Space and Venue Protocol policy

Last updated 2/18/2021

CORNISH VENUE SAFETY MANUAL
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Purpose

Cornish College of the Arts is firmly committed to providing a safe and healthy working environment for its faculty, students, staff and outside users. The following was established to provide information and policies that will serve as a guide to help promote the safety and well-being of employees, patrons and other guests of the college.

Everyone has a responsibility in maintaining a safe and healthful work environment free from recognized hazards. To do so will take the continued efforts of everyone (faculty and staff alike) to guarantee the success of this safety program. A key factor in implementing these policies will be the strict compliance to all applicable federal, state, local, and company policies and procedures. Failure to comply with these policies may result in disciplinary actions. Additionally, Cornish College of the Arts subscribes to these principles:

- All accidents are preventable through implementation of effective Safety and Health policies and programs. Safety and Health controls are a major part of our everyday work.
- Accident prevention minimizes human suffering, promotes better working conditions for everyone, and increases productivity. Staff and faculty will comply with all safety and health regulations which apply to the course and scope of operations.
- The College is responsible for providing the safest possible workplace for faculty, staff, and students. Consequently, Cornish is committed to allocating and providing all of the resources needed to promote and effectively implement this safety policy.
- Our safety program applies to all persons affected or associated in any way by the scope of this business, including patrons, rental clients, faculty, staff, and students. Everyone’s goal must be to constantly improve safety practices and awareness and to prevent accidents and injuries.

Guidelines

Avoiding Liability (for faculty, staff and users of the space)

Cornish and its employees can be found liable for accidents or illnesses if they fail to meet any of five major duties:

**TO INFORM.** Supervisors are responsible for providing students and employees, including instructional and operational staff with information about job site hazards. The information must be complete and specific. For example, in a classroom situation if a student is injured or made ill because faculty neglected to inform the class of potential hazards, the courts may interpret this as willful and/or knowing negligence on the part of the faculty and/or school.

**TO TRAIN.** Supervisors (including faculty and staff) must ensure that each student or employee knows how to work safely with hazardous materials or equipment. Supervisors must develop mechanisms to verify that students are trained to avoid making incorrect assumptions about their comprehension.
TO EXEMPLIFY. Supervisors, faculty, and staff must model safe behavior. If they are observed violating safety rules, they may be liable for damages caused when students also break the rules. In addition, supervisors, faculty, and staff must demonstrate a proper attitude toward safety. They must make it clear that safety is more important than finishing the work, cleaning up in time, or any other objective. Supervisors who show contempt for the regulations, who glorify risk-taking, or who belittle students or employees who try to follow the rules are demonstrating failure to exemplify.

TO ENFORCE. Supervisors cannot allow employees to violate the rules. Regulators make it clear that without an enforcement policy, there is no safety program. Likewise, employees must be in control of their students and must enforce the safety rules. Supervisors must support the employee’s attempts to enforce the rules. In fact, employees and supervisors may be liable even when students willfully break the safety rules if it can be shown that the rules were not enforced. Courts have held that enforcement policies must include meaningful penalties for those that break the rules—not a slap on the wrist. The penalties for infractions of safety regulations should be in writing as a part of every school’s written safety program.

TO PROVIDE A SAFE STUDIO/SHOP/CLASSROOM/THEATER. No amount of enforcement, training or information will make up for teaching in an unsafe environment. If a lesson or project cannot be completed while adhering to all safety regulations and observing all proper precautions, then it may not be undertaken. There is never a good enough reason for students or employees to violate safety laws in schools.

Safety Committee

The Safety Committee will meet monthly to communicate and evaluate safety and health issues brought up by staff, faculty, and students in the workplace. The Safety Committee is composed of Comish College of the Arts staff and faculty.

The goals of the safety committee are:

1. To provide information and promote staff awareness to enable and enforce safe working practices
2. To assist in creating and monitoring policies and procedures that ensure safe work practices are achieved
3. To provide a process to review conditions in order to identify and prevent unsafe practices

Purpose of the Safety Committee

The purpose of the Safety Committee is to provide a method of communicating and evaluating safety and health issues brought up by employees of the college. The Committee shall:

A. Review safety concerns, health inspections and accident investigations
B. Evaluate accident investigations conducted since the prior meeting(s) to determine if the cause(s) of the unsafe situation were identified and corrected if needed
C. Evaluate workplace accident and illness prevention programs and discuss recommendations for improvement if needed
D. Document attendance
E. Keep record of subjects discussed
F. Provide information and promote staff awareness to enable and enforce safe working practices
G. Helps in the creation and monitoring of policies and procedures that ensure safe work practices are achieved
H. Provide a process to review conditions in order to identify and prevent unsafe ones

Representation

The Safety Committee must have employee-elected and employer-selected members. The number of employee-elected members must equal or exceed the number of employer-selected members. Each of the performing and visual arts department core faculty and instructors will elect a representative. Employer-selected representatives should equal six or less.

