

# Preparedness Committee Security and Life Safety Commercial Office Building Protective Measures

Topic:	<b>Life Safety Provisions (Chicago)</b>
Date:	Jan 2014; Revised May 2018

**Background** The City of Chicago has a number of municipal codes for life safety protection, primarily under Chapter 13 of the municipal code. Recent versions of the Municipal Code for Chicago can be located at the following American Legal Publishing Corporation link: <a href="http://www.amlegal.com/library/il/chicago.shtml">http://www.amlegal.com/library/il/chicago.shtml</a>

### Chapter 13-78 / High Rise Buildings – Emergency Procedures

Chapter 13-78 / High Rise Buildings – Emergency Procedures is applicable to structures over 80 feet above grade. The code was enacted in 2001 and sets forth the life safety standards on how high rise buildings will prepare for and respond to fire related emergencies. Specifically, the code covers the following areas:

- Building Classifications
- Building Categories
- Emergency Evacuation Plan
- Emergency Preparedness Certificate
- Designated Emergency Evacuation Teams

Building Classification	Category Classification	
A: Residential	Category 1: 781 feet and above	
C: Assembly	Category 2: 541 feet to 780 feet	
D: Open Air Assembly	Category 3: 276 feet to 540 feet	
E: Business	Category 4: 80 feet to 275 feet	
F: Mercantile		
G: Industrial		

Occupancy and Category Classifications are important because they will determine the following:

- If an emergency plan needs to be filed with the Office of Emergency Management and Communication (OEMC)
- The number of emergency drills to be conducted over the course of a year
- Whether Fire Safety Directors and/or Deputy Fire Safety Directors are necessary

## • Required staffing for Emergency Evacuation Teams Chapter 13-78 Basic Requirements

13-78 Requirements	Category 1	Category 2	Category 3	Category 4
	>781 ft	541 – 780 ft	276 - 540 ft	80 – 275 ft
Evacuation Plan	Yes	Yes	Yes	Yes
Filed with OEMC	Yes	Yes	No	No
Plan available for inspection	Yes	Yes	Yes	Yes
FSD and Deputy FSD	Yes	Yes	Yes	No
Building Evacuation Supervisor	Yes	Yes	No	No
Designated Fire Warden	Yes	No	No	No
Emergency Evacuation Team	Yes	Yes	No	No
Evacuation Drills	2x year	1x per year	Not Required	Not Required
Training / Distribution	Annual	Annual	Annual	Annual

#### **Emergency Evacuation Plan**

- Every high-rise building will have an emergency plan in place responsibility of owner to create, implement, maintain and update
- Written document for occupant emergency evacuations and drills, prepared and maintained by owner and/or owner's agent
- Plan will identify required personnel, such as:
  - o Fire Safety Director/Deputy Fire Safety Director
  - o Building Evacuation Supervisor
  - o Fire Wardens
  - Emergency Evacuation Teams (EET)
- Plan requirements:
  - Description of occupant actions
  - o Roles and responsibilities of EET and personnel
  - Floor plans
  - Evacuation routes
  - o Posting of all evacuation routes and areas of rescue assistance in elevator lobbies
  - o Identification of those persons who have voluntarily requested assistance
  - o Training and distribution to tenants

#### Fire Safety Director Certification

- Applicable to all buildings exceeding 80 feet above grade
- Issued by Chicago Fire Department (CFD), renewed biannually
- Live course work, written exam, and practical exam for initial certification

• <a href="http://www.cityofchicago.org/city/en/depts/cfd/provdrs/prevent/svcs/emergency\_prepare">http://www.cityofchicago.org/city/en/depts/cfd/provdrs/prevent/svcs/emergency\_prepare</a> dnesscertificateapplication.html

# **Emergency Evacuation Teams**

Each plan for Category 1 buildings shall include the following required designated personnel:

**Fire Safety Director ("F.S.D.").** The plan must designate an F.S.D. The F.S.D. must be an employee of that building. The F.S.D. shall obtain and maintain an emergency preparedness certificate, and shall provide said certificate for inspection upon request to personnel of the department of buildings, the office of emergency management and communications, the fire department and the department of police.

**Deputy(ies) F.S.D.** The plan must designate one or more deputies F.S.D. to serve as required by Section 13-78-060 in the absence of the F.S.D. Each deputy F.S.D. must be an employee of that building. Each deputy F.S.D. shall obtain and maintain an emergency preparedness certificate, and shall provide said certificate for inspection upon request to personnel of the department of buildings, the office of emergency management and communications, the fire department and the department of police.

**Building Evacuation Supervisor.** The plan must designate a building evacuation supervisor. In a residential building, the building evacuation supervisor may be a resident of that building. In a non-residential building, the building evacuation supervisor must be an employee of that building.

