable gases have a lower flammability and are not inherently explosive, although all flammable gases can have a deflagration under the right conditions. A typical Category 1B flammable gas would be difluoromethane. The gas has a lower flammable limit of 13.8 percent and an upper flammable limit of 29.9 percent. The burning velocity is 6.7 cm/s or 2.6 in/s. Other Category 1B flammable gases would include: 1,1,1-trifluoroethane; and 2,3,3,3-tetrafluoro-1-propene. Trans-1,3,3,3-tetrafluoro-1-propene and ammonia are a Category 2 flammable gas. The last statement in the definition is to clarify that when not indicated, the term flammable gas applies to both Category 1A and Category 1B. When appropriate, the section in the code will state, “Category 1A flammable gas” or “Category 1B flammable gas.”

This proposal was submitted by the ICC Fire Code Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>

This code proposal (referenced as F3) was approved for the 2024 I Code Cycle.

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FINANCIAL IMPACT OF PROPOSED AMENDMENT:

The code change proposal will not increase or decrease the cost of construction. As a result, there is no impact to cost.

# GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

## CODE AMENDMENT FORM INSTRUCTION SHEET

1. Do not complete the line entitled “Item No. \_\_\_\_\_”.
2. Use a separate form for each proposed code amendment.
3. “Sheet \_\_\_\_ of \_\_\_\_\_” indicates the number of sheets for each individual proposed code amendment, not the number of sheets for all the amendments submitted.
4. Identify the code and code section that is the subject of the proposed amendment.
5. The proponent’s name, address, telephone number and fax number must be filled out completely.
6. Be sure to indicate the type of recommended action in the space referred to as “Check One”.
7. If the proposed amendment revises the language of the code section, deletes the entire code section, or deletes the entire code section and offers substitute language, include the language of the present code section and line through the language to be deleted and underline the language of the proposed amendment.
8. Under the “Reason” section, provide the reasoning behind the proposed code amendment. The reason should be clear and concise. Test reports, standards or other supporting information and documentation may be submitted with the proposed amendment and must be attached to the amendment form.
9. **A Statement of Financial Impact must accompany all proposed code amendments.** The statement should be clear and concise. Test reports, standards or other supporting information and documentation may be submitted with the proposed amendment and must be attached to the amendment form.
10. **All proposed amendments must be typed and completed in full and the original submitted to the Codes and Industrialized Buildings Section of the Department of Community Affairs NO LATER THAN DECEMBER 15<sup>TH</sup>.** The proposed code change shall be submitted for review to the State Codes Advisory Committee at their quarterly meeting in January. An incomplete form will be sent back to the proponent for completion. An amendment submitted after the submittal deadline date will be returned to the proponent.

11. The proponent will be notified when the proposed amendment will be considered by the State Codes Advisory Committee.
12. Information concerning submittal of code amendments, including deadline dates for submittal, can be obtained by contacting the Codes and Industrialized Buildings Section at (404) 679-3118. All proposed code amendments should be submitted to:

The Department of Community Affairs  
Codes and Industrialized Buildings Section  
60 Executive Park South, NE  
Atlanta, Georgia 30329-2231