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### **Fire Marshal Inspection**

- 1. What to expect when a member of the state fire marshal's office inspects your building:
  - 1. At least once a year, a member of the State Fire Marshal's Office will inspect your building. Although it is standard procedure for the Fire Marshal to be accompanied by a representative of the County Superintendent's choice, the Fire Marshal might at times be unaccompanied.
  - 2. Each Fire Marshal carries full State identification, and if the Fire Marshal is new or not known, we request that you do ask for identification. In the past several years, people claiming to be a representative of the Fire Marshal's Office have shown up in different schools.
  - 3. At this time, a check of fire drills to that date will be made.
  - 4. After checking fire drill records (which are required to be posted and up-to-date), an inspection of your building will be made. At this time, it is recommended that you accompany the Fire Marshal and also have available all keys necessary to gain access to ANY and ALL portions of the building he/she might require. If you are unable to accompany the Fire Marshal an appointed representative would be welcome. In larger schools, a person is usually assigned to accompany the Fire Marshal.
  - 5. At any time through the inspection feel free to ask questions; also, the Fire Marshal will point out things within the building, which have been corrected or need to be corrected.
  - 6. A written report indicating the code violations will be prepared and sent to the Superintendent of the county school system at the conclusion of the inspection of all county school buildings. Additional copies of the report will be copied to the following:
    - 1. The Inspector who conducted the inspection
    - 2. The State Fire Marshal's Office Charleston
    - 3. The State Superintendent of Schools.
  - **NOTE:** 1. Visits may be made at any time through the year, some of which might be unannounced check back type visits.
    - 2. Depending on weather and time situations, the Fire Marshal may ask to witness a fire drill, he/she may require that the drill be held immediately to check adequacy of advanced planning for Fire Emergencies in your facility.

## **Emergency Egress and Relocation Drills**

- Emergency egress and relocation drills (Fire Drills) shall be conducted in accordance with the State
  Fire Marshal Regulations with complete records maintained. Refer to School Fire Exit Drill Safety
  Report.
- 2. The fire alarm system shall be used when conducting fire exit drills.
- 3. ALL EXIT DOORS SHALL BE UNLOCKED AND UNFASTENED FROM THE EGRESS SIDE WHENEVER THE BUILDING IS OCCUPIED.

  WHEN ONLY A CERTAIN AREA OF THE BUILDING IS OCCUPIED ALL EXITS FROM THAT AREA SHALL BE UNLOCKED AND UNFASTENED FROM THE EGRESS SIDE.

**NOTE:** Doors can be locked so that entry to the building is limited, but all doors and exits shall allow immediate exit.

- 4. (a) Two (2) fire exit drills shall be conducted the during the first thirty (30) days of the school term and one (1) additional fire exit drill each month the school is in session. During the winter months of December, January and February fire exit drills may be deferred, six (6) fire exit drills shall be conducted before the drills are deferred.
  - (b) All occupants of the building shall participate in the drills.
- 5. The school shall conduct other emergency drills that relate to the area in which the school is located. Examples: Chemical Emergencies (Shelter In Place), Earthquakes, Severe Wind, Tornadoes, etc.

#### REGULATIONS AND PROCEDURES

- 1. Drills shall be executed on different days of the week, and at different hours of the day, during change of classes, when the school is in assembly, during recess periods, etc., and in such a manner as to destroy distinction between drills and actual fires.
- 2. If a drill is called when pupils are going up or down stairways, as during the time classes are changing, the pupils shall be instructed to form in file and immediately proceed to the nearest available exit in an orderly manner.
- 3. As all drills simulate an actual fire condition, pupils shall not be allowed to obtain clothing after the alarm is sounded, even when in homerooms, on account of the confusion, which would result in forming the lines and the danger of tripping over dragging apparel.
- 4. Documentation of drills shall be the responsibility of the principal, teachers, or other authorized person in each building. This person shall record the date of each drill and the time required to vacate the building on the State Fire Drill Report Form.

