Revision Responsibility:	Vice President for Business Affairs
Responsible Executive Officer:	Vice President for Business Affairs
Source/Reference:	Health & Safety Manual

PURPOSE

To outline the steps taken for fire protection at college facilities.

GENERAL

All fire-fighting appliances will be in accordance with National Fire Protection Association regulations. Where local requirements are equal or superior to National Fire Protection Association requirements they may be applied.

PORTABLE FIRE EXTINGUISHERS

Portable fire extinguishers are designed to cope with fires of limited size and are necessary even though the property may be equipped with automatic sprinklers, stand- pipes and hose, or other fixed protection equipment. Care should be taken in selecting extinguishers that are to be transported from one area to another during a fire since all extinguishers cannot be used on all fires. An example of this is that a water type extinguisher can be used on wood fires but should not be used on electrical fires.

Portable extinguishers will be maintained in a fully charged and operable condition, and kept in their designated places at all times when they are not being used. Under no condition will fire fighting equipment be removed or relocated by anyone other than employees of the Campus Police or Plant Operations Offices except for use in fire fighting. Tags on fire extinguishers will not be removed or altered. Extinguishers will not be obstructed from view and fire hose cabinets will be kept clear at all times.

Individuals, who for purposes other than fire fighting, discharge or damage extinguishers are not only endangering their own lives but are also endangering the lives and property of others and subject themselves to disciplinary action whether they be student, visitor, or employee.

Installation

Extinguishers will be conspicuously located where they will be readily accessible and immediately available in the event of fire. They should be located along normal paths of travel. Where practical; extinguishers should be located near exits from an area.

Extinguishers will not be obstructed from view. In large rooms and in certain locations where visual obstructions cannot be completely avoided, means will be provided to indicate the location and intended use of extinguishers.

Extinguishers will be installed on the hangers or in the brackets supplied, mounted in cabinets, or set on shelves unless the extinguishers are of the wheeled typed. Extinguishers having a gross weight not exceeding 40 pounds will be installed so that the top of the extinguisher is not more than 5 feet above the floor. Extinguishers having a gross weight greater than 40 pounds (i.e., except wheeled type) will be so installed so that the top of the extinguisher is not more than 3-1/2 feet above the floor. Extinguishers mounted in cabinets or wall recesses, or set on shelves will be placed in a manner such that the extinguishers operating instructions face outward. The location of such extinguishers will be marked conspicuously.

Extinguishers installed under conditions where they are subject to severe vibration will be installed in brackets specifically designed to cope with the vibration.

Extinguishers will be suitable for use within a temperature range of at least plus 40 to plus 120 degrees Fahrenheit. When extinguishers are installed in locations subjected to temperatures outside this range, they will be a type approved or listed for the temperatures to which they will be exposed, or placed in an enclosure capable of maintaining the temperatures to which they will be exposed.

Selection and Distribution

Fire extinguishers will be provided for the protection of both the building structure, if combustible, and the contents. Required building protection will be provided by fire extinguishers suitable for Class A fires. Occupancy hazard protection will be provided by fire extinguishers, suitable for such Class A, B, C, D, fire potentials as may be present. Extinguishers provided for building protection may be considered also for the protection of occupancies having a Class A fire potential. Combustible buildings having an occupancy hazard subject to Class B and/or Class C fires, will have a standard complement of Class A fire extinguishers for building protection, plus additional Class B and/or Class C extinguishers. Where fire extinguishers have more than one letter classification (i.e., such as 2-A and 20-BC), they may be considered to satisfy the requirements of each letter class.

Rooms or areas will be graded generally as light hazard, ordinary hazard, or extra hazard. Limited areas of greater or lesser hazard will be protected as required. A light hazard exists where the amount of combustibles or flammable liquids is such that fires of small size may be expected (e.g., in offices, schoolrooms, churches, assembly halls, or telephone exchanges). An ordinary hazard exists where the amount of combustible or flammable liquids present is such that fires of moderate size may be expected (e.g., in mercantile storage and display areas, auto showrooms, parking garages, light manufacturing, warehouses not classified as extra hazard, or school shop areas). An extra hazard exists where the amount of combustible or flammable liquids present is such that fires of severe magnitude may be expected (e.g., in woodworking, auto repair, and aircraft servicing areas, warehouses with high-piled - 14 feet or higher - combustibles, or in processes such as flammable liquids handling, painting, or dipping).

