

Towson University Department of Theatre Arts

General Safety Guide

Emergency Procedures

1. In the event of serious injury or illness, fire, explosion, or any emergency, dial "4-4444" on any campus phone. A Towson State University Police dispatcher is on duty at this number at all times.
2. Any injury or accident occurring within the department must be reported immediately to the faculty or staff member in charge.
3. A fully stocked and properly maintained first aid kit must be available in each shop or stage work area. First Aid care of minor injuries should never be neglected.

General Safety Rules

1. Running, practical jokes, horseplay, throwing tools or materials, jumping off props or from one level to another or activities which endanger either the individual or others are not permitted.
2. At the end of each work period, the shop, stage, or other work areas shall be left in a clean and safe condition. All tools should be returned, floors swept, and walkways and exits left clear and unobstructed.
3. Open traps must be blocked off with sawhorses, ropes, etc. or covered and should be conspicuously identified at all times.
4. Platforms or step units not completed or braced should be labeled "Do not Use" at the end of all work calls.
5. A light should be left burning onstage at the end of all use so that the stage is never left in complete darkness.
6. The shops and theatre will be closed and no work undertaken unless a faculty or staff member is present and acting as supervisor.

Personal Protection (for more information consult the TU PPE guidelines)

1. Hard soled shoes should be worn while working in the scene shop or theatre. Tennis shoes offer little protection and are not desirable but are permissible. Going barefoot or wearing sandals is prohibited at all times.
2. Dress properly for the job to be done. Loose fitting clothing or jewelry shall not be worn while using power equipment. Long hair must be tied back or otherwise secured. Long sleeves should be buttoned at the cuff or rolled to the upper arm.

3. Wash hands well after work calls, before eating or drinking. Never use solvents to clean hands; a good quality hand cleaner will remove stubborn substances.
4. Books, clothing and other personal property should be stored in the appropriate location during work calls.

Electrical Safety

1. Do not use any defective or questionable electrical tool, cord, equipment, connection, or accessory. Make certain that such hazardous equipment is marked and removed from service. Immediately report such items for repair or replacement.
2. Extension cords should be checked for proper wire size and length before use. Avoid long runs of extension cord. Extension cords may only be used temporarily. They are not a permanent wiring solution. Power strips with circuit breakers should be used at all possible times.
3. Never remove the ground prong from a plug. If an adapter must be used to accommodate a three-prong plug into a two-hole receptacle, the ground wire on the adapter must be properly attached to a known ground. Never exceed the rated amperage capacity of any adapter.
4. During rehearsals and performances, electrical lines running along the stage floor should be secured to prevent tripping. Such lines should be completely covered with tape if taped to the floor. Ensure all wiring insulation is protected from damage. Wires that are exposed to pedestrian foot traffic should be guarded with a cord cover. Friction causes the insulation to be rubbed away, and exposed wires create a fire hazard.
5. Any incident of electrical shock-no matter how slight, must be reported for immediate repair.

Power Tool Safety

1. No one is permitted to operate any power tool without authorization.
2. All users will be checked out in proper and safe operation of all power tools by the shop supervisor or his designated assistant before being allowed to use any power tool.
3. Understand the application, limitations, and potential hazards of any power tool or machine you use. Select the proper tool for the job. Don't improvise!
4. Never defeat the ground on any power tool. If an adapter must be used, the adapter wire must be attached to a known ground.
5. Never adjust, change bits, blades, cutters or belts with the power tool connected to electricity. Always remove adjusting keys and wrenches before plugging a tool in.
6. Keep the work area free of clutter and be alert to potential hazards such as wet floors, flammable vapors, and inattentive persons in the area. Never over-reach and always

maintain proper footing and a secure grip on the tool you are using. Keep work area well illuminated.

7. Keep guards in place and in working order and never remove or circumvent a guard or protective device.

8. Use safety eye and/or face protection- wear safety glasses, goggles or face shields whenever using any power tool. Ear protection is recommended for prolonged noise exposure. In any case, if shop noise is annoying, seek ear protection. Rubber gloves must be worn when working with dyes, plastics and solvents to avoid absorption of toxic substances into the skin.

