

## Program Statement

The University of North Alabama will provide protection to all faculty, staff, students, and visitors from the dangers of fire.

The University of North Alabama Fire Safety Plan includes several measures aimed at preventing fires and ensuring the safety of faculty, staff, students and visitors. The University's departments of Housing and Residence Life, Facilities Administration and Planning, Public Safety, and Student Engagement work cooperatively with the Florence City Fire Department to promote fire safety in every university building. This cooperative relationship and other measures, including building construction, training programs for faculty, staff, and students, and routine inspection of fire safety equipment, have contributed to a safe environment for the UNA campus community.

## Objectives

The objectives of this chapter are:

1. To safeguard all persons on UNA premises from death or injury in the event of a fire or associated explosion.
2. To minimize the risk of fire and to limit the spread of fire.
3. To minimize the potential for fire to disrupt teaching and research, damage buildings and equipment and harm the environment.
4. That adequate means of escape in case of fire exist for all persons on University of North Alabama premises.
5. That all means of escape are correctly maintained, kept free from obstruction and available for safe and effective use at all times.
6. That the means of escape have adequate emergency lighting (in case of fire), which will be maintained in efficient working order.
7. That adequate means of giving warning in case of fire exist and are maintained in efficient working order.
8. That adequate means for fighting fire are present and are maintained in efficient working order.
9. That appropriate instruction will be given to all personnel on University of North Alabama premises on evacuation procedures.
10. That effective management procedures are in place to respond to and deal with the aftermath of a fire.
11. That appropriate fire training is given to designated staff who have an active role in the implementation of fire precautions.
12. That all premises owned or occupied by the University of North Alabama are subjected to a fire risk assessment and that where risks are identified, action is taken to implement appropriate control measures.

13. That measures are taken to protect buildings, installations and equipment from fire that are commensurate with the risks and are appropriate to the value of teaching, research or commercial importance of those assets.

### **Building Construction and Alarm Systems**

University buildings are constructed of noncombustible materials, primarily brick and concrete. Walls, hallways, ceilings and floors are made of concrete, concrete block or other noncombustible materials. Each hall is equipped with a fire alarm system that includes manual pull stations, horns, strobe lights and smoke detectors. The alarm systems and fire extinguishers are routinely tested. Students are advised that initiating a false alarm is a violation of the Student Code of Conduct.

### **Prevention and Inspection Programs**

Coordinating university-wide safety programs is a responsibility of the Safety and Emergency Preparedness Committee, Public Safety, Facilities Administration and Planning, and the Environmental Health and Safety Department. They coordinate the fire safety programs on campus and train Residence Life staff on fire safety policies and procedures, providing educational materials to students on a variety of safety issues. University policies prohibit fire hazards in residence hall rooms such as candles, many electrical appliances, cooking devices, and room heaters. At the start of each semester, students are oriented on fire alarms and evacuation procedures and each hall conducts a fire drill during the first two weeks of each semester. Fire safety inspections are made with the Florence Fire Department on a regular basis to insure egress routes are maintained and that fire safety issues are addressed in a timely manner.

### **Residence Hall Fire Safety**

Fire alarm systems are installed in all residence halls. The system includes automatic smoke detectors, alarm signals, and enunciators. The alarm is a continuous buzzing noise. All alarms should be regarded as actual fires. University policy and state law require all residents and their guests to adhere to the fire safety regulations of the campus. Rendering a false alarm is considered a criminal offense. Failure to evacuate is not only a safety hazard, but is also a violation of University policy and state law. Failure to comply may result in the resident(s) being subject to the student conduct process. It is each resident's responsibility to be familiar with evacuation procedures. In the case of a fire, residents should do the following:

1. If there is smoke in the room, keep low to the floor.
2. Before passing through any door, feel the doorknob. If it is hot, do not open the door. Before opening a door, brace yourself against the door and open it slightly. If heat and smoke are present, close the door and stay in the room.
3. If you cannot leave the room, open the window. If trapped, attract the fire department by hanging an object out the window.
4. If you can leave the room, close the door behind you.

