# URSINUS COLLEGE



# THEATER SAFETY

# GUIDELINES



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#### **Introduction:**

Welcome to the Kaleidoscope Performing Arts Center. The purpose of this guide is to provide basic information for working safely with chemicals and operations in all Ursinus College theaters. All faculty, students, and contractors must read, understand, and adhere to these guidelines before participating in any production. Many of these guidelines are based on OSHA standards (Occupational Safety and Health Administration) and EPA regulations (Environmental Protection Agency) and therefore are required by law. In some instances, additional training by a qualified person shall be required (i.e. use of the rigging system in the theater).

A common sense approach to working safely is best. Never work alone in the building. If you are unsure about any process, procedure, or guideline, ask for help. Your safety and the safety of others depend upon it!

After you have read and understand these guidelines, sign the acknowledgement sheet located at the end of this document and return to the Technical Director or Technical Operations Director.



#### **GENERAL SAFETY INFORMATION**

Faculty/Staff/Students/Contractors working in the theater are expected to adhere to the general safety guidelines listed below.

Students and contractors should never work alone in the building and work conducted outside of scheduled class hours should be coordinated with a classmate. This includes all rehearsals, production, and class work. It is strongly recommended that Faculty and Staff not work alone in the building outside normal business hours. The building is closed from 12 midnight – 6am. All rehearsals and other work must be completed and cleaned up in advance and all students/contractors out of the building by midnight.

#### Chemicals

- Know the hazards associated with the products used in the theater including paints, paint thinners, and other chemical products and the location of the Safety Data Sheets (SDS formerly MSDS).
- Know how to properly dispose of paints, and other chemical products. Some of these items are hazardous and may not be disposed of in the sanitary system or regular trash. If you are unsure, please ask.
- Always label containers with the name of the product. When reusing containers, deface the original label or remove it entirely.
- Always use aerosol spray products outdoors. If you are unsure where, please ask.

#### Emergencies

- Know locations of first-aid kits, fire alarm pull boxes, all fire extinguishers, and the nearest emergency shower and eyewash.
- Know the procedures to follow in the event of an emergency. Always leave the building when the alarm sounds.
- Only use a fire extinguisher if trained and comfortable using. Remember to keep your back to the exit when using a fire extinguisher.
- Report all injuries to your instructor/supervisor immediately.

#### Tool Use

- Use of powered tools or equipment (electric or air) requires training on proper operational procedures by the Technical Director.
- No tool with a circular rotating blade (table saw, hand held circular saw, radial arm saw, or power miter saw) may be used without the presence of the Technical Director.
- Under no circumstances shall someone work unsupervised using powered tools.

#### **Work Practices**

- Wear closed-toed shoes. Open-toed shoes, sandals, or bare feet are prohibited in the theaters or shop at any time except when required as a performer.
- When lifting heavy objects, use your legs to lift. Get assistance if the object is too heavy to move alone.
- Keep a clean, neat and organized work area for your personal safety and the safety of others.
- Do not eat, drink, smoke, chew gum or apply cosmetics in the theater workshop or while painting/staining or using other chemical containing products.



- Practice good personal hygiene. Always wash your hands prior to handling food or drink and prior to departing the theater.
- Never use the fly system if untrained or working alone.
- No working at heights without supervision. This includes stepladders.



#### ELECTRICAL SAFETY

Only licensed electricians or qualified Facilities Services workers may perform electrical repairs.

- Only trained and authorized electricians should remove covers from electrical panels.
- Only properly trained and authorized persons are allowed to work with stage lighting equipment and electrical equipment.
- All tools and lighting equipment must be UL listed and in proper working order.
- All AC circuits, stage circuits, tools and stage lighting equipment must be grounded or double insulated.
- Use approved heavy-duty, three-wire, extension cords.
- Temporary cables, cords and wiring must be properly secured so they do not present a tripping hazard.
- Temporary cables, cords and wiring must not be spliced. Use proper connectors and terminations.
- Cable runs of more than 25 feet may increase electrical resistance beyond its normally rated capacity; therefore, try to keep cable runs to the minimum length or use the proper cable for the length.
- Never overload a circuit. Use the Power Formula (Watts=Volts x Amps) to determine proper load.
- Never use power tools near water. Never work on electricity near water. When in doubt use a GFCI (ground fault circuit interrupter).
- Never bypass a circuit breaker or fuse. These devices protect people and equipment from harm.
- Report any unsafe electrical conditions to the Technical Director.



