



## Life Safety Plan Requirements

The City of Jacksonville's Fire Marshal's Office requires the submittal of a code summary and life safety plan for building permits for all new construction and existing building alterations in order to ascertain if occupancy is code compliant and to assist the fire inspector in performing Life Safety Inspections. It is understood that all listed items may not apply in your situation.

### Fire Code specific code summary

The building code and fire code differ on occupancy types and uses and can make the proper application of the code difficult. Please provide in addition to the normal building code summary a fire code specific summary based off the Florida Fire Prevention Code (current edition) to include all the following information listed below. Failure to provide accurate fire code summary may delay plans review approvals as we return plans for corrections and clarifications.

Florida Fire Prevention Code 8<sup>th</sup> Edition.

- Occupancy type sub-classification (per NFPA 101 6.1)
- Building construction type (per NFPA 101 8.2.1)

**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 | HT      | A      | B |
| Primary structural frame <sup>f</sup> (see Section 202) | 3 <sup>a</sup> | 2 <sup>a</sup> | 1       | 0 | 1        | 0 | HT      | 1      | 0 |

- Gross square footage
- Number of stories
- Building height
- Interior wall and ceiling finish requirements See NFPA 101 10.2 Chapter 10

**10.2.3.4.1 Class A Interior Wall and Ceiling Finish.** Class A interior wall and ceiling finishes shall be those finishes with a flame spread index of 0.25 and a smoke developed index of 0. 450 and shall include any material classified at 25 or less on the flame spread index test scale and 450 or less on the smoke developed index test scale.

**10.2.3.4.2 Class B Interior Wall and Ceiling Finish.** Class B interior wall and ceiling finishes shall be those finishes with a flame spread index of 26.75 and a smoke developed index of 0. 450 and shall include any material classified at more than 25 but not more than 75 on the flame spread index test scale and 450 or less on the smoke developed index test scale.

**10.2.3.4.3 Class C Interior Wall and Ceiling Finish.** Class C interior wall and ceiling finishes shall be those finishes with a flame spread index of 76.200 and a smoke developed index of 0. 450 and shall include any material classified at more than 75 but not more than 200 on the flame spread index test scale and 450 or less on the smoke developed index test scale



## Life Safety Plan Requirements

- Allowable dead-end limits
- Allowable Common path of travel limits
- Allowable travel distance limits
- Any fire protection systems (sprinkler, fire alarm, etc.)
- Statement from architects or engineers that their design to the best of their knowledge complies with the 8<sup>th</sup> Edition Florida Fire Prevention Code (FFPC).

**Also, all existing buildings must provide classification of rehabilitation work categories per NFPA 101 43.1**

- Rehabilitation work on existing buildings shall be classified as
- one of the following work categories:
  - (1) Repair
  - (2) Renovation
  - (3) Modification
  - (4) Reconstruction
  - (5) Change of use or occupancy classification
  - (6) Addition

### **Life Safety Plan:**

**Required measurements:** (Worst case only need be shown).

- Dead end corridors measurements.
- Common path of travel measurements.
- Total travel distance to exits.

### **Required separation:**

- All rated walls / adjacent tenant occupancy type, required occupancy separation

### **Required Lock Latch details:**

- Lock/Latch details: Panic Hardware, Thumb turn lock, Key Lock with indicator and required signage.

### **Required Occupant Load Calculation:**

- Calculated occupant load using table 7.3.1.2 of NFPA 101 2012 edition.

### **Required Egress Inches:**

- Egress inches for means of egress components (doors, stairs, etc.)

### **Required Number of Exits:**

- All required exits shall terminate at a "public way". Access to the public way shall be via a stable, firm, and slip resistant conveyance such as a concrete sidewalk with a min. 5'x5' landing and 44" walkway.

### **Required Exit Separation Distance:**

Separation of exits using the one half (non-sprinkled) or one third (sprinkled) the diagonal distance rule.



## Life Safety Plan Requirements

### **Required Electrical Stop/Disconnect Details:**

- Any required Emergency stops or Shunt trips.
- Main Electrical disconnects access/location.