Employer-selected members of the committee are the Vice President of Operations, a member of Human Resources, Director of CSES, Director of Housing & Residence Life, Facilities Crew Chief, and the Custodial Manager.

The term for employee-elected members must be a maximum of one year but there are no limits to the number of terms that can be served. One year terms run from September through May. When there is an employee-elected member vacancy, a new member must be elected prior to the next scheduled meeting.

The committee must have an elected chairperson that serves in the position for a one year term. A new chairperson is elected each year by members of the committee.

Communication with the President and members of the President's Cabinet

Should an issue become large enough that it would involve college policy change or significant disruption to either the college community or its buildings, the committee will choose a member to address the President and the President's Cabinet for feedback and final approval of proposed action.

Safety Disciplinary Policy

A safety and health Accident Prevention Program is unenforceable without some type of disciplinary policy. In order to maintain a safe and healthful workplace, everyone must be cognizant and aware of all company, State, and Federal safety and health regulations as they apply to the specific job duties required. The following disciplinary policy is in effect and will be applied to all safety and health violations.

The following steps will be followed unless the seriousness of the violation would dictate going directly to Step 2 or Step 3.

1. A first violation will be discussed orally between supervisor and the faculty, student or staff. This will be done as soon as possible.
2. A second offense may result in either dismissal, or the immediate denial of access to activity related to the violation.
3. A third time will result in revocation of privileges to work in the space.

Any employee of the College who knowingly and willingly violates any of the safety rules or procedures, or puts themselves or other users of the space in an imminent danger situation, will be immediately discharged.

Restricted Access

Cornish College of the Arts manages a variety of spaces including those geared specifically for live performance. A theatre space, especially the stage area, is essentially a large machine for producing plays and performances. It contains many hazards, especially to those unfamiliar with the mechanical and physical aspects of a theatre.

THEREFORE:
• No unauthorized personnel (i.e. anyone other than Cast and Crew) shall be allowed backstage during any performance, between call time and 15 minutes after the final curtain.
• No one is allowed access to the stage area unless supervisory personnel (faculty, staff, or authorized student supervisors) are present.
• No one shall be permitted to work alone in the Theatre space. In case of injury or incident, there must be another person present to render aid or seek assistance.
• Students may not operate the personnel lift in any venue without a Cornish faculty or staff member physically present in the space.

Description of Applicable Laws

*Emergency Action & Fire Prevention (1910.38-39 & 157(g), 1926.150). Workers must be trained in a facilities alarm and fire suppression systems, exit routes, where to meet for a head count, etc. Workers expected to use fire extinguishers must be trained how to use the equipment, when to fight and when to flee, etc. Training is required at the time of hire and annually thereafter.*

Training Procedure for First Day in Theater

When a new person or group is being introduced to the theater training will take place. This will be provided by the manager of the space, the Technical Supervisor, or the crew depending on the needs of the group or individual. The training that will take place is listed below.

• Review of evacuation procedures and their responsibility in an emergency
• Evacuation Route Walkthrough
• First Aid Stations
• Procedures for injury or accident
• Specific training when deemed necessary by individual’s role:
  o Fall Arrest
  o Respiratory
  o Catwalk safety
  o PPE
  o Hot Work
  o Gun Closet
  o Grid
  o Rescue Efforts
  o Rigging
  o FOH
  o Hazardous Materials

General Theater Safety

1. Smoking is prohibited in the building.
   *(RCW Section 70.160 Smoking prohibited in public places or places of employment.)*

2. All staff/student/faculty are responsible for keeping their work areas safe. This includes:
   • Keeping the floor and exit paths clear of obstructions
• Maintaining a safe environment for visitors; people here for appointments, meetings, classes, and shows
• Proper routing of electrical cords and not overloading electrical outlets
• In all overhead work areas, tools and equipment are to be secured
• Trash is to be disposed of properly
• All fire doors are to be kept closed at all times

3. All staff/faculty/students are responsible for closing down their work areas and turning off equipment.
• The theater has posted information about close down procedures to make sure that all equipment that needs to be turned off is checked, and necessary emergency lighting is left on
• Staff without proper training in the use of power equipment may not use it

4. All visitors to the offices, backstage and classrooms must have permission to be in the building. Patrons in the theaters will be assisted by the house management staff as needed. If Patrons need to go anywhere other than the theater or the lobby they must be escorted by staff.

• Visitors are not permitted onstage or backstage except by special arrangement
• Visitors to hazardous work areas (loading dock and theaters) will be guided a safe distance from ongoing work and will be provided with any necessary protective equipment
• Visitors are not permitted backstage during any performance, between call time and 15 minutes after final curtain

Tours and workshops onstage will be supervised by staff and faculty.