#### EVENT MANAGEMENT

Event Management applies to staff working in the front of house. Follow these guidelines to prevent personal injury, injury to others, or damage to equipment and facilities.

- Know the location of the nearest fire alarm pull station, telephone and emergency phone, and the whereabouts of all fire exits, fire extinguishers, and first aid kits. First aid kits are located in the front of house, back stage and shop area.
- Review emergency and evacuation procedures and the location of the emergency equipment and first aid kits with the ushers. (Front of House Supervisor)
- Do not permit standees in the theater.
- Keep aisles and exit ways clear at all times. No person (s) may be seated in aisles or exit ways.
- In case of fire the ushers will assist patrons to the nearest exit of the building. The Event Manager will call 911 to report the emergency and notify the Stage Manager that the building is to be evacuated.



#### FIRE EMERGENCY PROCEDURE

#### If fire or smoke is visible:

- *Alert* people in the area of the need to evacuate.
- *Activate* the closest fire alarm.
- *Call 911* from a campus phone or 610-489-0911. Report
  - Your name
  - $\circ$  Location
  - $\circ$  Problem
- Go to the designated assembly area located in the grassy area in front of the main entrance to the Kaleidoscope.

<u>If there is no sign of fire or smoke</u>, call Campus Safety at 610-409-3333 or extension 3333, to determine if the alarm system is being serviced and to report the incident.

# If you are trained in the use of a fire extinguisher and you chose to fight the fire, always keep your back to the exit.

If not trained in the use of a fire extinguisher, do not attempt to extinguisher the fire. Evacuate immediately.

#### **NON-FIRE EMERGENCY PROCEDURES**

If a you or another person is injured while working in the Theater, determine the extent of the injury and take the appropriate action delineated below:

- 1. If the person is unconscious, appears to be seriously injured, or has fallen a distance of 4 feet or more, call 911 or 610-409-3333 for an ambulance. When in doubt, call 911.
- 2. If the person is conscious and doesn't appear to be seriously injured, 610-409-3333 or extension 3333, Campus Safety, who will notify UCEMS
- 3. For minor injuries:
  - a. Cuts clean cut with soap and water and place bandage on cut. If further medical attention is necessary, direct the student to the Wellness Center.
  - b. Burns soak in cool water (avoid ice). If further medical attention is necessary, direct the student to the Wellness Center.
- 4. Complete the injury report form, <u>Student Injury Report</u> (See Appendix A), and return a copy to your instructor.
- 5. Report all injuries to your instructor/supervisor.



#### FIRE PROTECTION & FIRE SAFETY

Anyone working in the Theater should be aware of the following guidelines to prevent personal injury, injury to others, and damage to equipment and facilities.

- Know the location of the nearest phone, fire extinguisher, fire alarm pull station, and fire exit at all times.
- Approved ABC fire extinguishers must be clearly accessible at all times. Facilities Services completes monthly inspections and yearly maintenance.
- No smoking is permitted in the building including actors as part of the event. The PA Clean Indoor Air Act does not permit smoking in a theater or performance establishment. The Act does not list exceptions for performances like a few other states.
- The Student House Manager/ushers, prior to each performance, should check fire extinguishers, aisles, stairwells, and approved fire exit doors. A printed checklist should be used and kept on file in the Box Office. Flammable liquids and aerosols should be stored in flammable storage cabinets.
- Know how to use the fire curtain. See the Technical Director for instruction.

#### EMERGENCY - 911 or 610-489-0911

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#### FLY SYSTEM LOADING & UNLOADING

Anyone changing weights to balance the counterweight fly system must be familiar with the safety guidelines listed below. Training by the Technical Director or Technical Operations Director on the operation of the fly system is required prior to use.

