FIRE SAFETY & EVACUATION PLANNING FOR APARTMENTS, INDEPENDENT LIVING FACILITIES, DORMITORIES, FRATERNITIES AND SORORITIES



West Metro Fire Rescue

Life Safety Division

433 South Allison Parkway Lakewood, Colorado 80226 (303) 989-4307 Fax (303) 969-8908

Scope

Reporting of emergencies, coordination with emergency response forces, emergency plans and procedures for managing or responding to emergencies shall comply with the provisions of the 2015 International Fire Code, Chapter 4, Section 401.

Purpose

The purpose of this document is to provide applicable facilities with guidance in preparing a fire safety and evacuation plan.

• In accordance with the 2015 International Fire Code, all residential occupancies (R-2) containing sleeping units of more than two dwelling units where occupants are primarily permanent in nature are required to provide an emergency guide to their residents informing them of safety measures available to them in the event of a fire. R-2 occupancies include apartments, dormitories, and extended stay motels.

Approval

Where required by this code, fire safety plans, emergency procedures and employee training programs shall be approved by the *fire code official*.

Emergency Responder Notification

Notification of emergency responders shall be in accordance with Sections 401.3.1 through 401.3.3:

- **Fire events.** In the event an unwanted fire occurs on a property, the *owner* or occupant shall immediately report such condition to the fire department
- o **Alarm activations**. Upon activation of a fire alarm signal, employees or staff shall immediately notify the fire department
- O Delayed notifications. A person shall not, by verbal or written directive, require any delay in the reporting of a fire to the fire department.

Required plan implementation

In the event an unwanted fire is detected in a building or fire alarm activates, the fire safety and evacuation plan shall be implemented.

Making a false report

A person shall not give, signal or transmit a false alarm.

Emergency evacuation drills

The sounding of a fire alar signal and the carrying out of an emergency evacuation drill in accordance with the provisions of Section 405 shall be allowed.

Unplanned evacuation

Evacuations made necessary by the unplanned activation of a fire alarm or by any other emergency shall not be substituted for a required evacuation drill.

Interference with fire department operations.

It shall be unlawful to interfere with, attempt to interfere with, conspire to interfere with, obstruct or restrict the mobility of or block the path of travel of a fire department emergency vehicle in any way, or to interfere with, attempt to interfere with, conspire to interfere with, obstruct or hamper any fire department operation.

DEFINITIONS PER THE 2015 INTERNATIONAL FIRE CODE:

Group R-2 Occupancy Group R-2 occupancies are residential occupancies containing sleeping units
or more than two dwelling units where the occupants are primarily permanent in nature, including:
☐ Apartment houses (this includes facilities deemed "independent living facilities")
☐ Congregate living facilities (nontransient) with more than 16 occupants
\Box Convents
□ Dormitories
☐ Fraternities and sororities
☐ Hotels (nontransient)
☐ Live/work units
☐ Monasteries
☐ Motels (nontransient)
☐ Vacation timeshare properties

Emergency Evacuation Drill An exercise performed to train staff and occupants and to evaluate their efficiency and effectiveness in carrying out emergency evacuation procedures.

Lockdown An emergency situation requiring that the occupants be sheltered and secured in place within a building when normal evacuation would put occupants at risk.

Special Needs Occupant A patron, employee, student, resident, or tenant that has unique or unusual need regarding their mobility capacity. These special needs can include, but are not limited to, the physically disabled, hearing impaired, visually impaired, or mentally impaired.

Plan Availability and Distribution

Fire safety and evacuation plans must be made available in the building at the front office/desk or near the fire alarm control panel. The plans must be available for reference and review by facility employees and copies shall be furnished to the Fire Marshal upon request. The plans are to be kept in a notebook and/or in protective coverings.

The plan must be distributed to the tenants and building service employees by the owner or owner's agent. Tenants shall distribute to their employees applicable pars of the fire safety plan affecting the employees' actions in the event of a fire or other emergency.

Plan Maintenance

Fire safety and evacuation plans must initially be approved by the Life Safety Division. The plans must be reviewed and updated by the facility annually or as necessitated by changes in staff assignments, occupancy or the physical arrangement of the building. Plans need to be resubmitted to the Life Safety Division only when *significant* changes to the plans have occurred.