5. Go to the nearest exit or stairwell. Do not use the elevator.
6. If the nearest exit is blocked by fire, heat or smoke, go to an alternate exit.
7. If all exits are blocked, go back to your room, open the windows, and attract the fire department.
8. After evacuating the building, move to the designated meeting location (at least 50 feet from the building). Emergency personnel and equipment will be maneuvering around the building.
9. Follow the directions of fire, police, and Housing and Residence Life staff.
10. You may reenter the building only after fire and police officials have given their approval.

### **In the Event of Fire:**

1. Know the location of fire extinguishers in your area and know how to use them.
2. On a minor fire that appears controllable, IMMEDIATELY contact Public Safety (X4357) and the Building Coordinator.
3. If you have been trained to use a fire extinguisher, promptly direct the charge of the fire extinguisher toward the base of the flame.
4. If necessary or if directed to do so by Public Safety or the Building Coordinator, activate the building alarm. Caution: The building alarms ring only in the building.
5. On large fires that do not appear controllable, immediately call 911 and the Building Coordinator. Then, evacuate all affected rooms, closing all doors to confine the fire and reduce oxygen. Do not lock doors.
6. When the building fire alarm is sounded, or when told to leave by Public Safety or by the Building Coordinator, walk quickly to the nearest marked exit and alert others to do the same.
7. Assist the disabled in exiting the building. Do not use elevators in case of fire.
8. Once outside move to a clear area away from affected building. Keep streets and walkways clear for emergency vehicles and personnel. If requested, assist Public Safety and/or the Building Coordinator.
9. An Emergency Operations Center may be set up near the emergency site. Keep clear of the Emergency Operations Center unless you have important information to report.
10. Do not return to an evacuated building unless directed to do so by Public Safety or the Building Coordinator.
11. Refer to the building-specific Emergency Procedures for additional information.

### **Rules for Fighting Fires**

Remember to always position yourself with an exit or means of escape at your back before you attempt to use an extinguisher to put out a fire. In case the extinguisher malfunctions, or something unexpected happens, you need to be able to get out quickly, and you don't want to become trapped.

### **Never Fight a Fire If:**

1. You don't know what is burning. If you don't know what is burning, you don't

know what type of extinguisher to use. Even if you have an ABC extinguisher, there may be something in the fire, which is going to explode or produce highly toxic smoke. If you don't know what is burning, let the fire department handle it.

2. The fire is spreading rapidly beyond the spot where it started. The time to use an extinguisher is in the incipient, or beginning, stages of a fire. If the fire is spreading quickly, evacuate the building, closing doors and windows behind you as you leave.
3. You don't have adequate or appropriate equipment. If you don't have the correct type or large enough extinguisher, do not to try to fight the fire.
4. You might inhale toxic smoke. If the fire is producing large amounts of smoke that you would have to breathe in order to fight it, it is best not to try. Any sort of combustion will produce some amount of carbon monoxide, but when synthetic materials such as the nylon in carpeting or foam padding in a sofa burn, they can produce highly toxic gases in addition to carbon monoxide. These gases can be fatal in very small amounts.
5. Your instincts tell you not to. If you are uncomfortable with the situation for any reason, let the fire department fight the fire.

## Fire Drills

Fire Drills (sometimes known as emergency evacuation drills) are conducted on a periodic basis in all University facilities. The purpose of these drills is to insure an orderly and controlled building evacuation through practice, to determine the time required to complete a full building evacuation and to analyze the evacuation process in order to identify and address any problems.

Participation in these drills is mandatory. However, if special circumstances require your presence in the building during the drill, or if for physical reasons, you cannot comply with the evacuation requirements, the department head can notify the Department of Public Safety to make special arrangements.

The Safety and Emergency Preparedness Committee believes the process to be an important part of our emergency planning as well as providing for your well being during an actual fire emergency. Your cooperation and understanding are gratefully appreciated.

## Fire Drill Procedures

When the building alarm sounds, your responsibilities are:

1. Shut down any experiments, procedures, etc. that should not be left unattended. Extinguish any open flames and shut off any noxious or flammable gas supply valves.

