



## FIRE PREVENTION INTERPRETATION

**Purpose:** To establish a standard interpretation for the use of open-flame cooking devices and the associated use, storage and transportation through residential occupancies, such as multi-family dwellings and apartment buildings, of LP-gas.

**Scope:** The 2018 International Fire Code (IFC) regulates open-flame cooking devices in Section 308.1.4. LPG is regulated by IFC Chapter 61 and NFPA 58.

**Description of Issue:** The requirements of Section 308.1.4 of the 2018 edition of the International Fire Code are vague and do not clearly define how the exceptions should apply to open flame cooking devices fueled by different methods including charcoal and LP-gas. This section also does not address storage of LP-gas cylinders as it is related to the use of the open- flame cooking device.

### **308.1.4 Open-flame cooking devices.**

*Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.*

#### **Exceptions:**

1. *One- and two-family dwellings.*
2. *Where buildings, balconies and decks are protected by an automatic sprinkler system.*
3. *LP-gas cooking devices having LP-gas container with a water capacity not greater than 2 ½ pounds [nominal 1-pound (0.454 kg) LP-gas capacity].*

**References:** 2018 IFC Sections 308.1.4 & 6101.1, 2014 NFPA 58 Sections 6.20.11 & 8.3.5.

**Interpretation:** The intent behind this particular code provision is to eliminate the use of an open-flame cooking device on balconies or within 10 feet of combustible patios on the ground level. Additional exceptions are made to this section for lower hazard operations or occupancies. Exception one shall be considered applicable to all types of open-flame cooking devices (Charcoal or LP-gas). Exception two shall be considered applicable to open flame cooking devices other than ones fueled by LP-gas. Exception three shall be applicable to LP-

gas fueled open-flame cooking devices in buildings protected and not protected with fire sprinklers.

Storage, handling and transportation of LP-gas are regulated by IFC Chapter 61 and NFPA 58, as specifically referenced in IFC Section 6101.1. Storage of LP-Gas in residential occupancies has been regulated by NFPA 58 since at least 1986. In accordance with NFPA 58, storage cylinders within a residential building shall be limited to cylinders each with a maximum water capacity of 2.7 lb. [nominal 1 lb. LP-gas capacity] and shall not exceed 5.4 lb. aggregate water capacity per each living space unit. Cylinders having water capacities greater than 2.7 lb. [nominal 1 lb. LP-gas capacity] shall not be located on balconies of dwellings of two or more living units above the first floor.

**Summary:**

- Open-Flame Cooking Devices (LP-Gas). LP-gas fueled open-flame cooking devices shall not be operated on combustible balconies (above the first story) or within 10 feet of combustible construction (e.g., stucco over wood framing).

*Exceptions:*

1. *One- and two-family dwellings.*
2. *LP-gas cooking devices having LP-gas container with a water capacity not greater than 2 ½ pounds [nominal 1-pound LP-gas capacity].*

- Open-Flame Cooking Devices (Charcoal/solid fuel). Charcoal or solid fueled open-flame cooking devices shall not be operated on combustible balconies (above the first story) or within 10 feet of combustible construction.

*Exceptions:*

1. *One- and two-family dwellings.*
2. *Where buildings, balconies and decks are protected by an automatic sprinkler system.*

- LP-Gas Storage within Residential Buildings. Storage of LP-Gas cylinders within a residential apartment building (under the horizontal projection of the roof, floor or balcony above), including the basement or any storage area in a common basement of a multiple-family buildings and attached or detached garages, shall be limited to cylinders each with a maximum water capacity of 2.7 lb. [nominal 1 lb. LP-gas capacity] and shall not exceed 5.4 lb. aggregate water capacity per each living space unit.
- LP-Gas Storage on Exterior Balconies of Residential Apartment Buildings. Cylinders having water capacities greater than 2.7 lb. [nominal 1 lb. LP-gas capacity] shall not be located on decks or balconies of dwellings of two or more living units above the first floor.

**Notes:** Typical consumer LP-Gas barbecue cylinders are 47.7 lb. water capacity [nominal 20 lb. LP-Gas capacity]. Typical LP-Gas camp stove or lantern canisters are 2.7 lb. water capacity [nominal 1 lb. LP-gas capacity].

Visual Guide:

**BBQs allowed on patio or balcony of a FIRE SPRINKLERED BUILDING**



**1lb Propane Grill  
(2-1lb bottles per unit)**



**Electric Smoker**



**Charcoal BBQ**



**5lb Propane Grill  
(Ground Floor  
Only 10' from  
Structure)**

**BBQs allowed on patio or balcony of a NON-SPRINKLERED BUILDING**



**1lb Propane Grill  
(2-1lb bottles per unit)**



**Electric Smoker**



**5lb Propane Grill  
(Ground Floor  
Only 10' from  
Structure)**

- **Know where your Fire Extinguishers are located.**
  - **DO NOT place your BBQ against the building.**
- Contact your local Fire Department for further information**