For ordinary combustibles the minimal sizes of fire extinguishers for the listed grades of hazard will be provided on the basis of the following table. Extinguishers will be so located that the maximum travel

distance will not exceed those specified in this table.

TABLE 22.02.03.A

Basic Minimum Extinguisher Rating for Area Specified	Maximum Travel Distances to Extinguishers		Area to be Protected Per Extinguisher	
		Light Hazard Occupancy	Ordinary Hazard Occupancy	Extra Hazard Occupancy
1A	75 ft.	3,000 sq ft	Not permitted except as specified in Par. 4120	Not permitted except as specified in Par. 4120
2A	75 ft.	6,00 sq ft	3,000 sq ft	Not permitted except as specified in Par. 4120
3A	75 ft.	9,000 sq ft	4,500 sq ft	3,000 sq ft
4A	75 ft.	11,250 sq ft	6,000 sq ft	4,000 sq ft
6A	75 ft.	11,250 sq ft	9,000 sq ft	6,000 sq ft

The protection requirements specified in the above table may be fulfilled by several extinguishers of lower rating for ordinary or extra-hazard occupancies. Where the floor area of a building is less than that specified in this table, at least one extinguisher of the minimum size recommended will be located so that the travel distance thereto will not exceed 75 ft.

For flammable liquids the minimum sizes of fire extinguishers for the listed grades of hazards will be provided on the basis of the following table. Extinguishers will

be located so that the maximum travel distances will not exceed those specified in this table (i.e., See Section 2120 National Fire Protection Association 101).

TABLE 22.02.03.B

Type of Hazard	Basic Minimum Extinguisher Rating	Maximum Travel Distance to Extinguisher
Light	5B	50 ft.
Ordinary	10B	50 ft.
Extra	20B	50ft.

Two or more extinguishers of lower rating, except for foam extinguishers will not be used to fulfill the protection requirements of the above table. Up to three foam extinguishers may be used to fulfill these requirements. The protection requirements may be fulfilled with extinguishers of higher ratings provided the travel distance to such larger extinguishers will not exceed 50 feet. For flammable liquid hazards of appreciable depth (Class B), such as in dip or quench tanks, Class B fire extinguishers will be provided on the basis of one numerical unit of Class B extinguishing potential per square foot of flammable liquid surface of the largest tank hazard within the area. Two or more extinguishers of lower rating, except for foam extinguishers, will not be used in lieu of the extinguisher required for the largest tank. Up to three foam extinguishers may be used to fulfill these requirements. When protection is sought for flammable liquid in appreciable depth and when the liquid surface area is in excess of 20 square feet, the protection requirements should be based on an evaluation of the extent of the hazard and engineering judgment applied.

Extinguishers with Class C rating will be required where energized electrical equipment may be encountered which would require a non-conducting extinguishing media. This will include fire either directly involving or surrounding electrical equipment. Since the fire itself will be a Class A or Class B hazard the extinguishers will be sized and located on the basis of the anticipated Class A or B hazards.

Inspection and Testing

Extinguishers will be inspected monthly, or at more frequent intervals when circumstances require, ensuring they are in their designated places, to ensure they have not been actuated or tampered with, and to detect any obvious physical damage, corrosion, or other impairments. At regular intervals, not more than one year apart or when specifically indicated by an inspection, extinguishers will be thoroughly examined and/or recharged or repaired to insure operability and safety, or replaced as needed. Any extinguisher showing defects will be given a complete maintenance check. Extinguisher

shells, cartridges, or cylinders, which show leakage or permanent distortion in excess of specified limits, or which rupture, will be removed from service. If, at any time, an extinguisher shows evidence of corrosion or mechanical injury, it will be subjected to a hydrostatic pressure test, or replaced. At intervals not exceeding those specified in National Fire Protection Association No. 101, extinguishers will be hydrostatically tested.

Each extinguisher will have a durable tag securely attached to show maintenance, test, or recharge date,

test pressure if applicable, and the initials or signature of the person who performed this service.

Extinguishers removed from the premises to be recharged will be replaced by spare extinguishers during the period they are gone.