Medical Emergencies

Employees within the following titles will maintain first aid certification:

1. Technical Supervisor
2. Director of CSES
3. Front of House Managers
4. IATSE House Staff Crew

WAC 296-155-120 requires the presence of personnel trained in first-aid procedures at or near those places where employees are working. Compliance with the provisions of this section may require the presence of more than one first-aid trained person.
First Aid Kits
First Aid Kits will be maintained based on WISHA/OSHA regulations. They will be refilled and restocked as necessary by Cornish Security. A yearly audit of all First Aid Kits will take place to ensure that they are being properly maintained by Venue staff.

Any injury requiring first aid or other medical treatment must be reported to the Technical Supervisor as soon as possible.

All company members are reminded that at no time should individuals come in contact with another person’s blood or other bodily fluids. Each first aid kit is equipped with examination gloves. Blood or bodily fluid contaminated waste must be disposed of in an appropriate manner. Always use extreme caution when dealing with possible blood borne pathogen exposure. See Accident Report Form for procedures on how to handle and report accidents. See Blood Borne Pathogen Section on procedures for handling blood or other potentially infectious materials.

Seattle Center ESU (Emergency Service Unit, or Unit One) staff is the designated first aid responder. The ESU Unit is a 24/7 operation. Seattle Center is located within 2 miles of medical facilities.

Defibrillator
The Cornish Playhouse’s defibrillator is located outside the Front of House Manager’s office. It is in a red carrying case. It is labeled AED Defibrillator. PONCHO’s Hall defibrillator is located in the 1st floor security office. Raisbeck Hall’s closest Defibrillator is just outside of the MCC securities office.

In the event of an emergency that may require use of the defibrillator, get the device, open it up, and follow the three easy steps listed inside – no special training is needed. The equipment does not work unless someone’s heart has stopped, so you cannot shock someone accidentally.

*In the event of a person having an apparent heart attack, call 911 first.*

Front of House First Aid
There is a first-aid kit located in all FOH offices. Bandages, band-aids, gauze, and similar items may be provided to patrons upon request, or used by staff when needed.

**Medications are never to be provided to any patron for any reason.** Patrons requesting medication of any kind can be directed to the nearest drug store or 7-11. Provided medications may be used by first aid trained staff at their discretion, and at their own risk.

Bloodborne pathogens
In any situation where medical assistance or first aid is rendered, universal precautions must be practiced to guard against transmission of infection.

Bloodborne pathogens standard (1910.1030). This standard protects workers from exposure to blood and other body fluids. Rubber gloves are available in all First Aid kits and should be used EVERY time a student/faculty/staff is dealing with blood and other body fluids. Among its provisions, it requires that sharp items that are contaminated with blood or other body fluids be disposed of in a medical biological
hazards (sharps) container. A court case already showed that the standard is applicable to workers in the textile industry who use tagging guns and needles. So it would apply to wardrobe/costumers and any other workers who routinely suffer small cuts and accidents such as in props and scenic work.

A list of sharps containers on campus can be found here.

**Crowd Management Plan**
Cornish Venues (Playhouse, Raisbeck, Poncho)

**Emergency Contact Numbers**

! **If calling 911, notify the 911 Operator of the building’s address.**

**Cornish Playhouse** - 201 Mercer Street. Nearest cross streets are 2nd Ave N and Mercer Street. Send a runner to Mercer Street to meet Emergency Responders.

**Raisbeck Hall** - 2015 Boren Ave. Cross streets are Boren Ave and Fairview Ave

**Poncho Hall** - in Kerry Hall at 710 E Roy St. Cross streets are Roy St and Harvard Ave E

<table>
<thead>
<tr>
<th>Medical, Fire, Police Emergency</th>
<th>9-911</th>
</tr>
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<tbody>
<tr>
<td><strong>Seattle Center</strong></td>
<td></td>
</tr>
<tr>
<td>Unit 1: Security, Emergency, Medical Response, 24 hrs</td>
<td>206-684-7272</td>
</tr>
<tr>
<td>Seattle Center Hotline: Engineers, Plumbers, Electricians</td>
<td>206-684-7273</td>
</tr>
<tr>
<td>Seattle Center Engineers: Building Emergency at Alhadeff &amp; Playhouse</td>
<td>206-255-7669</td>
</tr>
</tbody>
</table>