**Fire Wardens**. The plan must designate fire wardens in sufficient numbers to carry out their duties as required by this chapter. In a residential building, some or all fire wardens may be residents of that building. In a non-residential building, some or all fire wardens may be employees of that building; provided, however, that if the owner does not wish to supply one or more fire wardens, then such fire wardens shall be supplied by building tenants, in numbers proportionate to tenant size.

**Emergency Evacuation Team**. The plan must designate an emergency evacuation team. In a residential building, the emergency evacuation team may include or be composed of residents of that building. In a non-residential building, the emergency evacuation team may include or be composed of employees of that building; provided, however, that if the owner does not wish to supply one or more members of an emergency evacuation team, then such members shall be supplied by building tenants, in numbers proportionate to tenant size.

Most High-Rise Emergency Evacuation Teams may consist of:

#### Area Warden

The Area Warden is responsible for emergency coordination and reporting of any potential or actual emergency condition to Building Management. The Area Warden is also responsible for organizing his/her emergency team members and making sure emergency procedures are carried out correctly.

- Appoints personnel to the Life Safety Teams and fills vacant positions.
- Maintains an updated roster of all Life Safety Team members.
- Alerts key personnel of potential emergencies.
- Supervises the activity and training of all key team members. Ensures that all team members know their assigned duties and locations in case of an emergency.
- Is responsible for informing and training team members and all floor personnel in emergency procedures.
- Pre-plans the handling of physically disabled personnel during evacuation.
- Is responsible for the evacuation of floor personnel. Is responsible for notifying Life Safety Team members to evacuate.
- The Floor Warden / Assistant Floor Warden will assist the Area Warden in all areas of responsibility and assume the leadership role in his/her absence.

#### Floor Warden / Assistant Floor Warden

Operating under the supervision of the Area Warden, the Floor Warden (or Assistant) is responsible for the control of the Life Safety Team members and the people on the floor. In addition, he / she are responsible for the safe evacuation of personnel in his/her work area during an emergency.

- Supervises assembly of personnel in his/her work area.
- Is responsible for orderly evacuation of all personnel in his/her area via designated exits.
- Remains with the group throughout the evacuation period and leads them to predetermined safe areas.
- Assists in training of all personnel in his/her work area.

#### Searcher

Under the supervision of the Floor Warden, Searchers are responsible for finding and evacuating all personnel from the floor, specifically from remote areas such as  Checks all rooms including rest rooms, conference rooms, reception areas, and remote areas, closing but not locking all doors behind them. storerooms, file rooms, coffee areas, restrooms, etc.

- Advises any remaining personnel on the floor of the emergency and insists on their evacuation.
- Evacuates non-employees found on the floor.
- Reports to Floor Warden when his/her area is clear.

#### **Stairwell Monitor**

Under the direction of the Floor Warden, Stairwell Monitors are responsible for an assigned exit, such as a stairwell and assist in the orderly evacuation of personnel.

- Takes a position at his/her assigned exit and assists in the orderly evacuation of personnel.
- Inspects stairwells for possible heat or smoke conditions before evacuation.
- Instructs personnel to form single file lines into the stairwell and directs personnel to exit along the right side of the stairwell.
- Supervises and monitors evacuation flow while remaining calm and encouraging a calm and orderly evacuation.
- Stays at the exit until Searchers have cleared all personnel from the floor.

#### **Elevator Monitor**

Under the supervision of the Floor Warden, Elevator Monitors are responsible for making sure no one uses the elevators.

- Must be familiar with the building evacuation plan and the location of all stairways.
- Positions self at elevator bank and directs employees to the nearest stairway and away from the elevators.
- Stays at his/her post until instructed to evacuate by the Floor Warden.

#### **Aide to Persons Needing Assistance**

Under the supervision of the Floor Warden, the Aide to Persons Needing Assistance is responsible for making sure all physically challenged personnel are evacuated.

- Maintains an up-to-date list of physically challenged employees on the floor.
- Assists personnel to stairwell (Area of Safe Refuge) and calls Security on stairwell phone alerting them to person in stairwell.

# Safety Drill Affidavit

- Applicable to Category 1 buildings only
- On an annual basis, the owner shall file with the fire commissioner an affidavit certifying that at least two safety drills have taken place on all occupied floors during the past year

AFFIDAVIT	
<u>High Rise Safety Drill</u>	
DATE  By signing below, I certify, under penalty of perjury, that du period from, 20, 20, conducted on all occupied floors as required by Section 13-78-	ring the past 12 months, covering the at least two safety drills have been 090 of the Municipal Code of Chicago.
Building Name:	_
Address:	_
Submitted by:	
Name (print)	Notary Seal
Signature	
Title (print)	L
Mail this affidavit to:	*******
CHICAGO FIRE DEPARTMENT BUREAU OF FIRE PREVENTION 444 NORTH DEARBORN, 2 <sup>ND</sup> FLOOI CHICAGO, IL 60610-4304	3
	FORM HR - 2 (Revised 1/17/02)