- 5. Every fire exit drill shall be an exercise in school management for principals and teachers, with the chief purpose of every drill being complete control of the class so that the teacher will form its ranks quickly and silently, halt it, turn it, or direct it as desired. Great stress shall be laid upon the execution of each drill in a brisk, quiet, and orderly manner. Running shall be prohibited.
- 6. Each class or group shall proceed to a predetermined point outside the building and remain there while a check is made to see that all students are accounted for, leaving only when a recall signal is given to return to the building, or when dismissed. Such points shall be sufficiently far away from the building and from each other as to avoid danger from any fire in the building, interference with fire department operations, or confusion between classes or groups.
- 7. Where necessary for drill lines to cross roadways, signs reading "STOP! SCHOOL FIRE DRILL" or equivalent, shall be carried by monitors to the traffic intersecting in order to stop traffic during the period of the drill.
- 8. Whenever possible, drill lines should not cross a street or highway especially where the traffic is heavy. It is recommended that where drill lines must cross roadways, a police officer, school janitor, or a teacher acting as a traffic officer be on duty to control traffic during drills.

#### **Signal Regulations**

- 1. (a) All fire exit drill alarms shall be sounded on the fire alarm system and not on the signal system used to dismiss classes.
  - (b) The Public Address system shall be used if the Fire Alarm system does not work or another predetermined signal known to the staff.
- 2. Whenever it is determined that an actual fire exists, or existed the fire department shall be notified immediately using the public fire alarm system or such other facilities as are available.
- 3. In order that pupils will not be returned to a building which is burning, the recall signal shall be one that is separate and distinct from and cannot be mistaken for any other signals. Such signals may be given by distinctive colored flags or banners. If the recall signal is electrical, the push buttons or other controls shall be kept under lock, the key for which shall be in the possession of the principal or some other designated person in order to prevent a recall at a time when there is a fire. Regardless of the method of recall, the means of giving the signal shall be kept under a lock.
- 4. Directions or maps shall be conspicuously posted describing the procedure of the drills.

### **Special Provisions**

1. Guidelines shall be established for the evacuation of physically challenged students who are located on the second or higher floors. Examples: Occupants on crutches, walkers, wheelchairs, etc.

As more schools become accessible, students in wheelchairs can be found throughout the buildings. Disabled persons are injured each year by untrained rescuers attempting to carry the disabled person down stairs. Many of the "rescuers" are also injured.

The following recommendations for occupants as defined above that are located on the second or higher floors:

- (a) An "area of refuge" can be established in each building. This acts as a temporary staging area where students can assemble and safely wait for trained rescue personnel to arrive and continue the evacuation. In most schools, this is a landing in a stairwell, protected by fire doors at the top and bottom of the stairs. A sprinkler system provides additional protection in this area.
- (b) A trained staff member shall be assigned to accompany the students while they wait for rescue personnel.
- (c) Communication between school administration and those waiting in an area of refuge is an added safety measure.
- (d) A trained staff member shall be assigned to inform first responders of the location of the disabled students and the first responders will complete the evacuation of the students.

Any questions or guidance to the above may be addressed to the State Fire Marshal's Office.

- 2. During the school year The State Fire Marshals will be conducting fire drills to evaluate the effectiveness of such drills for the safe evacuation of the occupants.
- 3. Emergency plans shall be provided in all schools, teachers and staff shall be trained on the emergency plans.

#### General

- 1. All incidents of fire in any school shall be reported to the State Fire Marshal.
- 2. The Telephone number of the Fire Department serving the school shall be posted in a conspicuous location.
- 3. Occupancy of buildings or portions of buildings shall not be changed without approval of the State Fire Marshal.
  - EXAMPLE: Storage rooms to classrooms or garages to classrooms or classrooms to dining rooms.
- 4. Smoking shall be prohibited in school buildings where children are present.
  - NOTE: This regulation is not a Fire Marshal's regulation but is a state statute under the health laws.
- 5. All areas shall be maintained in neat and orderly manner and excessive amounts of combustible storage shall be prohibited.
- 6. All carpet installed in educational occupancies shall meet state requirements for flame spread and smoke combustion.
- 7. Every room or space greater than 250 square feet and used for classroom or other educational purposes or normally subject to student occupancy, shall have at least one (1) outside window meeting provisions of emergency window or door. Except in buildings with complete sprinkler protection,
- 8. Interior finish shall be Class A in corridors, stairways and other means of egress and may be Class B or C elsewhere. Paneling will usually not meet these requirements, except Class C paneling may be permitted in classrooms or offices.
- 9. Flexible plan schools may have walls and partitions rearranged only after review and approval by the State Fire Marshal.
- 10. Open plan schools shall have furniture, fixtures, or low partitions (5 feet) so arranged that exits will be clearly visible and unobstructed, and exit paths are direct, not circuitous.
- 11. Rooms used for kindergarten or first grade pupils shall not be located above or below the floor of exit discharge. Rooms used for second grade pupils shall not be located more than one (1) story above the floor of exit discharge. Exception: Independent dedicated means of egress from that room.