9. Dress properly for the job to be done. Loose clothing, jewelry, or long hair that can catch in moving parts or air vents should be removed, tied back, or otherwise secured.

10. Make sure that the switch is off before plugging in any power tool or machine.

11. Make sure saw blades, drill bits, router cutters, etc. are sharp, clean, and properly maintained.

12. All saws should be adjusted before use to expose only the minimum amount of blade necessary.

13. Always secure work materials with vises, clamps, or nails before any cutting or drilling operation.

14. Never attempt to clean tools of sawdust, chips, etc., while the tool or machine is operating.

15. Never brush sawdust or chips away with your hands. Use a bench brush or a broom.

16. Never force a power tool.

17. Never surprise, touch, or talk to anyone who is operating a power tool.

18. Never leave a power tool running unattended.

19. Return any tool that shows any defect or that is not operating properly to the supervisor for servicing. Never attempt field repairs on tools. Conspicuously mark all "out of service" tools so they will not be used until repairs are complete.

20. When using air powered tools which drive fasteners, always disconnect the air supply before loading, and beware of possible discharge as the power is restored.

21. Compressed air should not be used to clean or blow down machinery or any surface unless the area has been completely cleared and the operator is wearing full face and eye protection. AIR USED FOR THIS PURPOSE SHOULD NEVER EXCEED 30 PSI.

22. Always clean and return tools to proper storage after completing work.

23. Do not work alone.

Fire Safety

The special emphasis placed on fire protection within the theatre - is based on an unfortunately long history of disasters in this country. Two are worthy of special note. On December 5, 1876, 295 people perished as a result of a fire at the Brooklyn Theatre in New York. During a performance, a canvas backdrop broke from its fastenings and caught fire from an oil lamp along the border of the stage. The inadequate number of exits and the ensuing panic caused the tragic loss of life. Twenty-eight years later, the worst theatre fire in the history of the American stage ravaged the Iroquois Theatre in Chicago on December 30, 1903. 602 theatre-goers perished. The Iroquois was billed as being "Absolutely Fireproof," and had opened only five weeks before. The fire started when a drape came in contact with a powerful spotlight. The initial progress of the fire along the drapery was viewed with relatively little alarm by the greatly over-capacity crowd. This initial calmness was shattered when the drapery and other scenery crashed to the floor sending flames shooting out into the audience from under the half-lowered asbestos curtain. The simultaneous failure of the theatre lights created a panic which resulted in this unprecedented loss of life. These two fires are primarily responsible for the current emphasis on Fire and Life safety within the theatre.*

*This and other information is from The University of Texas at Austin Department of Drama Safety Guide and "Safety Guidelines for Theatre Production" by Steven Knight. former USITT National Vice Commissioner for Health and Safety.

1. All personnel involved in any department function should familiarize themselves with the location and operation of fire extinguishers, fire hoses, and fire alarms. However, TU's policy is that all persons evacuate immediately. If you know how to use a fire extinguisher, you do so at your own risk.
2. Faculty and staff members in charge of productions should check that all emergency lights and fire protection equipment are in working order.
3. Fire fighting equipment should never be blocked or obstructed at any time.
4. Smoking is not permitted on the Towson University campus
5. Open flames are not permitted on stage.
6. No welding or acetylene cutting or brazing shall take place unless an approved type fire extinguisher is stationed in the immediate area. A "Fire Watch" shall be established if the welding or related activity is close to any combustible material. Welding mask, gloves and jacket must be worn when welding.
7. Electric light bulbs must not be covered or decorated with paper or any combustible material.

8. Smoking, open flames, and arcing motors or switches are prohibited in the area of spray painting operations.
9. Exits and access to exits are to be kept uncluttered and unobstructed at all times.
10. No exit light shall be covered or its brightness or visibility reduced when an area is occupied.
11. Please see the university's decoration policy for acceptable stage decorations.