- At least three trained persons are required: two on the loading gallery and a supervisor on the stage to test the line set, call commands, and spot. *It is strongly suggested that all people on the stage wear hard hats*
- Anyone loading weights must be trained in the proper use of the installed restraint harness system and must wear the harnesses. See the technical director for training. When untrained persons are on the stage during the loading and unloading process, a minimum of two staff/faculty members must be present.
- Remove any unnecessary items from pockets or which could fall off (this includes hard hats) before climbing up to the loading gallery.
- During the loading/unloading process, an unbalanced load condition exists. This is
  potentially VERY DANGEROUS. Use the Theater Department's official procedure
  each time a line is loaded or unloaded. This procedure is taught as part of the
  certification process. Whenever possible, battens should be loaded at Low Trim.
  Counterweights should be the LAST THING LOADED, and the FIRST THING
  UNLOADED.
- Never load or unload weights when anyone is standing below the loading gallery.
- Lift weights with your legs while keeping your back as vertical as possible.
- A spreader plate should be used for each 24" of counterweights stacked on the arbor. Arbor collars should remain fastened in place after loading and unloading.
- There should be quiet on stage whenever counterweights are being loaded/unloaded.
- Counterweights should never be stacked higher than the top of the kick rail and should be evenly distributed along the length of the loading gallery.
- Line sets should always be kept in balance. Never rely on the rope lock to hold an unbalanced load.
- If the line can't be perfectly balanced because the imbalance is smaller than the smallest weight available, it is usually better to leave the line arbor heavy.



#### FLY SYSTEM OPERATION

Anyone using the theater fly system must be familiar with and follow these guidelines to ensure safe use of the Fly System.

- At least two trained, certified people are required one to operate the line set and the other to spot. When using the pin-and-rail system, three or more may be required. *It is strongly suggested that all people on the stage wear hard hats.*
- Use the Theater Department's official procedure each time a line set is moved. This procedure is taught as part of the certification process. Never stand or walk under a moving line set.
- Never move a line set when someone is under it.
- There should be quiet on stage whenever line sets are flown.
- Rope locks should always be locked closed with the lock ring in place when the line is not in motion.
- Label any line set that should not be moved for safety reasons. Never move a line set that is labeled with a warning not to do so.
- If a line set begins to fall make a reasonable attempt to stop it. If it is out of control or unsafe to stop it, DO NOT ATTEMPT TO STOP IT. ALERT OTHERS OF THE SITUATION.



#### LADDER SAFETY/LIFTS

You must receive hands-on training before using any ladder. See the Technical Director or Technical Operations Director for assistance. Use of ladders by students is strictly voluntary.

- Always inspect a ladder/lift before use. Check for cracks, missing stops/rungs, loose rivets, cables, railings, etc. If there is a problem with the ladder or lift, tag it as "out of service" and notify your supervisor.
- Make sure the ladder/lift is level and secure before climbing.
- Remove contents of pockets before using the lift, catwalks, or ladders.
- Do not carry tools, etc. up the ladder. Use a tool belt or a bucket with a rope to hoist the tools to you.
- Climb the ladder facing it. Keep a three-point grip at all times (two hands and one foot or one hand and two feet) when climbing.
- Do not stand on the top step of a ladder.
- Remember the belt buckle rule never reach so that your "belt buckle" goes beyond the sides of the ladder.
- Never move a ladder or lift when a person is on it.
- Always use a ladder or lift with another person present.
- Never operate the lift without the outriggers set.
- Always keep your body in the basket of the lift with feet firmly planted on the base of the basket.
- Always check below the lift prior to lowering it and announce verbally the lift will be lowered.

**Orchestra Lift** - A supervisor must be present for the operation of the lift. There must be at least two people present to operate the lift.

- Cordon off perimeter of the lift with caution tape (located in drawer in the equipment rack stage left). Across the entire proscenium opening and the house aisles.
- Know the location of the emergency stop buttons one in pit, stage left and stage right proscenium walls and on the hand-held controller.
- Turn on orchestra pit lights switch located on main lighting panels stage left or right or control booth.
- Check to make sure that no obstacles will be caught in the lift when operating lighting cables, step units, body parts, etc.
- Warn others in the area that the lift will be operating.
- Once the lift is in correct place, ensure all safety railings are in place and secured.
- Return manual controller to supervisor.



#### LIGHTING PRODUCTION

Any person using the theatrical lighting systems must be familiar with the following guidelines to prevent personal injury or death by electrocution.