- 12. Child-prepared artwork and teaching materials shall be permitted to be attached directly to the walls and shall not exceed 20 % percent of the wall area in classrooms and corridors. Except in schools that have a supervised automatic sprinkler system installed in accordance with NFPA 13 shall be permitted to have child-prepared artwork and teaching material attached directly to the walls not to exceed 50 % percent of the wall area in classrooms and corridors.
- 13. "No person shall make, turn in or telephone, or by use of any means or methods of communication aid or abet in the making or turning in of, any alarm, which he/she knows to be false at the time of making or turning in the alarm."
- 14. Electrical extension cords are for temporary use only (less than one (1) day) and shall be of a heavy-duty construction and should be limited to ten (10) feet in length whenever possible.
- 15. Power strips with a circuit breaker are permitted up to twelve (12) feet in length. Power strips must be plugged directly into a wall outlet and cannot be plugged together.
- 16. Maintain a minimum of 36" around all electrical panels.
- 17. When classrooms and other rooms are not occupied doors shall be kept closed.
- 18. Emergency lighting shall be provided in the following areas:
  - a. Interior corridors of buildings.
  - b. Windowless portions of buildings.
  - c. Stairways.
  - d. Laboratories and shops.

# **Means of Egress**

1. It shall be the responsibility of principals and teachers to inspect all exits in the facility daily in order to make sure that all stairways, doors, corridors, and other means of egress are in proper working condition.

NOTE: Loss of 25% or more of required means of egress shall necessitate closing of the building.

- 2. Every required exit, way of approach thereto, and way of travel from the exit into the street or open space shall be continuously maintained free of all obstructions or impediments to full instant use in case of fire or other emergency.
- 3. Exits shall be maintained during construction. The State Fire Marshal's Office shall be notified of construction projects and inspections made prior to beginning of construction.
- 4. All doors shall be readily opened from the side from which egress is to be made at all times when the building is occupied.
  - NOTE: Any device or alarm installed to restrict the improper use of a means shall be so designed and installed that it cannot, even in case of failure, impede or prevent emergency use of such means of egress.
- 6. Corridors shall not be less than six (6) feet wide clear width.
  - NOTE: Drinking fountains or other equipment, fixed or movable, shall be recessed as so not to obstruct the required minimum six (6) feet corridor width.
- 6. Not less than two separate exits shall be provided on every story and shall be accessible from every part of every story and mezzanine.
- 7. Dead end corridors shall not exceed 20 feet in length except in buildings provided with a supervised automatic sprinkler system installed in accordance with NFPA 13 dead end corridors shall not exceed 50 feet in length.
- 8. A door normally required to be kept closed in a means of egress, such as door to a stair enclosure, shall not at any time be secured in the open position unless provided with approved hold-open devices connected to the fire alarm system. These doors shall bear a sign stating, "FIRE DOOR KEEP DOOR CLOSED".
- 9. Classroom with a capacity of fifty (50) or more persons shall have at least two (2) exit doors as remote from each other as practicable.