Fire safety and evacuation plans shall be reviewed or updated by the facility annually or as necessitated by changes in staff assignments, occupancy or the physical arrangement of the building. The Life Safety Division does not need to re-review plans where changes in personnel/staff assignments, contact information or similar.

FIRE SAFETY AND EVACUATION PLAN SUBMITTALS

Please submit plans for review to:

West Metro Fire Rescue's Life Safety Division

433 South Allison Parkway, Lakewood, Colorado 80226 Phone: (303) 989-4307

Fax: (303) 969-8908

Email: codeenforcement@westmetrofire.org

Hours: M-F 8:00am to 4:30pm (closed on holidays and holiday observances)

There is no charge for the review/approval of the fire safety and evacuation plans.

FIRE SAFETY AND EVACUATION PLAN CONTENTS

The fire safety and evacuation plan is comprised of four (4) sections:

- 1. Cover page
- 2. Written plan
- 3. Floor plan(s) with evacuation routes shown
- 4. Site plan

Cover Page (An **Evacuation Plan Cover Sheet** template is available atwestmetrofire.org)

The Cover Page must include the following information:

- 1. Name of business/facility.
- 2. Name, address, telephone numbers and email (if applicable) of the manager(s) of the tenant.
- 3. Name, address, telephone numbers and email (if applicable) of the building owner (if different than tenant).
- 4. Main occupancy classification of building.
- 5. Total square footage of occupancy (all floors, levels, mezzanines, etc) and number of occupied floors above- and below-grade.
- 6. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
- 7. Emergency contact information for key operational personnel and building owner's agent.

<u>Written Plan</u> (An Apartment Safety Evacuation Plan template is available at westmetrofire.org)

The written portion of the fire safety and evacuation plan includes information regarding reporting fires/emergencies and occupant notification; evacuation and accountability of the evacuees; emergency response and crowd management; and occupancy hazards. Each subsection has specific information that is required by code to be included in the plan.

Note that all bulleted items below are required by the fire code to be included within the fire safety and evacuation plan.

Fire/Emergency Reporting and Occupant Notification

- The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.
- o The preferred and any alternative means of notifying occupants of a fire or emergency.

 A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided. The procedure for reporting a fire or other emergency.

Evacuation and Accountability

- o Emergency egress or escape routes and whether evacuation of the building is to be complete or, where approved, by selected floors or areas only.
- The life safety strategy and procedures for notifying, relocating or evacuating occupants, including occupants who need assistance.
- o Procedures for accounting for employees and occupants after evacuation has been completed.

Emergency Response and Crowd Management

- o Procedures for employees who must remain to operate critical equipment before evacuating.
- o Procedures for assisted rescue for persons unable to use the general means of egress unassisted.
- o Identification and assignment of personnel responsible for rescue or emergency medical aid.

Occupancy Hazards

- A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
- o Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.
- o Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.

Floor Plans

- The floor plan portion of the fire safety and evacuation plan must identify the locations of the following:
- Locations of all exits, exit stairs and exit corridors.
- Primary evacuation routes from all spaces (delineate primary routes in a different manner than secondary routes)
- Secondary evacuation routes from all space (delineate secondary routes in a different manner than primary routes)
- o Identify accessible egress routes and all areas of refuge6
- Exterior areas for assisted rescue
- o Locations of manual fire alarm boxes (pull stations)
- o Locations of portable fire extinguishers
- Location of hose valve/standpipe stations
- o Location of all fire alarm annunciators and controls

Site Plans

The last portion or site plan portion of the plan must indicate the following:

- Building footprint showing all exits and the evacuee assembly point (multiple points permitted if facility is large)
- o The locations of fire hydrants
- o The normal routes of fire department vehicle access (fire lanes)

R-2 OCCUPANCY SPECIAL REQUIREMENTS

The following items apply to all apartments, dormitories, fraternities, sororities and independent living facilities.

College and university buildings. *An approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-2 college and university buildings. Group R-2 college and university buildings shall comply with Sections 403.10.2.1.1 and 403.10.2.1.2.

First emergency evacuation drill. The first emergency evacuation drill of each school year shall be conducted within the first 10 days of the beginning of classes.

Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when school is at assembly, during recess or gymnastic periods or during other times to avoid distinction between drills and actual fires. One required drill shall be held during hours after sunset or before sunrise.