Chemical Safety

1. Anyone who use chemicals during while at TU must be trained in Hazard Communication/Right-to-Know. See the Technical Director or EHS for more information.
2. All chemicals must be labeled and Material Safety Data Sheets (MSDS's) must be obtained for each chemical on campus. See TU's Chemical Labeling Procedures for more information.
3. Only approved containers shall be used for the storage and handing of flammable and combustible liquids. These containers shall be properly labeled. Only specific amounts of flammable and combustible liquids may be stored outside a flammable liquids cabinet. See TU's Chemical Storage Guidelines for more information.
4. No toxic substances may be used or stored in the space without prior approval by the technical director or EHS. This includes, but is not limited to, oil based paints, lacquers, and solvents.
5. Read the MSDS for all chemicals you use.
6. All hazardous wastes must be disposed of through EHS. Anyone requesting disposal of hazardous wastes must be trained as a hazardous waste generator. See the Technical Director or EHS for more information.
7. Use the appropriate Personal Protective Equipment for the chemical you are using.

Rigging Safety (Consult Fly Guidelines for more detailed information)

1. During the rigging call, there shall be only one designated person to give instructions to the flymen.
2. No other work shall be done on the stage while rigging and hanging operations are taking place.

3. If personnel are working on the grid, the stage floor may be designated a hardhat area. An object falling from the grid or fly floor can do serious bodily damage to anyone standing under it.

4. Tools brought onto the grid or fly floor must be tied or secured to the worker.

5. Pockets should be emptied before going onto the grid. Eyeglasses must be fitted with a retainer.

6. Tools, hardware, equipment, etc. must never be left loose on the grid. Solid work platforms with raised edges should be used to work on equipment. Hardware should be secured in heavy cloth bags.

7. Electrical lines or rope must never be dropped to the stage floor from the grid or fly galleries. They should be coiled, tied, and lowered or carried down.

8. The correct call to warn of a line, equipment, or scenery coming down under control is "Heads!" The flyman should name the piece being moved and the stage area involved.

9. The emergency call for dropping objects is "CLEAR the Stage!" Crew heads should ensure that all persons working onstage understand these calls.

10. When hanging a standard counterweight set, the load shall be attached to the batten before loading the arbor, and the arbor shall be unloaded before detaching the batten load.

11. Before loading or unloading the arbor the flyman must be sure the gallery and floor areas beneath are clear of all personnel. The common sequence of calls is "Clear the Rail/Clear the Floor" from above which is answered by "Rail Clear/Floor Clear" from below. The worker(s) who acknowledged from the rail/floor must ensure that they are kept clear of personnel until the call of "Rail Safe/ Floor Safe" indicates that the loading procedure is complete.

12. Always use a spreader plate every two feet within a counterweight arbor stack and one on top secured by locking collars. Weight should be stacked with a full weight on top.

13. Never force and line set to fly if it feels or appears to be fouled.

14. Avoid storing anything on line sets; all battens should be stripped and the set restored to batten weight when not in use for a production.

Ladder Safety (consult TU Ladder Safety Guide for more detailed information)

1. Before any ladder is used, it should be inspected to assure that it is in safe condition.

2. Wood ladders should not be painted. Paint hides splits and defects. Shellac or varnish are acceptable alternatives.

3. Non-skid safety feet should be on any straight ladder before it is used.

4. The base of a straight ladder should rest on a level surface. The distance from the wall or surface against which it leans should be one quarter the length of the ladder.
5. A stepladder should always be completely opened and climbed only on the side with the steps. Never stand or work from the top of a stepladder.
6. Tools or other objects should be secured against falling while work is being performed from a ladder. Never leave any object on a ladder unattended.
7. Leaning from a ladder is never suggested. When leaning is a necessity, your "beltline" should never pass the sides of a ladder.
- 8) Ladders should always be returned to proper storage after every use.

Lighting Safety

1. Only authorized personnel who have received formal training in the operation of the lighting control and dimming systems are permitted to work with this equipment.
2. Visually inspect all electric cables and connectors for signs of frayed cords, loose or exposed wires, and damaged plugs before use.
3. Never leave a lighting instrument hanging before tightening the clamp and using a safety cable or other safety device between the batten and the instrument yoke. All lighting instruments must have a safety cable attached and all bolts properly tightened.
4. Always unplug an instrument before re-lamping, and take care when opening the instrument to avoid dropping any component parts.