EMERGENCY PLANNING AND PREPAREDNESS

Office of the Fire Marshal Reference: 2006 IFC

Introduction

This document was created to assist in providing the requirements for reporting emergencies, coordinating with emergency personnel, organizing emergency plans, and procedures to manage emergencies. It is important that every business or building have a plan for what to do in the event of an emergency. Formulating a plan will reduce the chances of confusion, panic or injury. The individuals in charge of building safety should take the time to create a plan, practice it and share it with the building occupants.

TABLE OF CONTENTS

- General information
- 2. Where fire safety and emergency plans are required
- 3. Fire evacuation plans
- 4. Fire safety plans
- 5. Specific use/occupancy emergency plan requirements
- 6. Emergency drill frequency
- 7. Recordkeeping
- 8. Surveying building
- 9. Designating an exterior meeting spot
- 10. Employee duties, assignments and training
- 11. Pick your fire safety team
- 12. Reporting emergencies
- 13. Procedures for persons unable to use exit stairs
- 14. If you are unable to leave the floor
- 15. Sample floor plans

1. General Information

- ✓ In the event of a fire, the owner or occupant shall immediately notify the fire department via 9-1-1.
- ✓ Upon activation of a fire alarm signal, employees or staff shall immediately notify the fire department via 9-1-1.
- ✓ Nothing prohibits the sounding of the fire alarm signal for conducting evacuation drills but call the nonemergency number for 9-1-1 to inform them of the drill.
- ✓ It is illegal to interfere with fire operations.
- ✓ Fire safety and evacuation plans shall be available to occupants.

2. Where Fire Safety and Evacuation Plans are Required.

Section 404 of the International Fire Code, Section 404 requires a number of occupancies to have a fire safety and evacuation plan. Those occupancies that require such a plan are:

- ✓ **Group A:** Excluding assembly occupancies used exclusively for purposes of religious worship and have an occupant load less than 2,000, a fire safety and evacuation plan is required in buildings with assembly rooms with a capacity of 50 individuals or more.
- ✓ **Group B:** Buildings used for office, professional or service-type transactions with 500 or more occupants or more than 100 occupants above or below the level of exit discharge.
- ✓ **Group E**: Educational facilities used through the 12th grade and day care facilities.
- ✓ Group H: Buildings involving high-hazard uses involving manufacturing, processes, generation or storage of materials, which constitute a physical or health hazard exceeding maximum allowable quantities.
- ✓ Group I: Nurseries for children, hospitals, sanitariums, nursing homes, homes for children, half-way houses, group homes, and health-centers for patients unable to evacuate themselves as a result of medical treatments. Mental hospitals and sanitariums, jails, prisons, reformatories and buildings where personal liberties of occupants are similarly restrained.
- ✓ **Group R-1 and R-4:** Buildings used for hotels, motels, boarding houses, dormitories, fraternities and sororities, residential care for 5 to 16 persons.
- ✓ Group R-2: college and university buildings.
- ✓ High-rise: Buildings with an occupied floor level 75 ft. above the lowest level of fire department access.
- ✓ Group M: Retail sales and display buildings with an occupant load 500 or more or occupants above or below the level of exit discharge.
- ✓ Covered malls: Exceeding 50,000 sq. ft. in aggregate floor area.

- ✓ Underground buildings: All.
- ✓ Buildings with an atrium that contain a Group A, E or M occupancy: An atrium is an opening in the building connecting two or more stories and closed at the top.

3. Fire Evacuation Plans

Section 404.3.1 of the IFC requires fire evacuation plans to contain the following information:

- Emergency exit routes and information whether the evacuation includes the entire building or just selected floors.
- ✓ Procedures for employees who must operate critical equipment before evacuating.
- ✓ Procedures for where employees and occupants should meet and how they should be accounted for after the evacuation.
- ✓ The assignment of personnel responsible for assisting others and rendering medical aid and how personnel will be identified during the emergency.
- ✓ The preferred and an alternate method of notifying the occupants of an emergency or fire.
- ✓ The preferred and an alternate method of reporting an emergency or fire to 9-1-1.
- ✓ The assignment of personnel who can be contacted for additional information or explanation of duties under the plan and how personnel will be identified during the emergency.
- ✓ A description of the emergency voice/alarm communication system alert tone and the voice messages, where provided.