- Only properly trained and authorized persons are allowed to work with stage lighting equipment and electrical equipment.
- All stage lighting equipment must be properly maintained and regularly inspected.
- Always unplug lighting units BEFORE opening to check the condition of a lamp.
- Never touch the glass on a stage lamp with your fingers. Grease will be deposited on the lamp and lead to lamp failure.
- All lighting units must be hung with an approved safety cable and hanging hardware must be tightened.
- Test all stage lighting units, cables, and circuits during the hang.
- No other work should happen on stage in the area where lighting units are being hung, unhung, or focused.
- Stage lighting units can become very hot with use. Gloves are available for focusing.
- Wash hands and forearms after each work call (the cords on most lighting units are covered with a fiberglass material which can irritate the skin).
- When replacing a lamp, return the spent lamp to the original container for recycling and give to your supervisor. Do not place any lamp in the regular trash.



## Materials handling/safe lifting

Knowing how to properly lift objects in the Theater setting is important to protect your back. Stage pieces tend to be awkward, heavy, or unusually shaped which can impede proper lifting techniques. Follow these steps to reduce or minimize the potential for injury.

#### **Before lifting, prepare:**

- Wear supportive shoes with non-slip soles.
- Size up the load does the load require assistance? Get a co-worker or mechanical device if needed (i.e. cart, hand truck, dolly, wheelbarrow, or drywall carrier).
- Determine your route is your pathway free and clear?
- Remember to push rather than pull heavy loads.
- Don't block your view.
- Secure bulky, loose or delicate objects

#### **Proper Lifting Technique:**

- Stand as close to the load as possible.
- Move your feet shoulder width apart.
- Squat down bending your knees, back straight, stomach muscles tight.
- Grab the load securely making sure you can carry it before starting to move.
- Stand up slowly lifting with your legs. Hold the object close to your body. Avoid twisting your body.
- Carry the load to its designation and then reverse the lifting process.

#### Loading plywood sheets in the back of a pickup truck:

- Lay sheets flat on the bed of the truck.
- Do not stack the sheets on the sides as they may shift and potentially crush any person standing near the stacked sheets.

#### **Back belts:**

NIOSH (National Institute for Occupational Safety & Health) believes that the decision to use back belts should be a voluntary decision by both employers and employees. If you choose to wear back belts, you should remember the following points:

- There is a lack of scientific evidence that back belts work.
- Workers wearing back belts may attempt to lift more weight than they would have without a belt.
- A false sense of security may subject workers to greater risk of injury.
- Workers and employers should redesign the work environment and work tasks to reduce lifting hazards, rather than rely solely on back belts to prevent injury.



#### SAFE USE OF TOOLS

Any person who will use any tool or machine located in the theater shop should be familiar with and should follow these guidelines.

- Do not use any tool or machine until fully trained on its use. ASK THE TECHNICAL DIRECTOR FOR HELP.
- Always wear eye protection when operating any tool and ear protection when power tools are in use whether using the tool or working nearby.
- Never wear loose clothing such as ties, gloves, or long sleeves that might get caught in moving parts.
- Tie long hair back.
- Remove all jewelry and wristwatches before using power tools and machinery.
- Wear closed-toed shoes. No work is permitted while wearing open-toed shoes, sandals, or bare feet.
- Use the right tool for the job. Don't force a tool or machine to do a job it isn't designed for.
- Always disconnect the power to the machine and contact the Technical director prior to servicing, changing blades, bits and cutters.
- Always operate machines with safety guards in place.
- Think twice, measure twice, and cut once.
- Always turn the machine off when finished never leave a running machine unattended. Once the machine is turned off, allow moving parts to stop themselves – do not use a stick or your hands.



#### WASTE DISPOSAL PROCEDURES

Use these guidelines to properly dispose of wastes generated in the Theater Department. If you are unsure of how to properly and safely dispose of a chemical, please consult a Theater Department Faculty/Staff member or the Environmental Health & Safety Coordinator.

#### AEROSOL SPRAY CANS

Clogged or partially filled aerosol cans for disposal are considered hazardous due to the flammability of the propellant and/or content of the paint. These cans must be collected as hazardous waste and disposed of properly. Give non-empty spray cans to the Technical Director for proper disposal.