- 10. Every room used for educational purposes or student occupancy located more than eight steps below grade level must have at least one exit that leads to the outside through a stairway that is not continuous to any stair or floor above without passing through a one-hour rated fire door.
- 11. If a room or space is subject to occupancy by more than fifty (50) persons, exit doors shall swing in the direction of egress.
- 12. Only one (1) locking or latching door shall be permitted on a door or a leaf of a pair of doors.
- 13. Any exterior door and any room door subject to use by one hundred (100) or more persons shall be equipped with panic hardware.
- 14. ALL EXIT DOORS SHALL BE UNLOCKED AND UNFASTENED FROM THE EGRESS SIDE WHENEVER THE BUILDING IS OCCUPIED.
  WHEN ONLY A CERTAIN AREA OF THE BUILDING IS OCCUPIED ALL EXITS FROM THAT AREA SHALL BE UNLOCKED AND UNFASTENED FROM THE EGRESS SIDE.

#### **Protection from Hazards**

- 1. Areas used for general storage, boiler or furnace rooms, fuel storage, and janitor's closets shall be separated from other parts of the building by one-hour fire resistive construction with self-closing fire doors in approved frames or protected by an approved automatic supervised sprinkler system installed in accordance with NFPA 13.,
- 2. Maintenance shops including woodworking and painting areas, laundries and fuel storage areas in quantities deemed hazardous by the authority having jurisdiction shall be separated from other parts of the building by one-hour fire resistive construction with self-closing fire doors in approved frames and such area shall be protected with automatic supervised sprinkler system installed in accordance with NFPA 13.
- 3. Cooking facilities shall be protected by an approved automatic extinguishing system.

## **Fire Protection Equipment**

1. Every required automatic sprinkler system, fire detection and alarm system, automatic extinguishing system, fire pump, fire extinguisher, exit lighting, emergency lighting, generator, fire door and other items of fire protection equipment shall be maintained continuously in proper operating condition.

(a) Automatic Sprinkler System
 (b) Automatic Fire Alarm System
 (c) Automatic Extinguishing System
 (d) Fire Pump
 Tested quarterly
 Tested annually
 Tested semi-annually
 Tested monthly

(e) Fire Extinguisher Inspected every 30 days by staff, annually by

trained fire extinguisher personnel.

(f) Exit Lighting Inspected every 30 days (g) Emergency lighting Inspected every 30 days (h) Concenter Tested weekly

(h) Generator Tested weekly

(i) Fire Doors Inspected every 30 days

- 2. When a required system is out of service, the building shall be evacuated or an approved fire watch shall be provided for all portions left unprotected by the shutdown until the system has been returned to service. The State Fire Marshal's Office shall be notified that a Fire Watch has been established. Fire Watch shall have a minimum of one (1) person per floor and no more than 50,000 square foot per person. The Fire Watch person/s shall have **NO** other responsibilities.
- 3. Every portion of educational buildings below the floor of exit discharge shall be protected with complete automatic sprinkler system.
- 4. Every educational building shall be protected with an approved electrically supervised fire alarm system.
- 5. In buildings protected by an automatic sprinkler system clearance from the top of storage to the bottom of the sprinkler head shall not be less than 18 inches or greater.
- 6. The intentional misuse or abuse by any person(s) of any Fire Safety Equipment, e.g. portable fire extinguishers, fire alarm systems, sprinkler system components, etc. is strictly prohibited and any conduct amounting to such intentional misuse or abuse shall be in violation of State Fire Code and appropriate action should be taken.

### Flammable and Combustible Liquids

1. No flammable or combustible liquid or material shall be stored in any furnace room or basement.

#### **Definitions:**

Class I liquid - a liquid having a flash point below 100 degrees F (37.8 degrees C) and having a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100 degrees F (37.8 degrees C).

Examples: Gasoline, alcohol, ether, paint thinner.

Class II liquid - a liquid having a flash point at or above 100 degrees F (37.8 degrees C) and below 140 degrees F (60 degrees C).

Examples: Kerosene, some duplicating fluid.

Combustible liquid - a liquid having a flash point above 140 degrees F (60 degrees C).

Examples: oils, most duplicating fluids.

NOTE: More information will be found on product container.