4. Fire Safety Plans

Section 404.3.2 of the IFC requires fire safety plans to include the following minimum information:

- ✓ A procedure for reporting a fire or other emergency.
- ✓ The strategy and procedures for notifying, relocating or evacuating occupants.
- ✓ Site plans indicating: 1) where occupants assemble after evacuation, 2) location of nearest hydrants, and 3) normal fire vehicle access roads so people do not obstruct the use of Items 2 and 3.
- ✓ Floor plans showing: 1) exits and the routes to get to the exits, 2) accessible exit routes, 3) areas of refuge (special areas designed into the building for the location of people that have accessibility needs), 4) manual fire alarm boxes, 5) fire extinguishers, 6) occupantuse hose stations, and 7) the location of fire alarm annunciators and controls.
- ✓ A list of major fire hazards associated with the building, its use and processes.

- ✓ The identification and assignment of personnel responsible for the maintenance of systems and equipment installed to prevent or control fires.
- ✓ The identification and assignment of personnel responsible for the maintenance, housekeeping, and controlling of fuel hazard sources.

Instructions should include not using the elevator when the fire alarm sounds or when there is a reported fire. Using the elevator can be dangerous, as the elevator doors could open up on the floor involved in fire resulting in injury or death.

Floor plans should also identify the routes, both conventional and accessible routes, of evacuation for each room or portion of the occupancy and the locations of interior areas of refuge. Post the floor plan throughout the building. Mark YOU ARE HERE relative to the floor and the location on the posted plan. In hotels, motels, and shelters, a diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required exit door from a sleeping room.

Posted site maps should show the locations of the exterior assembly area where occupants are requested to meet so a count can be taken.

A simple flyer can be created to distribute to the building occupants, or a more detailed document can be used outlining the roles of staff or tenants during a fire emergency. In residential buildings, a copy of the emergency guide should be given to each tenant prior to the time of initial occupancy. In employee environments, the emergency plan should be given to each new employee and a copy should be in an accessible location for all employees to review.

Required emergency plans shall be submitted to the fire department for review. Emergency plans shall be reviewed and updated annually. Additional reviews and updates shall be provided whenever changes are made in the occupancy or physical arrangement of the building.

5. Specific Use and Occupancy Emergency Plan Requirements

Hazardous Materials

Any occupancies listed in Section 2 that have a hazardous materials permit from the Fire Marshal's Office shall provide the following:

- ✓ MSDS's that are readily available.
- ✓ Rooms and buildings are identified with a hazard warning sign in compliance with the NFPA 704 diamond hazard placard.
- ✓ Persons responsible for areas where hazardous materials are stored, handled, or used shall be trained about the nature of the chemicals and know the mitigating actions to take to maintain a safe environment in the case of a release, spill, fire, or leak. They shall be trained as the liaison for the fire department.
- ✓ A Hazardous Materials Inventory Statement shall be available to fire officials.

Group A Occupancies (places of assembly)

Group A occupancies shall also provide a detailed seating plan(s) and occupant load(s) for rooms exceeding an occupant load of 50 with their emergency plan.

Group E occupancies (educational facilities, 1st - 12th grade)

Fire drills involve the following:

- ✓ The 1st drill of each school year shall be conducted within 10 days of the beginning of classes.
- ✓ In severe weather the Fire Code Official shall approve deferral requests of the drill frequency.
- ✓ The time of the drills shall be random to avoid the distinction between drills and actual fires.
- ✓ Persons evacuating from the facility shall meet at designated locations.

Semiconductor Fabrication Facilities (H-5)

Group H-5 occupancies shall also provide with their emergency plan:

✓ Plans and diagrams in approved locations indicating the amount and type of HPM stored, handled, and used, location of shutoff valves for HPM supply piping, emergency phone and exit locations.

Group I-1 Occupancies (buildings exceeding 16 persons providing 24 hour care: assisted living, half-way houses, group homes, etc)

Group I-1 occupancies shall also provide with their emergency plan:

- ✓ Special staff actions including fire protection procedures for residents.
- ✓ Residents capable of assisting in their own evacuation shall be trained in the proper actions in the event of an emergency.
- ✓ Emergency drills of the onsite emergency response team shall occur at least 6 times per year unless the facility is under licensure of the state and can evacuate within 3 minutes.
- ✓ Residents shall be involved in the evacuation drills by moving them to a selected assembly point. There are some exceptions so consult with your Fire Marshal's Office.

Group I-2 Occupancies (hospitals, nursing homes, outpatient clinics, etc)

Group I-2 occupancies shall also provide with their emergency plan:

- ✓ The movement of patients to safe areas or to the exterior of the building is not required during drills.
- ✓ When evacuation drills are conducted after visiting hours or when patients are expected to sleep, a code announcement is permitted instead of audible alarms.