#### OIL PAINTS AND FINISHES - DO NOT DUMP OIL PAINTS AND FINISHESDOWN

**THE DRAIN OR IN THE TRASH!** These are hazardous. Oil-based paints may be combined with solvents and linseed oil for disposal. Collect the paint in a used paint can with a lid or other appropriate container with a <u>tight fitting lid</u>. Label the container with the words "hazardous waste", the full name of the contents, and the date added. Contact the Technical Director for disposal. Note: a coffee can with a lid is NOT an acceptable container.

**OILY RAGS** - Place in a RED safety trashcan, as they are potentially flammable and/or may spontaneously combust. This includes any rag/paper towel soaked with any of the following chemicals:

- Denatured alcohol (Reworkable Fixatif Spray, Stop-Out Varnish, Strypeeze Paint & Varnish Remover)
- Linseed oil
- Mineral Spirits (Kamar Varnish)
- Paint Thinners
- Turpentine (Retouch Spray)
- Xylenes (No Odor Spray Fix, Matte Spray Fix, Matte Fixative, Goof Off)

**SOLVENTS - DO NOT DUMP** solvents **down the drain**. They are considered hazardous waste because of their flammability. Instead, place these solvents in a used solvent container with a <u>tight fitting lid</u>. Label the container with the words "hazardous waste", the full name of the contents, and the date added. Contact the Technical Director for disposal. Note: A coffee can with lid is NOT an acceptable container. Some common solvents that may be used in the Theater include mineral spirits, paint thinners, and turpentine.

Latex and acrylic paints – **DO NOT DUMP down the drain.** Leave the lid off the can to dry or use up the paint.



#### STUDENT INJURY REPORT FORM Student/Non-Employee Incident Report Form

Date of Incident: Time of Incident: AM or PM
Name (of Injured):
Address: Phone:
City & State: Age: Sex:
Position (Check one): Undergraduate: Visitor: Other:
Location of Incident: Building Room Number
Type of Incident: Fire Chemical Spill Medical Injury Other
Incident Occurred During: Course (Course number and experiment #)
Research Other
Was Safety or 911 called? Yes or No If yes, which one was called?
Type of Medical Care         Was simple first aid given? (Band-aid)       Yes or No         Was treatment provided by emergency personnel? Yes or No         Was transportation provided by emergency personnel? Yes or No         Was medical treatment deemed unnecessary by injured? Yes or No         If yes, signature of injured here
Type of Injury:         Thermal Burn         Chemical Burn         Glass cut, Scrape, or Puncture
Non-glass cut, Scrape, or PunctureChemical Irritation of Skin
Irritation of Eyes Inhalation of Fumes Other
Body part affected/injured:
Description of Incident (Use the back of this form if necessary and include names of witnesses if a
Student Signature:
Professor/Staff Member Signature:

PLEASE SUBMIT COMPLETED FORM TO THE EH&S COORDINATOR WITHIN THREE DAYS OF THE INCIDENT



#### Appendix B

Pre-performance Checklist for the Box Office

- Fire extinguishers in place in the theater and outside of the theater?
- Fire exit doors clear? no chairs, boxes, etc should be stored in front of them. This includes the exit doors within the theater itself.
   Exception: Black Box theater has 3 exits in the back of the theater. Seating area set-up in front of the middle exit is permitted as there are 4 other exits in the theater.
- □ Aisles in theater clear? must be kept clear at all times. No one should be standing or sitting in the aisles.
- □ First Aid Kits stocked? (Located Lenfest Stage right, Blackbox backstage hallway, and Box Office.

Comments:

To be completed by the person doing the checklist:

Printed Name \_\_\_\_\_\_ Signature \_\_\_\_\_\_ Date \_\_\_\_\_

Please place in the designated folder in the box office.



#### EMERGENCY - 911 OR 610-489-0911

#### REFERENCES

- 1. Colby Theater and Dance Department <u>http://www.colby.edu/theater/information\_sheets.shtml</u>
- 2. Occupation Safety and Health Administration http://www.osha.gov/
- 3. Ursinus College Academic Building Evacuation Planhttp://www.ursinus.edu/netcommunity/document.doc?id=2067

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