- 2. Flammable or combustible liquids shall not be stored so as to limit use of exits, stairways, or areas normally used for the safe egress of people.
- 3. Storage shall be limited to that required for operation of office equipment maintenance, demonstration, treatment and laboratory work. All liquids in laboratories and at other points of use shall meet the following storage provisions:
  - (a) No gasoline shall be stored in the building.
  - (b) Gasoline stored on the property shall be stored in proper listed containers.
  - (c) No Class 1 liquids shall be stored in the basement.
  - (d) All Class 1 liquids shall be stored in proper listed containers and an approved flammable storage cabinet.
  - (e) Duplicators and fluid shall only be in non-student areas, and duplicator fluid shall be limited to one can per machine at a time, all others shall be stored in an approved flammable storage cabinet.
  - (f) No container for Class I or Class II liquids shall exceed a capacity of one (1) gallon except that safety cans can be of two (2) gallon capacity.
  - (g) No more than ten (10) gallons of Class I and Class II liquids combined shall be stored outside of a storage cabinet or storage room except in safety cans.
  - (h) No more than twenty-five (25) gallons of Class I and Class II liquids combined shall be stored in safety cans outside of a storage room or storage cabinet.

- (i) Not more than sixty (60) gallons of combustible liquids shall be stored outside of a storage room or storage cabinet.
- (j) Quantities of flammable and combustible liquids in excess of those set forth in this section shall be stored in an inside storage room or storage cabinets.

### **Chemistry Laboratories**

#### **General Rules for Chemical Storage**

- 1. Criteria for storage area:
  - (a) Store chemicals inside a closeable cabinet or on a sturdy shelf with a front edge lip to prevent accidents and chemical spills; a 3/4 –inch front edge lip is recommended.
  - (b) Secure shelving to the wall or floor.
  - (c) Ensure that all storage areas have doors with locks.
  - (d) Keep chemical storage areas off limits to all students.
  - (e) Ventilate storage areas adequately.
- 2. Organization of chemicals:
  - (a) Organize chemicals first by COMPATIBILITY not alphabetic succession.
  - (b) Store alphabetically within compatible groups.
- 3. Chemical segregation:
  - (a) Store acids in a dedicated acid cabinet. Nitric acid should be stored alone unless the cabinet provides a separate compartment for nitric acid storage.
  - (b) Store highly toxic chemicals in a dedicated, lockable poison cabinet that has been labeled with a highly visible sign.
  - (c) Store volatile and odoriferous chemicals in a ventilated cabinet.
  - (d) Store flammables in an approved flammable liquid storage cabinet.
  - (e) Store water sensitive chemicals in a watertight cabinet in a cool and dry location segregated from all other chemicals in the laboratory.
- 4. Storage Don'ts:
  - (a) Do not place heavy materials, liquid chemicals, and large containers on high shelves.
  - (b) Do not store chemicals on top of cabinets.
  - (c) Do not store chemicals on the floor, even temporarily.

- (d) Do not store items on bench tops and in laboratory chemical hoods, except when in use.
- (e) Do not store chemicals on shelves above eye level.
- (f) Do not store chemicals with food or drink.
- (g) Do not store chemicals in personal staff refrigerators, even temporarily.
- (h) Do not expose stored chemicals to direct heat or sunlight, or highly variable temperatures.
- 5. Proper use of chemical storage containers:
  - (a) Never use food containers for chemical storage.
  - (b) Make sure all containers are properly closed.
  - (c) After each use, carefully wipe down the outside of the container with a paper towel before returning it to the storage area. Properly dispose of the paper towel after use.
- 6. MSDS (material safety data sheets) shall be kept on file for chemicals:

The MSDS books shall be located at following locations:

- (a) Principals Office
- (b) Chemistry Lab and/or Chemistry Storage Room.

# Plays, Stage Production, Show Choirs, and Graduation

- 1. No scenery shall be used that has not been treated to render the material flame retardant for information the staff of the Fire Marshal's Office will be glad to assist.
- 2. Electrical equipment shall conform to the National Electrical Code. Any temporary electrical equipment or arrangements must be inspected by a competent electrician prior to use.
- 3. A responsible adult or adults shall be present backstage during any practice or production to supervise all activity.
- 4. Exits and required aisles shall not be blocked or restricted.
- 5. Drama staff shall be instructed that fire hose standpipes, fire extinguishers, electrical panels, etc. shall not be blocked at any time while practicing for or performance of a play or stage production.
- 6. Cameras, stage lights, etc. shall not be placed in aisles nor obstruct the means of egress at any time.
- 7. The use of Pyrotechnics or smoke machines that would activate the fire alarm is prohibited.
- 8. The fire alarm shall not be turned off for any performances involving pyrotechnics or smoke machines