2. Secure any valuables. Purses and wallets should be taken with you when you leave. Close your office or lab door.
3. Leave the building via the nearest available exit as soon as possible. **DO NOT USE THE ELEVATORS**, they will not work while the alarm is active.
4. Stand well clear of the building by at least 50 feet.
5. DO NOT reenter the building until advised by Public Safety Officers (i.e., University Police, Fire Department, City Policy).

### The Fire Triangle



To understand how fire extinguishers work, you need to understand how a fire is created. Fire is a very rapid chemical reaction between oxygen and a combustible material (fuel), which results in the release of heat, light, flames, and smoke.

For fire to exist, the following four elements must be present at the same time:

1. Enough oxygen to sustain combustion.
2. Enough heat to raise the material to its ignition temperature.
3. Some sort of fuel or combustible material.
4. The chemical reaction that is fire.

### How a Fire Extinguisher Works:

Portable fire extinguishers apply an extinguishing agent that will either cool burning fuel, displace or remove oxygen, or stop the chemical reaction so a fire cannot continue to burn. When the handle of an extinguisher is compressed, agent is expelled out the nozzle.

### Types of Fire Extinguishers and Fires

Not all fuels are the same, and if you use the wrong type of fire extinguisher on the type of fuel present in the fire, you can make matters worse. Therefore, it is important to understand the four different classifications of fuel. See Table 1 for a summary of extinguisher types. Table 2 provides additional information on extinguisher types.

Table 1 – Types of Fire Extinguishers













Extinguisher Type	Type of Fuel/Fire	Appropriate For:
	Class A – Water Extinguisher 	Ordinary Combustibles Fires in paper, cloth, wood, rubber, and many plastics require a water type extinguisher labeled A.
	Class B – CO <sub>2</sub> Extinguisher 	Flammable Liquids, Electrical Equipment Fires in oils, gasoline, some paints, lacquers, grease, solvents, and other flammable liquids require an extinguisher labeled B. CO <sub>2</sub> extinguisher leave no residue so are suitable for live electrical equipment fires.
	Class C – Dry Chemical Extinguisher 	Electrical Equipment Fires in wiring, fuse boxes, energized electrical equipment, computers, and other electrical sources require an extinguisher labeled C.
	Multi-purpose Extinguisher 	Ordinary Combustibles, Flammable Liquids, or Electrical Equipment Multi-purpose dry chemical is suitable for use on class A, B, and C.
	Class D Extinguisher 	Metals Fires involving powders, flakes or shavings of combustible metals such as magnesium, titanium, potassium, and sodium require special extinguishers labeled D.
	Class K Extinguisher 	Kitchen Fires Fires involving combustible cooking fluids such as oils and fats.

