

University of Pittsburgh Safety Manual	EHS Policy #	02-002
Subject: FIRE SAFETY AND FIRE PREVENTION	Effective Date	Page 1 of 7
	1/1/07	

FIRE SAFETY AND FIRE PREVENTION

These guidelines are intended to prevent fires and maintain University environments that are optimal for life safety.

1. No Smoking

University policies prohibit smoking in all University owned and leased facilities. Smoking should be limited to designated areas only. Interior loading dock areas, foyers and vestibules near entrances are not designated smoking areas.

2. Building Features

- 2.1 Do not tamper with fire detection notification devices, smoke or heat detectors, sprinkler heads or other fire protection devices.
- 2.2 Sprinkler heads should not be obstructed and at least an 18 inch clearance should be maintained below the level of sprinkler heads.
- 2.3 Do not prop open with wood wedges or other items fire or smoke doors (e.g., doors to stairways, doors at building subdivisions, and doors to labs).
- 2.4 Fire Extinguishers

The University provides and maintains over 5000 fire extinguishers throughout University properties. EH&S provides for the inspection of all fire extinguishers annually. The fire extinguishers are selected by type and location due to the hazards involved, as outlined in applicable City Codes and the National Fire Protection Association (NFPA) Code 10.

- 2.4.1 No one on campus is required to use a fire extinguisher during a fire emergency. A fire extinguisher may be used under the following conditions:
 - 2.4.1.1 The individual is trained in the use of fire extinguishers. Training is provided for designated personnel and is available annually during the University's Fire Safety Day in October.
 - 2.4.1.2 The fire is small (i.e. any fire that is isolated to a container or small area such as a trash can) and can be extinguished with one local extinguisher.
 - 2.3.1.3 It can be determined exactly what is burning, and that the proper type and classification of fire extinguisher is available.

University of Pittsburgh Safety Manual	EHS Policy #	02-002
Subject: FIRE SAFETY AND FIRE PREVENTION	Effective Date	Page 2 of 7
	1/1/07	

2.4.2 Never enter a room that is smoke filled. Never enter a room containing a fire without a backup person. Never enter a room if the top half of the door is warm to touch.

2.4.3 The following is offered as a reminder to personnel trained in the operation of a fire extinguisher: Keep your back to an unobstructed exit and stand six to eight feet away from the fire. Follow the four step **PASS** procedure:

Pull the pin: This unlocks the operating lever and allows the operator to discharge the extinguisher. (NOTE: Some extinguishers may have other release mechanisms);

Aim low: Point the extinguisher nozzle at the base of the fire;

Squeeze the lever: This discharges the extinguishing agent. Releasing the lever will stop the discharge. (Some extinguishers have a button instead of a lever);

Sweep from side to side: Moving carefully toward the fire, keep the extinguisher aimed at the base of the fire and sweep back and forth until the flames appear to be out. Watch the fire area--if the fire re-ignites, repeat the process.

2.5 Fire Hose

Fire standpipe systems with hose valves, hose lines or hose cabinets are prominently located throughout University buildings. Fire hose is only to be used for emergency purposes by responding fire fighters. Fire hose cabinets are intended for the storage of fire equipment only.

3. Corridor Utilization Guidelines

3.1 The storage or use of chemicals, hazardous waste, radioactive material, biological material, compressed gas cylinders, work stations, tables, desks, chairs and any equipment used for active laboratory procedures is strictly forbidden in egress corridors and stairwells.

3.2 Certain storage equipment such as refrigerators and filing cabinets may be *temporarily* placed in a corridor if a clear path of egress is maintained (minimum 44" clear width) and the equipment can be locked.

3.3 At no time can items stored in corridors obstruct emergency showers, utility access panels, exit doors, fire doors, EXIT signs, hose cabinets, fire extinguishers, fire alarm notification devices (horns, strobes or bells), fire alarm pull stations, smoke and heat detectors, or sprinkler systems.

University of Pittsburgh Safety Manual	EHS Policy #	02-002
Subject: FIRE SAFETY AND FIRE PREVENTION	Effective Date	Page 3 of 7
	1/1/07	

- 3.4 Any storage of combustible items (paper, cardboard boxes, cloth, etc.) in egress corridors must be in fully enclosed cabinets.
- 3.5 At no time can any egress corridor be reduced in width by stored items to less than 44 inches.