### **Required markings of means of egress:**

- Exit signs to include tactile exits signage.

### **Required Emergency lighting:**

- Show emergency illumination.

### **Required Lightweight Truss Signage:**

- Location of lightweight truss signage per FAC 69A-60.0081 (if applicable).

### **DETERMINING Occupant Load:**

Identify all area or room "uses" and calculate occupant load using the occupant load factors listed in table 7.3.1.2 of NFPA 101. For use areas using gross square footage the gross area of a space is defined as everything within its walls, including occupiable spaces and non-occupiable spaces, such as closets, bathrooms, hallways, and stairs. For use areas using net square footage the area is determined by measuring all of the non-occupiable spaces, and then subtracting this area from the gross area and then applying the appropriate use factor. In general, "net floor area" in an assembly space is where the public is expected to or can assemble. Each "use" area should be hatched or delineated in such a way as to be able to separate one "use" from another for figuring purposes.

Please note that assembly "use" should typically be figured using net square footage based off the following:

- 1 person for every 7 square feet (concentrated use) Example dance floor.
- 1 person for every 15 square feet (less concentrated use) Example non-fixed tables and chairs.
- 1 person for every linear inch of bench type seating.
- 1 person for every fixed seat (seating that is secured to buildings structure).

- **DETERMINING TOTAL EXIT WIDTH:**

Once occupant load is determined required exit capacity must be calculated per FFPC requirements for capacity factor.

### **Note:**

1. Doors must open in the direction of egress travel with appropriate lock latch devices to be considered an exit.
2. Access through an open kitchen cannot be deemed as public access to exit.
3. All exits, particularly for existing buildings, must comply with all requirements in the Florida Fire Prevention Code for exits (e.g. flame spread rating, emergency lights, exit lights, door hardware, etc.) In order to be considered as contributing to required exit widths.



## Life Safety Plan Requirements

### **MAXIMUM OCCUPANT LOAD CALCULATION:**

The maximum occupant load of a room or floor area for assembly occupancy shall be the lesser number derived by:

- A.) Dividing the net floor area by the pertinent Occupant load factor table (see NFPA Table 7.3.1.2 page 3 of this document).
- B.) Determining the number of persons for whom there is sufficient exit capacity using the Capacity factor table (see NFPA Table 7.3.1.2 below).

The number of persons permitted to occupy a room shall not exceed the maximum occupant load calculated.



## Life Safety Plan Requirements

**Table 7.3.1.2 Occupant Load Factor**

| Use  | (ft <sup>2</sup> /person) <sup>a</sup> |
|--|--|
| <b>Assembly Use</b>                                |  |
| Concentrated use, without fixed seating            | 7 net                                  |
| Less concentrated use, without fixed seating       | 15 net                                 |
| Bench-type seating                                 | 1 person/18 linear in.                 |
| Fixed seating                                      | Use number of fixed seats              |
| Waiting spaces                                     | See 12.1.7.2 and 13.1.7.               |
| Kitchens   | 100                                    |
| Library stack areas                                | 100                                    |
| Library reading rooms                              | 50 net                                 |
| Swimming pools                                     | 50 (water surface)                     |
| Swimming pool decks                                | 30                                     |
| Exercise rooms with equipment                      | 50                                     |
| Exercise rooms without equipment                   | 15                                     |
| Stages   | 15 net                                 |
| Lighting and access catwalks, galleries, gridirons | 100 net                                |
| Casinos and similar gaming areas                   | 11                                     |
| Skating rinks                                      | 50                                     |

**Table 7.3.3.1 Capacity Factors**

| Area                        | Stairways<br>(width/person) |     |
|-----------------------------|-----------------------------|-----|
|                             | in.                         | mm  |
| Board and care              | 0.4                         | 10  |
| Health care, sprinklered    | 0.3                         | 7.6 |
| Health care, nonsprinklered | 0.6                         | 15  |
| High hazard contents        | 0.7                         | 18  |
| All others                  | 0.3                         | 7.6 |