# **Furnishings and Decorations**

- 1. No furnishings, decorations, storage or other objects shall be so placed as to obstruct exits, access thereto, egress there from or visibility thereof. While metal lockers are permitted, open coat racks are prohibited in corridors.
  - NOTE: The above is further noted to prohibit classes or instructional areas or storage in all corridors and stairways.
- 2. No furnishings or decorations of an explosive or highly flammable character shall be used in any educational occupancy.
- 3. Window draperies and curtains for decorative and acoustical purposes shall be flame retardant.

#### EXIT INSPECTIONS AND PUBLIC SAFETY ANNOUNCEMENTS.

- 4. Inspection of Exits. Not more than ninety (90) minutes prior to the scheduled commencement of any non-continuous activity, event, performance, show, meeting, function, or other occasion for which 300 or more people will gather in a place of assembly, the owner or his/her designee pursuant to written authority, instructions, or procedures shall inspect every required exit, way of approach to an exit, and way of departure from an exit. If the inspection reveals that any required means of egress is obstructed, inaccessible, locked, fastened, or otherwise unsuited for immediate use, the scheduled program shall not begin, nor shall admittance to the place of assembly be permitted, until necessary correction action has been completed.
- 5. Announcements. Immediately prior to the start of a program, the owner or his/her authorized agent shall orally notify all attendees concerning the location of the exits to be used in case of fire or other emergency.
- 3. Records. An accurate record of all inspections, corrections, and notifications shall be kept and retained for at least two (2) years in the offices of the respective building owners. The records shall contain:
  - (1) a brief description of each activity, event, performance, etc., including its date, time, and location:
  - (2) the name and signature of the person who performed each requirement of this subsection;
  - (2) the date and time when each requirement was performed.

Alternatives. In case of practical difficulty or undue hardship, or in which compliance would not significantly increase life safety, the State Fire Marshal may approve or accept alternative means of accomplishing the objectives of this section.

- 4. Events in gymnasiums and auditoriums shall have tickets for the number of seats available. There shall be no standing or sitting permitted in aisles or additional seats added. Persons allowed entry on a free pass shall be given a ticket to account for the number of seats occupied. Events shall not exceed the maximum posted occupancy.
- 5. Festival seating is prohibited for more than 1,000 persons unless an approved Life Safety Evaluation is utilized and approved by the State Fire Marshal's Office.
- 6. Folding chairs shall not exceed 14 chairs in a row and shall have an aisle at both ends. The aisle shall not be less than 36 inches wide. The rows of seats shall have a minimum of 12 inches clear width aisle access way between chairs.
- 7. In Class A assembly occupancies, there shall be trained crowd managers or crowd manager supervisors at a ratio of 1 crowd/supervisor for every 250 occupants. Crowd/supervisors shall have received approved training in crowd management techniques.
- 8. Item 7 shall apply to any location at which a school event is being held.

#### **Maintenance of Outdoor Grandstands**

#### 1. Maintenance of Outdoor Grandstands.

- (a) The owner shall provide for not less than annual inspection and required maintenance of each outdoor grandstand to ensure safe conditions.
- (b) At least biennially, a professional engineer, registered architect or individual certified by the manufacturer shall perform the inspection.
- (c) The owner shall provide certification that such inspection has been performed.

#### 2. Maintenance and Operation of Folding and Telescopic Seating.

Maintenance and operation of the folding and telescopic seating shall be the responsibility of the owner or his/her duly authorized representative and shall include the following:

- (a) During operation of the folding and telescopic seats, the opening and closing shall be supervised by responsible personnel who shall ensure that the operation is in accordance with the manufacturer's instructions.
- (b) Only attachments specifically installation shall be attached to the seating.
- (c) The owner shall provide for not less than annual inspection and required maintenance of each outdoor grandstand to ensure safe conditions.
- (d) At least biennially, a professional engineer, registered architect or individual certified by the manufacturer shall perform the inspection.
- (e) The owner shall provide certification that such inspection has been performed.