4. Holiday Decorating Guidelines

- 4.1 Fire codes prohibit live cut decorations such as trees, holly and evergreen branches inside University buildings. Use artificial trees and decorations.
- 4.2 Avoid placing electrical decorations near sources of water or on anything made of metallic materials due to potential shock hazards. Be sure that all electrical decorations are UL approved. Avoid using extension cords. No more than three (3) sets of lights or decorations should be on one electrical circuit. Turn off all decorative lighting when unattended.
- 4.3 Lit candles or other open flames for decorative purposes are prohibited inside University buildings. General guidelines on their safe use during religious or commemorative services have been provided below.
- 4.4 Artificial trees, displays or other decorations should not obstruct emergency showers, utility access panels, exit doors, fire doors, EXIT signs, hose cabinets, fire extinguishers, fire alarm notification devices (horns, strobes or bells), fire alarm pull stations, smoke and heat detectors, or sprinkler systems.

5. Candles

Candles, incense and open flames are not permitted in University buildings. With prior approval by EH&S and adherence to guidelines below, candles or open flames may be permitted for ceremonies or religious events:

- 5.1 Should the use of candles require any portion of the fire detection system to be placed on hold during the event, a Fire Watch (see Section 11.2) must be provided during that time and coordinated with appropriate Facilities Management or Housing personnel.
- 5.2 The event should include personnel who are knowledgeable regarding the proper use of portable fire extinguishers and the nearest extinguisher location.
- 5.3 Lit candles must never be unattended. The above assigned personnel should remain to monitor the room during any breaks and to extinguish all candles when the event is over.
- 5.4 The location of the candles should not block any emergency equipment or exit.

University of Pittsburgh Safety Manual	EHS Policy #	02-002
Subject: FIRE SAFETY AND FIRE PREVENTION	Effective Date	Page 4 of 7
	1/1/07	

- 5.5 Keep candles away from items that can catch fire such as clothing, books, paper, curtains, combustible wall coverings, or decorations.
- 5.6 Make sure candles are placed on a stable piece of furniture or in sturdy holders that will not tip over. Candles should fit in the holders securely and holders should be made from material that cannot burn.
- 5.7 Make sure the candleholder is big enough to collect dripping wax.
- 5.8 Avoid candles with combustible items embedded in them.
- 5.9 Extinguish taper and pillar candles when they get within two inches of the holder or decorative material. Votives and container candles should be extinguished before the last ½ inch of wax starts to melt.

6. Luminaries

- 6.1 Candle type luminaries should not be used indoors.
- 6.2 Electrical luminaries may be used indoors as follows:
 - 6.2.1 The devices are UL approved and they are operated according to the manufacturers recommended guidelines.
 - 6.2.2 Avoid locations near sources of water or on anything made of metallic materials due to potential shock hazards.
 - 6.2.3 Use of extension cords should be avoided and no more than three (3) sets of lights or decorations should be on one electrical circuit.
 - 6.2.4 Turn off when unattended and upon completion of the ceremony.
- 6.3 Candle and electrical luminaries can be used outdoors as follows:
 - 6.3.1 Candles must have at least 2" of sand (or like non-combustible material) in the bottom of the bag. The candle must be of a size that will allow adequate space between the candles and bag so as not to ignite the bag.
 - 6.3.2 Candles will not be placed within five (5) feet of combustible material, such as leaves, paper or decorations.
 - 6.3.3 An individual should be designated to supervise and manage the luminaries, and ensure that luminaries are properly extinguished and discarded.
 - 6.3.4 Candles must be extinguished at the end of the event unless the area is supervised.

University of Pittsburgh Safety Manual	EHS Policy #	02-002
Subject: FIRE SAFETY AND FIRE PREVENTION	Effective Date	Page 5 of 7
	1/1/07	

6.3.5 Electrical luminaries and associated extension cords must be rated for outdoor use.

6.3.6 Electrical cords and extension cords will not be placed so as to cause a tripping or fire hazard.

7. Portable Heaters

- 7.1 Portable heaters are not designed for continuous use and should not be used as a primary heating source for any room or area.
- 7.2 Only UL approved portable heaters with an automatic safety switch that will turn the heater off if it is accidentally tipped over should be used. Portable heaters with exposed heating elements should be avoided.
- 7.3 Portable heaters must be plugged directly into an electrical outlet (do not use extension cords) and the cords should not be located across doorways, aisle ways, under rugs or in areas where the cord may be exposed to wet conditions or physical damage.
- 7.4 Maintain at least a 3 foot minimum clearance between the heater and any combustible materials (e.g. trash and/or recycling containers, furniture, files, curtains, combustible wall coverings).
- 7.5 Nothing should be placed on the heaters and the ventilation openings cannot be blocked or obstructed.
- 7.6 Portable heaters should be turned off and unplugged when not in use and when the area is not occupied.
- 7.7 Portable heaters are not designed for use in areas where flammable/combustible liquids or gases are used or stored, or where dust may be present (e.g. labs and workshops).