Group I-3 Occupancies (jails, prisons, reformatories, etc)

Group I-3 occupancies shall also provide with their emergency plan:

- ✓ Employees shall be instructed in the use of portable extinguishers. Train new staff immediately and provide refresher training semiannually.
- ✓ 24 hour staffing is required to be within 3 floors or 300 ft. of the access door of each resident housing area. In Use Conditions 3, 4, and 5 as defined in Chapter 2 of the IFC, the staff must release locks necessary for evacuation or other emergency actions within 2 minutes of the alarm.

✓ Keys necessary for unlocking doors for exiting shall be identifiable by touch and sight.

R-1 Occupancies (transient boarding house, hotels and motels, etc)

R-1 occupancies shall also provide with their emergency plan:

- ✓ A diagram shall be posted on or adjacent to each guestroom interior exit door depicting 2 evacuation routes.
- ✓ Employees shall activate an available fire alarm, and call 9-1-1 when a fire or suspected fire is discovered.
- ✓ Guests shall be provided information to decide whether to evacuate, go to an area of refuge, or remain in place.

R-2 Occupancies (University dormitories, fraternities, and sororities)

R-2 occupancies shall also provide with their emergency plan:

✓ A fire emergency guide that describes the location, function and use of fire protection equipment including fire alarm systems, smoke alarms, and portable extinguishers. The guide shall be provided in each guest unit.

Fire drills involve the following:

- ✓ The 1st drill of each school year shall be conducted within 10 days of the beginning of classes.
- ✓ The time of the drills shall be random to avoid the distinction between drills and actual fires.
- ✓ One drill shall be before sunrise or after sunset.

R-4 Occupancies (24 hour assisted living from 5 to 16 persons, etc)

R-4 occupancies shall also provide with their emergency plan:

- Employees shall be periodically instructed in the proper actions to take in the event of a fire.
- ✓ Evacuation drills shall be done according to the licensing agency rules and not less than 6 times per year, 2 times per shift per year and 12 drills shall be conducted the first year.
- ✓ Drills will involve the evacuation of residents to selected assembly points and shall provide residents with experience in exiting the building. There are some exceptions so consult with vour Fire Marshal's Office.

Covered Mall Buildings

Malls shall also provide with their emergency plan:

- ✓ A lease floor plan identifying each occupancy and tenant, fire protection features; fire department hose connections, fire command center, smoke management systems, hose valve outlets, elevator controls, sprinkler and standpipe control valves, firewalls and smoke detector zones.
- ✓ The lease plan shall be approved by the Fire Marshal's Office and be available to emergency responders.
- ✓ The second exit doors for each tenant shall be labeled on the exterior side with the tenant's name and number.
- ✓ Vacant tenant spaces are kept free of storage, combustible waste, and shall be kept clean.

6. Emergency Drill Frequency

Drills shall occur as follows:

2006 IFC TABLE 405.2 FIRE AND EVACUATION DRILL FREQUENCY AND PARTICIPATION

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group A	Quarterly	Employees
Group B ^e	Annually	Employees
Group E	Monthly ^a	All occupants
Group I	Quarterly on each shift	Employees ^b
Group R-1	Quarterly on each shift	Employees
Grонр R-2 ^d	Four annually	All occupants
Group R-4	Quarterly on each shift	Employees ^b
ligh-rise buildings	Annually	Employees

a. The frequency shall be allowed to be modified in accordance with Section 408 3.2

Fire drills shall be conducted in a manner that carries out the procedures in the emergency plan. In addition, fire drills shall include a review of the emergency plan and assigned employee duties.

When fire drills are conducted, the orderly evacuation of the building shall receive priority over the speed of evacuation.

Records of fire drills shall be maintained on the premises for review by the fire department.

Always notify your fire alarm monitoring company and 9-1-1's nonemergency number before and after conducting a fire drill, so the fire department does not respond unnecessarily.

b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 408.10.5. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.

c. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

d. Applicable to Group R-2 college and university buildings in accordance with Section 408.3

The following are suggestions for fire drills:

- ✓ Appoint someone to monitor the drill, activate and reset the fire alarm, and time the evacuation.
- ✓ Fire drills shall be conducted at varying times and under varying conditions to simulate conditions that could occur during a fire or other emergency. Make it realistic by requiring participants to use their second way out or to crawl low. This can be done by having someone hold up a sign reading "smoke" or "exit blocked by fire."
- ✓ After the evacuation, take a head count at the designated meeting place(s) to account for everyone's participation and safe evacuation.
- ✓ After the drill, gather everyone together to discuss questions or problems that occurred. Redesign the drill procedures as needed.