# Chapter 13-196 of the Municipal Code of Chicago "Existing Buildings – Minimum Requirements"

- 13-196-203: Life Safety Data Sheet
- 13-196-204: Voice Communication System
  - o 1-way communication from fire panel
  - o 2-way communication in stairwells every 5<sup>th</sup> floor
- 13-196-205: Automatic Sprinkler System
- 13-196-209: 1-hour fire rating on doors, stairways, and frames

# CFD Life Safety Data Sheet

- COC Chapter 13-196-203
- For all high rise buildings over 80 feet above grade
  - o Building Management
  - o Occupancy Use
  - o Sprinkler / Standpipe / Stairwell / Fire Pump information
- Mandatory requirement to file with the CFD Fire Prevention Bureau
- Life Safety Data Sheet can be downloaded at:
  - o <a href="https://www.cityofchicago.org/city/en/depts/cfd/provdrs/prevent/svcs/life\_safety\_datasheet.html">https://www.cityofchicago.org/city/en/depts/cfd/provdrs/prevent/svcs/life\_safety\_datasheet.html</a>

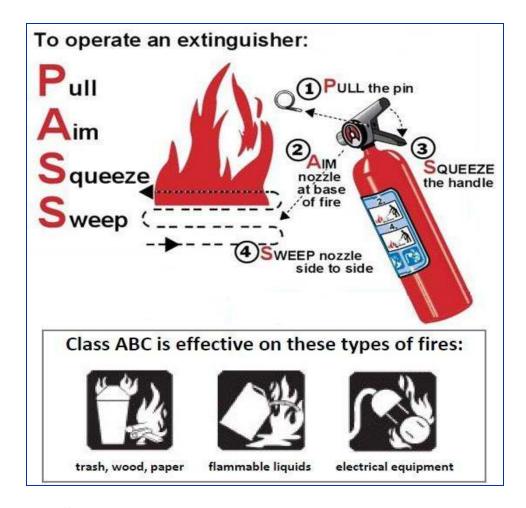
(For	For buildings exceeding 80 feet in height above grade. compliance with City of Chicago Municipal Code Section 13-196-203)
Building Address	
Building Owner	
Office Phone	Cell/Alternate Phone
Building Manager	
Office Phone	Cell/Alternate Phone
Height of Building	feet stories
Occupancy/Use(s) of Bu	
(Check all that appl ☐ Residential	ly) Complete □ Partial □ Number of standpipes □
□ Institutional	What floors or areas are sprinklered? Location of standpipes
□ Assembly	
☐ Mercantile ☐ Business	
☐ Garage	
☐ Storage ☐ Industrial	Stairwells
If residential or mixed use.	Number of Stairwells in building
total number of dwelling un	
ППП	Are the doors to the stairwells locked from the stairwell side? Yes \( \text{Ves} \) No \( \text{No} \)  If yes, is there an unlocking system? Yes \( \text{Ves} \) No \( \text{No} \)
	If yes, is there an unlocking system? Yes □ No □  Is there a fire alarm system in the building? Yes □ No □
	Pressurized Stairwells
Does the building have any p	ressurized stairwells? Yes □ No □
	ressurized ?
Additional Information —	
Number of fir	Fire Pumps  pumps in building  Size of pump(s)
1st pump	gals/min lbs/sq in
2nd pump 3rd pump	gals/min lbs/sq in lbs/sq in
	w knowledge, all the above information is accurate.
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Prepared by/ Name	Title Daytime Phone Number

# Chapter 13-76 of the Municipal Code of Chicago "High Rise Buildings"

- 13-76-030: Fire Panel Location
  - Approval of CFD
- 13-76-050 : Voice Communication (same as 13-196-204)
- 13-76-070: Stairwell Locking Devices
  - o Unlocked or electronically controlled (fail safe)
- Stairwell Identification
  - o Interior location and directional signage
- Area Of Rescue Assistance

#### Fire Extinguisher Use – PASS Acronym

- Fire extinguishers should only be used for small fires and used by trained personnel
- Always leave an escape path
- To use a fire extinguisher, utilize the Pass method:
  - o P: Pull safety pin
  - o A: Aim nozzle at base of fire
  - o S: Squeeze trigger
  - o S: Sweep contents back & forth



**Conclusion / Follow-Up** Life Safety preparedness measures may vary from building to building based on the property classification and category. For more information, refer to City of Chicago's Title 13 Buildings and Construction code, specifically chapters 13-76, 13-78 and 13-196. The Chicago Fire Department Bureau of Fire Prevention is also a great resource and can assist you in understanding life safety code, standards and guidelines.

Note: The above measures are provided for informational purposes only and do not constitute any set standard, guideline, or code. They are offered as possible options to consider when developing response measures to issues in a commercial office building. When developing response measures, consider all variable, such as building size and design, staffing, time of day, etc. The purpose of these measures is to provide general information to those persons responsible for developing site-specific protective measures, to serve as practices to consider when drafting emergency operations plans, and do not constitute any set policy or procedure.