8. Outdoor Cooking Appliances

Outdoor cooking appliances such as charcoal, electric or gas grills are only permitted on University property if the following conditions are strictly adhered to:

- 8.1 Outdoor grills must be located on a hard, noncombustible flat surface (not on grass or wood decking).
- 8.2 Grills should be at least 10 ft. from any building's door, window or air intake. Grills should not be located under building overhangs or areas of combustible construction.

University of Pittsburgh Safety Manual	EHS Policy #	02-002
Subject: FIRE SAFETY AND FIRE PREVENTION	Effective Date	Page 6 of 7
	1/1/07	

- 8.3 Grills, tables, chairs, and other material associated with an event must not obstruct a means of egress.
- 8.4 All outdoor cooking appliances must be constantly attended while in use. The event should include personnel who are knowledgeable regarding the proper use of portable fire extinguishers. A 10 lb ABC type extinguisher should be provided in an accessible location within 10 ft. of the grill.
- 8.5 Upon completion of the event, all burner controls should be turned off. For charcoal grills, the coals should be thoroughly extinguished with water. In addition, it is recommended that the coals remain in the grill with the lid tightly secured until the following day at which time the coals and ash can be emptied into an appropriate trash container.

9. Propane

Propane is prohibited inside University buildings, unless approval is granted by EH&S. Propane tanks should not be used if they have dents, damage, rust or leaks. The following guidelines for propane use must be followed:

- 9.1 When not in use, the propane cylinder valve must be closed and the threaded connection capped in accordance with the manufacturer's instructions.
- 9.2 Do not smoke while handling the propane cylinder.
- 9.3 Do not use, store, or transport propane cylinders where the cylinder would be exposed to high temperature. Do not store spare cylinders under or near the grill.
- 9.4 Refer to the 'Storage and Handling of Flammable and Pyrophoric Gasses' Section of this manual for additional detail regarding propane safeguards.

10. Pyrotechnics

Approval for the use of Pyrotechnics must be obtained from the City of Pittsburgh's Bureau of Fire with appropriate permits obtained from the Bureau. EH&S shall be contacted prior to the proposed use of any pyrotechnics as this may also impact fire detection devices and provision of a Fire Watch.

11. Residence Halls and Fraternity Houses

In addition to the above fire safety guidelines, the following items are NOT permitted in residence facilities (residence halls, University fraternity houses, apartment buildings):

- 11.1 Cooking devices with grease or open heating elements such as toaster ovens, waffle irons, hot plates, deep fryers, or propane stoves with tanks attached.

University of Pittsburgh Safety Manual	EHS Policy #	02-002
Subject: FIRE SAFETY AND FIRE PREVENTION	Effective Date	Page 7 of 7
	1/1/07	

- 11.2 Halogen lamps.
- 11.3 Only UL approved multi-outlet plug strips or surge suppressers (125V AC, 60Hz, 1875 watt or less) should be used. No more than one multi-outlet plug strip may be plugged into each duplex outlet.
- 11.4 All weapons, “weapon-like projectiles,” air guns, paint guns, stun guns, starter pistols, firearms, or ammunition.
- 11.5 Flammable and combustible liquids. Fireworks, sparklers, flares, or any type of flammable or combustible novelty; and explosives or incendiary devices such as blasting caps, percussion caps, fertilizers, black powder, and any other type of material used in the manufacturing of explosives.

12. Maintaining Fire Alarm and Fire Protection Systems

12.1 Testing of Fire Alarms

Each month, the fire alarm system of each building is tested by the Building Engineer to verify its operational condition. Prior to the test or during repair of the alarm system, a notice is posted on the entrance doors to the building and/or an announcement is made to notify occupants. These signs will identify the date and time of the testing. Occupants need not evacuate the building during a fire alarm test. Building occupants should listen for the fire alarm signal during the test and notify EH&S if not detected. If fire or smoke is detected during the test or outage, follow the above Emergency Evacuation Procedures and call 811 or 412-624-2121.

12.2 Maintenance and Impairments to the Fire Alarm and Protection Systems (“Fire Watch”)

Maintenance and repair of building fire alarm and protection systems are required to provide a safe and consistent level of defense against fire. During these repairs and maintenance, it may be necessary to temporarily disable the building fire alarm or fire protection systems. Detailed procedures have been developed by EH&S to help manage these impairments.

A fire watch is the process in which a building is physically monitored by designated University personnel (building engineers, security or other adequately trained individuals) during periods when fire alarm or fire protection systems are disabled. These personnel will continually walk the building and report any signs of fire via radio to University Police who in turn notify the City Bureau of Fire.

EH&S should be contacted with any questions on these procedures.