AUTOMATIC SPRINKLER SYSTEM

Installation

All high hazard occupancies will have automatic sprinkler protection or such other protection as may be appropriate to the particular hazard, including explosion venting for any area subject to a dust explosion hazard, designated to minimize danger to occupants in case of fire or other emergency before they have time to utilize exits of escape.

All gate valves in supply pipes to automatic sprinklers, whether or not of indicator or post pattern, should be sealed open in a satisfactory manner. All control, drain, test and alarm valves will be provided with identification signs of the standard design adopted by the automatic sprinkler industry, or their equivalent. Where corrosive conditions exist, types of pipe, tube, fittings, hangers, and protective coatings that resist corrosion should be used.

Where necessary to extend feed mains of wet pipe systems through an open area or through cold rooms, or passageways or other areas exposed to frost, the pipe will be adequately protected against freezing by insulating coverings, frost-proof casings, or other suitable means. Sprinklers which are so located as to be subject to mechanical injury (i.e., in either the upright or the pendent position) will be protected with approved guards.

When painting piping or painting in areas near sprinklers, the sprinkler may be protected by covering it with a paper bag which will be removed immediately after the painting has been finished. Sprinklers will not be painted and any sprinklers which have been painted, except for factory applied coatings applied for identification of temperature rating, will be replaced with new approved sprinklers.

Clearance of at least 36 inches will be maintained between sprinkler deflectors and the top of storage to reduce possibility of obstruction to the distribution of water.

Impairment of Sprinkler Protection

Before shutting off a section of the fire protection system to make sprinkler system connections, the authority having jurisdiction will be notified. The work will be planned carefully, and all materials

assembled to enable completion in shortest possible time. Work started on connections should be complete without interruptions, and protection restored as promptly as possible. During the impairment, emergency hose lines, additional fire pails, and extinguishers will be provided, and additional extra watch services will be undertaken in the areas affected.

When change involves shutting off water from any considerable number of sprinklers for more than a few hours, temporary water supply connections should be made to the sprinkler system so that reasonable protection can be maintained. In adding to old systems or revamping them, protection should be restored each night so far as possible.

STANDPIPES AND HOSES

Inspections will be made frequently to assure that the hose is in proper position on the racks, and that all of the equipment is in place and in good condition. The hose will be removed and re-racked at intervals at least annually and new gaskets installed in the couplings, both at the hose valves and at the nozzles. Where couplings are polished, care will be taken to see that polish used does not touch fabric of hose.

MANUAL FIRE ALARMS

Manual fire alarm boxes will be approved for the particular application and will be used only for fire protective signaling purposes. Combined fire alarm and watchman's signaling boxes are acceptable. (i.e., See the 2003 Edition of the Life Safety Code).

Manual fire alarm boxes will be distributed throughout the protected area so that they are unobstructed, readily accessible, and located in the normal path of exit from the area. Additional boxes will be provided on each floor to obtain a maximum horizontal travel distance of 200 feet to the nearest box.

CARBON DIOXIDE AND DRY CHEMICAL FIRE EXTINGUISHING SYSTEMS

Safety Requirements

In any proposed use of carbon dioxide where there is a possibility that persons may be trapped in, or enter into atmospheres made hazardous by a carbon dioxide discharge, suitable safeguards will be provided to ensure prompt evaluation of and to prevent entry into such atmospheres and also to provide means for prompt rescue of any trapped personnel. Such safety items as personnel training, warning signs, discharge alarms, pre-discharge alarms and breathing apparatus will be considered. Alarms should be provided to give positive warning of a discharge where hazards to personnel may exist. Such alarms should function to warn against personnel entry into hazardous areas as long as such hazards

exist or until hazards are properly recognized.

Installation, Maintenance, and Testing

Local application systems will be designed, installed tested and maintained in accordance with related requirements in National Fire Protection Association No. 12. These systems will be maintained in fully operating condition at all times. At least annually, all carbon dioxide systems will be thoroughly inspected and tested for proper operation by a competent engineer or inspector.