Emergency Guide

Emergency guide. Fire emergency guides shall be provided for Group R-2 occupancies. Guide contents, maintenance and distribution shall comply with Sections 403.10.2.2.1 through 403.10.2.2.3.

Guide contents. A fire emergency guide shall describe the location, function and use of fire protection equipment and appliances accessible to residents, including fire alarm systems, smoke alarms and portable fire extinguishers. Guides shall include an emergency evacuation plan of for each *dwelling unit*.

Emergency guide maintenance. Emergency guides shall be reviewed and approved by the *fire code official*.

Emergency guide distribution. A copy of the emergency guide shall be given to the tenant prior to initial occupancy.

Evacuation diagrams for dormitories. A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each dormitory *sleeping unit*. Evacuation diagrams shall be reviewed and updated as needed to maintain accuracy.

Examples of such fire protection equipment commonly accessible to residents and the functions and proper use of each are listed as follows (only include those items that are actually present):

Fire Alarm Manual Pull Stations

- Where they are located in the unit/building
- How to use them
- o Consequences if damaged, vandalized, deactivated or used falsely
- When they should be used
- o Call 911 once you are outside the building

Smoke Alarms/Detectors

- O Where they're located in the unit/building
- o Consequences if damaged, vandalized or deactivated
- Maintenance

- How to maintain
- o Who is responsible for maintenance
- Testing
- Changing batteries
- o Keep free of dust by vacuuming it regularly
- Never paint a smoke alarm
- o Replace any smoke alarm that is 10 years old or greater

Fire Extinguishers

- O Where they are located in the unit/building
- o Consequences for discharge, vandalism, or theft
- How to use **PASS** (**Pull**, **Aim**, **Squeeze**, and **Sweep**)
- o Only use an extinguisher if familiar with its operation
- o Only attempt to extinguish small fires
- o Make sure a safe exit is provided if fire is not extinguished
- o Never turn back to fire when using a fire extinguisher
- o If applicable, list the type and size of fire extinguisher available to residents.

Automatic Fire Sprinklers

- o Consequences for damage, vandalism, or tampering
- o Do not paint, tamper with or hang items from sprinkler heads
- O Sprinklers are a life saving device. They will slow the spread of fire and give residents time to evacuate

Exit Signs

- o Where they are located in the building
- o Consequences for damage, vandalism, or tampering
- o Exits shall be marked by an approved exit sign readily visible from any direction of travel.
- Access to exits shall be marked by readily visible exit signs in cases where the exit is not immediately visible to the occupants.

In addition to the items listed above, the following topics may be considered to be included in the plan:

- Carbon monoxide alarms
- Candle safety
- o Electrical safety/appliance safety
- Cooking safety
- Smoking safety
- Oxygen safety

Distribution

A copy of the emergency guide shall be given to each tenant prior to initial occupancy. It is recommended that each resident sign a form that indicates the resident has received, read and understood the emergency guide8. Such a form would be kept on file for the building or complex.

FIRE SAFETY, EVACUATION AND LOCKDOWN PLANS

Fire evacuation plans. Fire evacuation plans shall include the following:

- 1. Emergency egress or escape routes and whether evacuation of the building is to be complete by selected floors or areas only or with a defend-in-place response.
- 2. Procedures for employees who must remain to operate critical equipment before evacuating.
- 3. Procedures for the use of elevators to evacuate the building where occupant evacuation elevators complying with Section 3008 of the *International Building Code* are provided.
- 4. Procedures for assisted rescue for persons unable to use the general *means of egress* unassisted.
- 5. Procedures for accounting for employees and occupants after evacuation has been completed.
- 6. Identification and assignment of personnel responsible for rescue or emergency medical aid.
- 7. The preferred and any alternative means of notifying occupants of a fire or emergency.
- 8. The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.
- 9. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
- 10. A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided.

Fire safety plans. Fire safety plans shall include the following:

- 1. The procedure for reporting a fire or other emergency.
- 2. The life safety strategy including the following:
 - a. Procedures for notifying occupants, including areas with a private mode alarm system.
 - b. Procedures for occupants under a defend-in-place response.
 - c. Procedures for evacuating occupants, including those who need evacuation assistance.
- 3. Site plans indicating the following:
 - a. The occupancy assembly point.
 - b. The locations of fire hydrants.
 - c. The normal routes of fire department access.
- 4. Floor plans identifying the locations of the following:
 - a. Exits.
 - b. Primary evacuation routes.
 - c. Secondary evacuation routes.
 - d. Accessible egress routes.
 - i. Areas of refuge.
 - ii. Exterior areas for assisted rescue.
 - e. Refuge areas associated with smoke barriers and horizontal exits
 - f. Manual fire alarm boxes.
 - g. Portable fire extinguishers.
 - h. Occupant-use hose sections.
 - i. Fire alarm annunciators and controls.
- 5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
- 6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.

