

## **FIRE PREVENTION, PROTECTION AND SAFETY – FACT SHEET**

### **Introduction**

There have been many studies related to injuries, deaths and property loss due to fire that has introduced many life safety improvements through advance technology and research. Although the United States is one of the most technologically advanced nations, we continue to experience a higher life and property loss than most nations. Universities and colleges in the United States are no exception, especially residential facilities (dormitories, sororities, fraternities, and individual housing units). Environmental Health and Safety (EHS), ASU Services Departments, State Fire Marshal's Office and Municipalities (Building and Fire Departments/Development Services) constantly collaborate, evaluate and plan life safety improvements for existing facilities and new construction.

Occupants should be aware of the fire protection features of their building and be careful not to undermine their purpose. Occupants should also practice fire safe behaviors by identifying hazards specific to their area and use the appropriate preventative measures. When a fire occurs, the campus fire emergency policy should be enacted. Life safety is the primary objective of all ASU fire protection programs.

### **Applicable ASU Policies**

- EHS 201 - Electrical Safety
- EHS 202 - Decorations and Displays
- EHS 204 - Facility Safety and Occupancy Limits
- EHS 205 - Storage and Hazardous Chemicals

### **Applicable ASU Guideline**

- EHS Fire Prevention and Safety Plan

### **Applicable Regulations**

- International Fire Code
- National Fire Protection Association (NFPA) Standards
- 29 CFR 1910.37 - Means of Egress
- 29 CFR 1910.38 - Employee Emergency & Fire Prevention Plans
- 29 CFR 1910.101 - Hazardous Materials
- 29 CFR 1910.106 - Flammable & Combustible Liquids
- 29 CFR 1910.157 - Portable Fire Extinguishers
- 29 CFR 1910.159 - Automatic Sprinkler Systems

## Summary of Requirements

### Life Safety Features in Campus Buildings

Every building provides exits sufficient to permit the prompt escape of occupants in case of a fire or other emergency. Exits are marked by stand alone signs and illuminating EXIT signs where required. Keep exit doors and signs clear of obstructions and maintain the minimum required width of 44 inches for public access to exit doors. The required exit access may be more than 44 inches depending on the occupant load and the configuration of the space. Enclosed stairways provide safe passage to the outside in the event of an emergency. Keep stair doors closed to prevent the spread of fire and smoke and keep stairwells clear of storage. The exit system (corridors, passageways, stairways, and exit doors) must be free of any combustible or hazardous materials and must be maintained unobstructed.

Most campus buildings are equipped with a fire alarm that can be activated by manual pull stations, smoke detectors, heat detectors, beam detectors, duct detectors, and fire sprinklers. Keep all fire alarm devices free of obstructions. When activated, the alarm sounds throughout the building to initiate evacuation of building occupants and will also send a message to a dispatch center via telephone line or fiber optics (usually ASU Police Department Dispatch). In order to provide the designed fire protection, occupants must ensure a minimum of 18 inches of space beneath the fire sprinkler's deflector. Seek advice from EHS when erecting partitions in a fire sprinkler or fire detection protected space because the new wall may interfere with sprinkler and/or fire alarm coverage.

### Fire Prevention Measures

Electricity is the most common utility/energy source for heating, cooling, cooking, and generating electrical power distribution in most buildings today. As the most common energy source, electricity became the most commonly encountered hazard to life and one of the most common causes of fire. Make sure that the electrical equipment and appliances in your area are Underwriters Laboratory (UL) listed and are used according to the manufacturers' recommendations as well as per fire code and electrical code. The use of makeshift electrical equipment is not permitted except in experimental laboratories when its use is crucial to the research or work being conducted; the lab employees are qualified and the laboratory is designed in a manner to prevent undo exposure or damage to life and property. All circuits should have over current protection. Whenever a damaged appliance or power cord is found, it must be immediately placed out of service and/or repaired by qualified electricians.

Flammable liquids create a severe fire and explosion hazard. Flammables must be kept in approved sealed containers and stored in flammable liquid storage cabinets or approved storage rooms. Refrigerators used for flammable storage must be manufactured for that purpose and labeled as such on the front of the door. Take out from storage only the amount needed for the day. Eliminate sources of ignition when using flammables; including, static electricity, friction and heat exposure.

Open flames must always be attended, whether in a laboratory, kitchen or shop area. Keep open flames away from combustible and flammable materials. Comply with EHS "Hot Works Operation" guidelines when working with open flames outside of designated laboratories or shop areas.

Good housekeeping is always an important safety measure. Discard combustible waste as soon as possible. Accumulations of paper products and upholstered furnishings are attractive targets of malicious fire setting.

## **Emergency Procedures**

A fire emergency exists when there is uncontrolled fire, the presence or the odor of smoke, or an uncontrolled release of a toxic gas or a flammable liquid spill. When such an emergency is discovered, the occupants must ensure the following:

1. Pull the building fire alarm, unless the alarm is already sounding.
2. Shut off equipment in the immediate area and close each door exiting through if safe to do so.
3. Leave the building and assemble at a safe distance away from the building.
4. Call 911. Use any campus phone, cell phone or campus emergency phone to advise the ASU Police Department Dispatch of the fire emergency and any pertinent information you can provide or questions the dispatcher may ask you. (Cell phones can be used but if the cell phone is a non-GPS phone you must advise upon 911 being answered your location is on ASU campus—specify the campus).

Be available to assist emergency responders and provide any information about operations in your area.

The use of fire extinguishers is not required by any building occupant or campus employee and is not recommended for those who have not received training.

## **Recordkeeping**

EHS maintains records of all life safety inspections, building evacuation drills, and training conducted by EHS as well as request for our files any documentation related to life safety inspections, building evacuation drills, and training performed by other organizations, vendors, or consultants.

## **Reporting**

Call 911 to report all fires, even fires found extinguished.

Call the Department of Facilities Management Service Center at (480) 965-3633 or call EHS at (480) 965-1823 to report life safety equipment that needs service. This includes missing or burned out EXIT signs, missing or discharged fire extinguishers, fire doors that do not completely self-close and latch and any damaged or malfunctioning fire alarm or sprinkler system.

## **Training**

EHS provides fire safety, evacuation, and emergency preparedness training to campus groups upon request. Call EHS at (480) 965-1823 or review our website to request brochures, training or to borrow fire safety videos.

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