Extent of Hazard

The hazard will be so isolated from other hazards or combustibles that fire will not spread outside the protected area. The entire hazard will be protected. The hazards will include all areas that are or may become coated by combustible liquids or shallow solid coatings such as areas subject to spillage, leakage, drippings, splashing, or condensation, and all associated materials or equipment such as freshly coated stock, drain boards, hood ducts, etc., that might extend fire outside or lead fire into the protected area.

EQUIPMENT DAMAGE AND ABUSE

Automatic closing devices on fire doors must NOT be damaged. Perhaps the single most important reference to life safety from fire, is the proper maintenance and use of stairway doors. Fire doors will NOT be wired, blocked open, chained in the closed position, or abused. Tampering with fire and emergency equipment could result in injury or death. It is an employee and student responsibility to keep all fire doors closed and to prevent abuse of equipment.

STORAGE ROOMS

All storage rooms, custodians closets, and other limited access areas are staff responsibility and will be kept clean and free of debris at all times.

WASTEBASKETS

All wastebaskets will be of metal or fire resistant materials.

HOLIDAY DECORATIONS

The danger of fire is great around holidays (e.g., the Christmas Holidays). The following safety measures will be observed.

1. When obtaining or prior to use of decorating materials care will be exercised to ensure they are flameproof or made of non-flammable material,

2. When obtaining Christmas trees other than the manufactured aluminum or other flameproof type, the following precautions will be observed:

   a. Ensure that they are fresh and not dried out. Obtain tree shortly before Christmas and dispose of it shortly after

   b. Christmas,

   a. Make fresh cut across trunk at base of tree and cut slits crosswise at the base just prior to mounting in stand,

   b. Use tree stand equipped to hold water at base of tree and keep it filled while tree is mounted,

   c. Inspect tree lights for condition and UL approval. Do not leave lights burning on tree over long periods of time, or when unattended, and

   d. Do not use electrical toys or appliances under tree.

   e. Electrical lights will not be used on metal trees. All gift wrapping

3. material (e.g., tissue paper and ribbon) will be tightly stuffed in a box as gifts are unwrapped and the box removed from the premises as soon as gift opening is completed.

4. Decoration material will not be exposed to light bulbs, heater, or other sources of heat or flame.

5. Means to extinguish fire (e.g., water bucket, hose, or fire extinguisher) will be located close to decorated areas.

RESPONSIBILITIES OF FIRE MARSHAL

The Assistant Director of Plant Operations is designated the college's Fire Marshal. This person is responsible for execution of all duties and responsibilities of these fire safety policies and procedures. In addition, the Fire Marshal will coordinate the activities for fire prevention and act as the planning agent with the local fire department and the State of Tennessee fire protection agencies.

PROCEDURE FOR REPORTING A FIRE

The Director of Campus Police will be notified of all fires regardless of size. Any person discovering a fire, regardless of type and size, will arouse all occupants by using local fire alarms, shouting, or by any other means provided; obtain assistance; and, on the main campus, immediately notify the Campus Police Office, and, as appropriate, the local fire department. There are several types of fire alarms in the college buildings; therefore, all persons using any of these buildings should familiarize themselves with the alarm system. All fires involving Walters State Community College property, as well as non-college property involved in fire that create a hazard to college property, will be reported by telephone or any other possible and expeditious means to the Campus Police , and, as appropriate, to the local fire department.

When reporting a fire or other emergency, give the building name and location, the caller's name, and any other information requested. Remain on the phone until released by the person that you are notifying. If the Campus Police Office is called prior to the local fire department, that office will notify the fire department.

EXITING BUILDINGS

Safety Exit Drills

Periodically, personnel in college buildings will take part in a fire drill and leave the buildings. During the drills the persons responsible for conducting the drill will observe the action of personnel and check the first aid and fire fighting equipment, including fire escapes and fire exits. Variation of drills should be held, such as blocked exits, and night and morning drills will be used to create a variety of what could be experienced during actual emergency. Coordination will be effected with the Director of Campus Police prior to conducting any drills. A minimum of 24 hours notice will be required of any drill. Upon conclusion of a fire evacuation drill, the person responsible for conducting fire drill will forward a report to the Safety Administrator.