7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

Lockdown plans. Where facilities develop a lockdown plan, it shall be in accordance with Sections 404.2.3.1 through 404.2.3.3.

Lockdown plan contents. Lockdown plans shall be *approved* by the *fire code official* and shall include the following:

- 1. Initiation. The plan shall include instructions for reporting an emergency that requires a lockdown.
- 2. Accountability. The plan shall include accountability procedures for staff to report the presence or absence of occupants.
- 3. Recall. The plan shall include a prearranged signal for returning to normal activity.
- 4. Communication and coordination. The plan shall include an *approved* means of two-way communication between a central location and each secured area.

Training frequency. The training frequency shall be included in the lockdown plan. The lockdown drills shall not substitute for any of the fire and evacuation drills required in Section 405.2.

Lockdown notification. The method of notifying building occupants of a lockdown shall be included in the plan. The method of notification shall be separate and distinct from the fire alarm signal.

Maintenance. Fire safety and evacuation plans shall be reviewed or updated annually or as necessitated by changes in staff assignments, occupancy or the physical arrangement of the building.

Availability. Fire safety and evacuation plans shall be available in the workplace for reference and review by employees, and copies shall be furnished to the *fire code official* for review upon request.

Distribution. The fire safety and evacuation plans shall be distributed to the tenants and building service employees by the *owner* or *owner*'s agent. Tenants shall distribute to their employees applicable parts of the fire safety plan affecting the employees' actions in the event of a fire or other emergency.

EMERGENCY EVACUATION DRILLS

Emergency evacuation drills complying with Sections 405.2 through 405.9 shall be conducted not less than annually where fire safety and evacuation plans are required by Section 403 or where required by the *fire code official*. Drills shall be designed in cooperation with local authorities.

Frequency

Required emergency evacuation drills shall be held at intervals specified in Table 405.2 (below) or more frequently when necessary to familiarize all occupants with the drill procedure.

Group or Occupancy	Frequency	Participation
Group A	Quarterly	Employees
Group B ^b	Annually	All Occupants
Group B b,c (Ambulatory care facilities)	Annually	Employees
Group B ^b (Clinic, outpatient)	Annually	Employees
Group E	Monthly ^a	All Occupants
Group F	Annually	Employees
Group I -1	Semiannually on each shift	All Occupants
Group I -2	Quarterly on each shift ^a	Employees
Group I -3	Quarterly on each shift ^a	Employees
Group I -4	Monthly on each shift ^a	All Occupants
Group R -1	Quarterly on each shift	Employees
Group R -2 ^d	Four annually	All Occupants
Group R-4	Semiannually on each shift a	All Occupants

- a. In severe climates, the fire code official shall have the authority to modify the emergency evacuation drill frequency
- b. Emergency evacuation drills are required in Group B buildings having an *occupant load* of 500 or more persons or more than 100 persons above or below the *lowest level of discharge*.
- c. Emergency evacuation drills are required in ambulatory care facilities in accordance with Section 403.3
- d. Emergency evacuation drills in Group R-2 college and university buildings shall be in accordance with Section 403.10.2.1. Other Group R-2 occupancies shall be in accordance with Section 403.10.2.2.

Leadership

Responsibility for the planning and conduct of drills shall be assigned to competent persons designated to exercise leadership.

Time

Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

Record Keeping

Records shall be maintained of required emergency evacuation drills and include the following information:

- 1. Identity of the person conducting the drill
- 2. Date and time of the drill
- 3. Notification method used
- 4. Employees on duty and participating
- 5. Number of occupants evacuated
- 6. Special conditions simulated
- 7. Problems encountered
- 8. Weather conditions when occupants evacuated
- 9. Time required to accomplish complete evacuation

Notification

Where required by the fire code official, prior notification of emergency evacuation drills shall be given to the fire code official.