Table 2 – Fire Extinguisher Details

Extinguisher Type	Details
<p><b>Water - Air-pressurized Water Extinguishers (APW)</b></p>	<p>Water is one of the most commonly used extinguishing agents for type A fires. You can recognize an APW by its large silver container. They are filled about two-thirds of the way with ordinary water, then pressurized with air. In some cases, detergents are added to the water to produce a foam. They stand about two to three feet tall and weigh approximately 25 pounds when full.</p> <p><b>Never use water to extinguish an electrical fire. Water can conduct electricity.</b></p> <p>APWs extinguish fire by cooling the surface of the fuel to remove the "heat" element of the fire triangle.</p>
<p><b>CO<sub>2</sub> or Dry Chemical - Carbon Dioxide Extinguishers</b></p>	<p>This type of extinguisher is filled with Carbon Dioxide (CO<sub>2</sub>), a non-flammable gas under extreme pressure. These extinguishers put out fires by displacing oxygen, or taking away the oxygen element of the fire triangle. Because of its high pressure, when you use this extinguisher pieces of dry ice shoot from the horn, which also has a cooling effect on the fire. NOTE: Do not touch the plastic discharge horn on CO<sub>2</sub> extinguishers, it gets very cold and may damage skin.</p> <p>You can recognize this type of extinguisher by its hard horn and absent pressure gauge.</p>
<p><b>Multi-purpose - Dry Chemical Extinguishers</b></p>	<p>Dry chemical extinguishers put out fires by coating the fuel with a thin layer of fire-retardant powder, separating the fuel from the oxygen. The powder also works to interrupt the chemical reaction, which makes these extinguishers extremely effective.</p> <p>Dry chemical extinguishers are usually rated for class B and C fires and may be marked multiple purpose for use in A, B, and C fires. They contain an extinguishing agent and use a compressed, non-flammable gas as a propellant.</p>
<p><b>Class D Extinguishers</b></p>	<p>Class D fires are those that occur from combustible metals, such as aluminum, titanium, magnesium, lithium, zirconium, sodium, and potassium.</p> <p>These types of fires usually occur in industrial, manufacturing, or laboratory settings when the metal fines - tiny, thin pieces of metal, often shavings or dust ignite, becoming the fuel element in the fire triangle. A class D extinguisher works by smothering the fire and eliminating the oxygen element. The agent also helps to absorb the heat from the fuel. Class D extinguishers are not effective for any other class of fire.</p>
<p><b>Class K - Dry and Wet Chemical Extinguishers for Kitchen Fires</b></p>	<p>Due to the higher heating rates of vegetable oils in commercial cooking appliances <u>NFPA 10</u>, Portable Fire Extinguishers, now includes a Class K rating for kitchen fires extinguishers which are now required to be installed in all applicable restaurant kitchens. Once a fire starts in a deep fryer, it cannot always be extinguished by traditional range hoods or Class B extinguishers. Extinguishing agents in many Class K extinguishers are electrically conductive and should only be used after electrical power to the kitchen appliance has been shut off.</p>

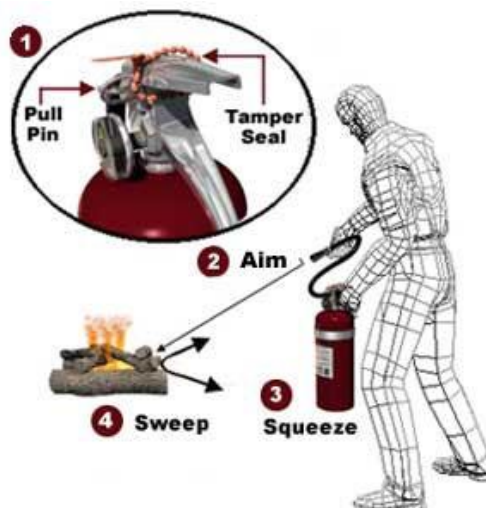
### Using a Fire Extinguisher

The following steps should be followed when responding to incipient stage fire:

1. Sound the fire alarm and call the fire department, if appropriate.
2. Identify a safe evacuation path before approaching the fire. Do not allow the fire, heat, or smoke to come between you and your evacuation path.
3. Select the appropriate type of fire extinguisher.
4. Discharge the extinguisher within its effective range using the P.A.S.S. technique (pull, aim, squeeze, sweep).
5. Back away from an extinguished fire in case it flames up again.
6. Evacuate immediately if the extinguisher is empty and the fire is not out.
7. Evacuate immediately if the fire progresses beyond the incipient stage. An "incipient stage fire" is one in the initial or beginning stage and which can be controlled or extinguished by portable fire extinguishers, class II standpipe, or small hose systems without the need for protective clothing or breathing apparatus.

Most fire extinguishers operate using the following P.A.S.S. technique:

1. *PULL*... Pull the pin. This will also break the tamper seal.
2. *AIM*... Aim low, pointing the extinguisher nozzle (or its horn or hose) at the base of the fire.
3. *SQUEEZE*... Squeeze the handle to release the extinguishing agent.
4. *SWEEP*... Sweep from side to side at the base of the fire until it appears to be out. Watch the area. If the fire re-ignites, repeat steps 2 - 4.



If you have the slightest doubt about your ability to fight a fire....EVACUATE IMMEDIATELY!