Exiting Procedures

Before a fire occurs employees are to:

1. Know the location of all fire alarm stations in their building and how to activate them,

2. Know the location of the portable fire extinguishers and how to use them, and

3. Know the location of emergency evacuation routes and of alternate means of exit if needed.

On discovering a fire employees will (i.e., if safe to do so):

1. Sound the fire alarm immediately to alert occupants,

2. Shut all doors and windows in the immediate vicinity of the fire, and

3. Vacate the building by the nearest safe exit.

On hearing the fire alarm sound employees will (i.e., if safe to do so):

1. Raise window shades all the way,

2. Close all windows tightly,

3. Vacate the room, leaving the lights on and the door open, and

4. Vacate the building by the nearest safe exit.

NOTE: Elevators are not to be used for evacuation and all persons will evacuate the building.

Periodically, faculty will instruct students in the evacuation procedures to be used in the event of fire or other emergency (i.e., see Chapter 28 “Emergency Preparedness Plan” of this manual). Students will be informed of the location of Building Emergency Evacuation Plans and that it is their responsibility to know and understand the plans’ content.

FALSE FIRE ALARMS

The importance of using fire equipment properly must be stressed. Employees and students must be aware of the hazards of false fire alarms. These include:

1. Accidents,

2. Possible failure of persons to respond effectively in a real fire situation as a result of repeated false alarms,

3. College property damage,

4. Personal and fireman inconvenience, and

5. Time and money waste.

FIRE SAFETY INSPECTIONS

Systematic inspections to locate and eliminate fire hazards are an indispensable element of a fire safety program. The Safety Administrators will cause inspections to be made on a regularly scheduled basis of all facilities of the college.

INSPECTING AND TESTING FIRE ALARMS, SPRINKLER SYSTEMS, AND FIRE HYDRANTS

In order to ensure proper continuous operation of fire alarm and automatic sprinkler systems the Assistant Director of Plant Operations will cause each system to be tested on a periodic basis. The testing will be performed during the hours that will cause the least disruption to normal activity. Upon completion of each test a Fire Alarm Test Report or Sprinkler System Test Report will be filed in the Campus Security Office.

The Assistant Director of Plant Operations will cause each fire hydrant and standpipe system to be checked and tested at least once annually. The inspections, checking and testing, will include winterizing those hydrants subject to freezing. Test reports will be filed in the Plant Operations Office.

FIRE REPORTS

All fires, regardless of how minor or if burned out prior to discovery, will be reported to the Director of Campus Police. The Director of Campus Police will be notified immediately upon discovery of the fire. A report of all fires will be kept on file in the Campus Police Office. The report will contain a minimum of the location and cause of the fire, the amount and cost of damage, possible corrective measures, and any other general information concerning the fire.

As in the case of accident and injury reports, the information derived from these reports will materially assist the Safety Administrators in identifying those areas and conditions which are particularly

hazardous. The report will be analyzed and, if possible, corrective action to eliminate the hazard will be taken immediately.

ALTERATIONS AND RENOVATIONS

In those structures altered or renovated, the Assistant Vice President of Facilities Management will ensure that unsafe conditions are not added but are eliminated in such structures. Prior to commencement of any alterations or renovations the following procedures will be followed:

1. Any alterations or renovations proposed will comply with all applicable fire codes and safety and health regulations,

2. Any plans and specifications related to such alterations or renovations will be coordinated with the Safety Administrator to assure compliance with all applicable safety and health codes,

3. During major alterations or renovations the Safety Administrator will periodically inspect the affected areas to ensure that applicable safety and health codes are being complied with and that all possible safety precautions are being taken,

4. Any alterations or renovations performed by private construction companies or personnel other than Plant Operations employees, will conform to all regulations applicable to the work being done as adopted by Walters State Community College and all other state and federal agency regulations (e.g., those of the State Fire Marshal's Office, State Health Department, Occupational Safety and Health Act, American National Standard Institute, and National Fire Protection Association),

5. All plans and specifications, including preliminary and final will be submitted to the Safety Administrator for review and approval, and

6. All plans and specifications will comply with the requirements of the State Fire Marshal and the Occupational Safety and Health Act.

FIRE LANES

Fire lanes on campus property must be kept clear in case of an emergency. These lanes are "Tow-Away-Zones" and the regulation will be enforced by the Campus Police Office. Particular emphasis will be given to street intersections to assure that parked vehicles will not interfere with rapid access to buildings by a fire truck.