7. Recordkeeping

Records shall be maintained to record the events of the evacuation drill. The record shall include the following. A sample template is **provided** at the back of this document:

- ✓ Identify the person conducting the drill.
- ✓ Date and time of the drill.
- ✓ Notification method used.
- Staff members on duty and participating.
- ✓ Number of occupants evacuated.
- Special conditions simulated.
- Problems encountered.
- ✓ Weather conditions during the drill.
- ✓ Time required completing the evacuation.

8. Surveying the Building

Before starting to formulate an evacuation plan, take some time to conduct a walk-through of the building. During your walk-through, note the location of fire protection features, such as portable fire extinguishers, manual fire alarm boxes, and if your building is equipped with a fire alarm control system, the location of the fire alarm control unit and any annunciator panels.

For each area of the building, note the safest and shortest path for a primary evacuation route. Also note a secondary route if the primary path becomes unsafe or obstructed. In newer buildings, note "areas of refuge" which have been created as safe areas for individuals with wheelchairs or with walking disabilities.

Consider whether your building houses a changing population, as in a retail store or restaurant, or will the building occupants be familiar with the facility? Note any special needs that individuals may have, such as non-English-speaking or people with disabilities.

9. Designating an Exterior Meeting Spot for All Occupants

A location a safe distance away from the building shall be designated as a common meeting spot for people to gather after evacuating the building. The meeting spot should be located in a remote location clear of incoming fire equipment, away from traffic, and hazards such as falling glass. There could be several meeting locations depending on the size and configuration of the building.

A member of the Building Response Team should be assigned to verify that all building occupants are accounted for. That person should advise the fire department whether all occupants are accounted for or if some are still in the building.

To ensure the fastest, most accurate accountability of your employees, consider including the following items into your emergency plan:

- ✓ Designate assembly areas where employees should gather after evacuating. People should not re-enter the building for any reason.
- ✓ Take a head count after the evacuation. Identify the names and last known locations of anyone not accounted for and pass them to the Fire Official in charge.
- Establish a method for the accounting of nonemployees, such as suppliers and customers.
- Establish procedures for expanding the evacuation in case the incident expands. This may consist of sending employees home by normal means, or relocating them to a nearby building, or providing them with transportation to a more remote location.

10. Employee Duties, Assignments and Training

Employees should receive training in the emergency plans and their duties as part of new employee orientation and at least annually thereafter.

Employees should be assigned duties and be trained for emergencies. Training in fire safety, evacuation plans, and their duties shall occur annually (and semiannually for Group I-2 occupancies). Training should include familiarization with:

- ✓ Fire Prevention: Apprised of fire hazards of materials and processes in their work environment.
- ✓ Evacuation: Familiarization with the fire alarm and evacuation signals, evacuation procedures and routes, areas of refuge, exterior meeting areas, and their assigned duties in the event of an emergency.
- ✓ Fire Safety: Employees should be trained to know the locations and proper use of portable fire extinguishers.

11. Pick your Fire/Life Safety Team

The recommended structure of your team could involve one or more of the following roles.

Fire/life Safety Director

The person identified who will maintain and implement your Emergency Operations Plan. Pick a person who has not only the knowledge, but the authority to implement the procedures in the plan.

Building Response Team

Their primary role is to investigate the source of an alarm or emergency, communicate their findings to the other building occupants, and notify the Fire Department.

Floor Wardens

Floor wardens are volunteers selected from among the building staff and tenants to assist in the evacuation of occupants from specific building areas in the event of a fire alarm or emergency and conduct the accountability procedure for their area. They must be familiar with the building's evacuation plan.

Assistant Monitors

Assistant monitors are responsible for providing assistance to those individuals on a floor that require assistance to evacuate. These include people with disabilities or who have medical problems.

12. Reporting Emergencies

Building occupants should be instructed to call 9-1-1 whenever an emergency occurs. They should state:

- ✓ The nature of the emergency i.e., bomb threat, fire, or hazardous materials spill.
- ✓ The address of building.
- ✓ The nearest cross street.
- ✓ The extent of the fire or emergency, and specific information, if known.
- ✓ All callers should follow the 9-1-1 operator's instructions.

The caller should never hang up until told to do so by the emergency operator or unless his/her life is in danger.

Post the emergency number on all phones. In Eugene, call 9-1-1 for fire, police, or medical aid. The address of the building should be on the telephone. If the building security or manager wants to be notified, that number can be listed on the phone as well.