Initiation

Where a fire alarm system is provided, emergency evacuation drills shall be initiated by activating the fire alarm system.

Accountability

As building occupants arrive at the assembly point, efforts shall be made to determine if all occupants have been successfully evacuated or have been accounted for.

Recall and reentry

An electrically or mechanically operated signal used to recall occupants after an evacuation shall be separate and distinct form the signal used to initiate the evacuation. The recall signal initiation means shall be manually operated and under the control of the person in charge of the premises or the official in charge of the incident. Persons shall not reenter the premises until authorized to do so by the official in charge.

EMPLOYEE TRAINING AND RESPONSE PROCEDURES

Where fire safety and evacuation plans are required by Section 403, employees shall be trained in fire emergency procedures based on plans prepared in accordance with Section 404.

Frequency

Employees shall receive training in the contents of the fire safety and evacuation plans and their duties as part of new employee orientation and not less than annually thereafter. Records shall be maintained.

Employee training program

Employees shall be trained in fire prevention, evacuation and fire safety in accordance with Sections 406.3.1 through 406.3.4:

Fire Prevention Training

Employees shall be apprised of the fire hazards of the materials and processes to which they are exposed. Each employee shall be instructed on the proper procedures for preventing fires in the conduct of their assigned duties.

Evacuation Training

Employees shall be familiarized with the fire alarm and evacuation signals, their assigned duties in the event of an alarm or emergency, evacuation routes, areas of refuge, exterior assembly areas and procedures for evacuation.

Fire Safety Training

Employees assigned fire-fighting duties shall be trained to know the locations and proper use of portable fire extinguishers or other manual fire-fighting equipment and the protective clothing or equipment required for its safe and proper use.

Emergency Lockdown Training

Where a facility has a lockdown plan, employees shall be trained on their assigned duties and procedures in the event of an emergency lockdown.

HAZARD COMMUNICATION

This section is applicable where hazardous materials subject to permits under Section 5001.5 are located on the premises or where required by the *fire code official*. To check to see if a facility also has an annual hazardous materials permit, please contact the Life Safety Division.

Material Safety Data Sheets (MSDS)

Material safety data sheets for all hazardous materials shall be either readily available on the premises as a paper copy; or where *approved*, shall be permitted to be readily retrievable by electronic access.

Identification

Individual containers of hazardous materials, cartons or packages shall be marked or labeled in accordance with applicable federal regulations. Buildings, rooms and spaces containing hazardous materials shall be identified by hazard warning signs.

Training

Persons responsible for the operation of areas in which hazardous materials are stored, dispensed, handled or used, shall be familiar with the chemical nature of the materials and the appropriate mitigating actions necessary in the event of a fire, leak or spill. Responsible persons shall be designated and trained to be liaison personnel for the fire department. These persons shall aid the fire department in preplanning emergency responses and identification of the locations where hazardous materials are located, and shall have access to Material Safety Data Sheets and be knowledgeable in the site emergency response procedures.

Hazardous Materials Inventory Statement

Where required by the *fire code official*, each application for a permit shall include a Hazardous Material Inventory Statement (HMIS).

Hazardous Materials Management Plan

Where required by the *fire code official*, each application for a permit shall include a Hazardous Materials Management Plan (HMMP). The *fire code official* is authorized to accept a similar plan required by other regulations.

Facility closure plans

The permit holder or applicant shall submit to the fire code official a facility closure plan to terminate storage, dispensing or use of hazardous materials.

Evacuation Map/Diagram Posting

Although the fire code does not require the evacuation map to be posted for such facilities/ occupancies, the Life Safety Division provides some guidance in terms of where the maps should be posted.

- The evacuation diagrams posted within a facility should include a location for "You Are Here" that is unique for each location of the diagram.
- Ensure the diagram is displayed/oriented/turned in such a way that quickly allows the viewer to determine which direction to exit. In other words, if the viewer faces the map and lays it flat, the elements seen left of the viewer within the facility will actually be shown to the left of the "You Are Here" on the diagram. An example of this would be if the viewer is holding the diagram in front of them and the diagram shows an exit immediately to the right of the viewer, the viewer should be able to turn their head to the right and see the exit.
- O Post diagrams in prominently traveled areas (e.g., hallways, stairwells, dorm rooms, drinking fountains etc.). Unusual building layouts require more evacuation maps to be posted.