Controlling the fire and evacuating everyone safely depends on immediate notification of the emergency.

13. Procedures for Persons Unable to Use Exit Stairs

They should move to the exit or "Area of Refuge." If the stairwell is free of smoke, they should enter after all persons on the floor have evacuated, unless the stair landing is large enough for their presence without hindering the egress of others. After entering the exit stairway, make sure the stairwell door is securely shut. One person should wait with the disabled person while someone else goes to inform the arriving fire department of their location.

If stairwell traffic builds from the evacuation of upper floors, persons waiting should re-enter the floor to allow others to pass.

The disabled person and employee should stay at the stairwell landing as long as conditions are safe. It is preferred that appointed team members evacuate the person down the stairs to a safe area as determined by the plan. If the building does not provide a safe area for persons to wait, the emergency plan should incorporate a method and training to evacuate the disabled.

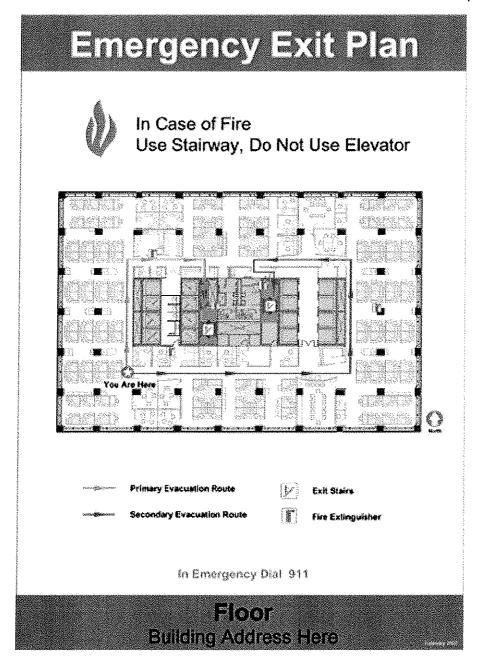
14. If You Are Unable to Leave the Floor

If you are unable leave the floor because exits become blocked or unsafe to enter due to smoke or fire, refuge should be sought on the floor in a totally enclosed room with a telephone and window.

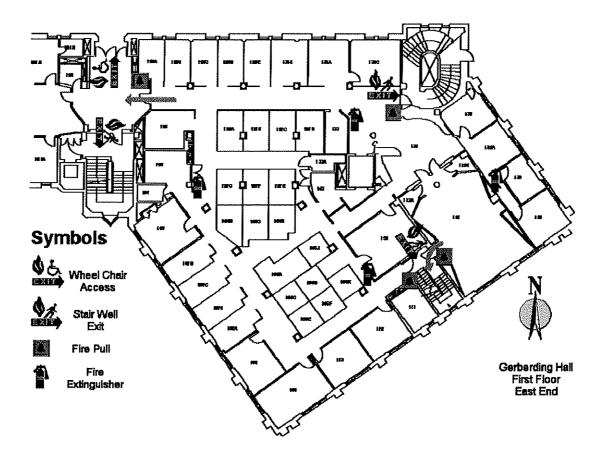
Use towels or clothing to block openings around doors or vents where smoke might enter. Put a wet cloth over your mouth. Place a signal in the window. The signal can be anything that will call attention to your location. For instance, tie the curtains in a knot.

If smoke enters your unit, call 9-1-1 to report your location. Stay low to the floor to breathe the best air. It is not advisable to break the windows. Often smoke from outside of the building can enter through open windows and broken glass can injure those below.

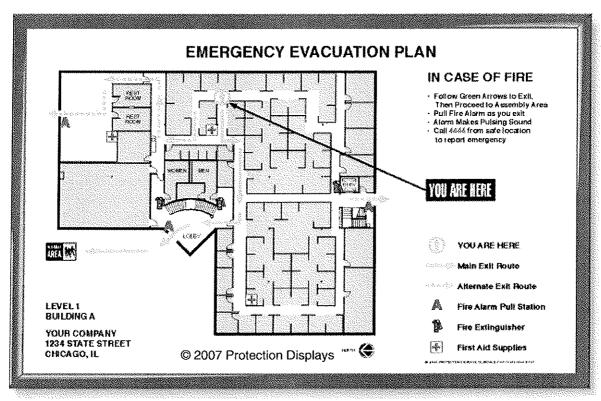
15. Sample Floor Plans



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Fire Plan Review and Inspection Guidelines