**Cornish College of the Arts**

<table>
<thead>
<tr>
<th>MCC Security: 24 hrs</th>
<th>206-726-5038</th>
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</thead>
<tbody>
<tr>
<td>Kerry Security: M-F 6:30am-12:30am / S &amp; Su 8:30am-12:30am</td>
<td>206-726-5076</td>
</tr>
<tr>
<td>Dean Degraw (head of security)</td>
<td>206-726-5120</td>
</tr>
<tr>
<td>Elevator Problem (MCC Security)</td>
<td>206-726-5038</td>
</tr>
<tr>
<td>Raisbeck/Poncho Facilities Emergency</td>
<td>206-726-5175 (Ryan) 206-726-5008 (Jennifer)</td>
</tr>
</tbody>
</table>

**City / State**

<table>
<thead>
<tr>
<th>Seattle Police, non-emergency</th>
<th>206-625-5011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seattle Public Utilities Emergency Services, 24 hrs</td>
<td>206-625-4448</td>
</tr>
<tr>
<td>- Power Outage</td>
<td>206-625-4448</td>
</tr>
<tr>
<td>Service</td>
<td>Contact Information</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>- Electrical Emergency</td>
<td>206-706-0051</td>
</tr>
<tr>
<td>- Water Emergency</td>
<td>206-386-1800</td>
</tr>
<tr>
<td>- Gas Emergency</td>
<td>1-888-225-5773</td>
</tr>
<tr>
<td>Washington Poison Center</td>
<td>1-800-222-1222</td>
</tr>
<tr>
<td>24 hr Crisis Line (Emotional/Mental Health)</td>
<td>206-461-3222</td>
</tr>
<tr>
<td><strong>Cornish Venue Staff</strong></td>
<td></td>
</tr>
<tr>
<td>Pinky Estell: Director of CSES</td>
<td>206-726-5776</td>
</tr>
<tr>
<td>Jill Beasley: Technical Supervisor</td>
<td>206-726-5113</td>
</tr>
<tr>
<td>Allison Putnam: Patron Services Manager</td>
<td>206-726-5074</td>
</tr>
<tr>
<td>Andrew Murray: Rentals Manager</td>
<td>206-726-5190</td>
</tr>
</tbody>
</table>

**Medical Emergency**

- First Aid Box Locations - Playhouse Mainstage:
  - House Manager Office
  - Box Office white cabinets
  - Backstage Left and Right
  - 1st and 2nd Floor Backstage Hallway
  - Technical Booth, Loading Dock, Founders Room
  - East and West Side of 3rd Floor Admin Offices
- First Aid Box Locations - Alhadeff Studio:
  - Backstage left kitchen
  - Backstage 2nd floor outside control booth
- First Aid Box Locations - Raisbeck Hall
  - Box Office
  - Backstage door
- First Aid Box Locations - Poncho Hall
  - Security Office on 1st Floor
- Seattle Center ESU (Unit 1)
  - Designated First Aid Responders
  - 24/7 on call
- Bodily Fluids
  - Never come in direct contact with another person’s blood or other bodily fluids
  - Use extreme caution when dealing with possible blood borne pathogen exposure
  - First Aid Boxes are equipped with Bodily Fluid Clean-Up Kits which include gloves, masks and bio-hazard bags, etc.
  - Dispose: Contain everything in bio-Hazard bag, contact Director of CSES, drop in designated area in Loading Dock
    - If Emergency Services are called, send bag with responders
- Defibrillator
- **Playhouse Location:** just outside Playhouse FOHr’s Office in RED carrying case, labeled AED Defibrillator
- **Raisbeck Location:** on the 3rd floor of MCC by the Security Offices
- **Poncho Location:** on the 1st floor across the hall from the Security Office
- CALL 911 FIRST in the event of an apparent heart attack
- Turn AED on and the automated system will direct you through process
- Defibrillator goes with the Emergency Services when they arrive

**Hospital**
- Closest Hospital is Swedish Medical Center / First Hill Emergency Room
- 700 Minor Ave, Seattle, WA 98104
- Comish is not permitted to transport students to hospital - call security if needed

**Accident Report Form**
- Located on the FOH Drive as well as in the box offices of each venue.
- Must be filled out for all incidents requiring medical attention, even minor injuries
- Turn completed form into the Director of CSES and the Patron Services Manager.

**Who to Call When**
Below is the calling tree for informing the community of inclement weather, school mandated closure, fire alarm, earthquake, violent incident or a nearby incident that impacts our community. This list is in order of who to contact first.

- Use your best judgement if a severe medical emergency - call 911 FIRST
- Using your best judgement if a minor/First Aid injury - call 911 FIRST, Cornish security or Seattle Center Security Unit 1
- After taking care of immediate need, refer to the following Call Order:

1. Only needed if **not** closed by the school
   a. MCC security 206-726-5038
   b. Dean Degraw Director of Security 206-726-5120
2. Pinky Estell Director of CSES
   To inform academic department
   i. Coordinator
   ii. Chair
   iii. TD (if applicable)
   iv. Faculty/staff (if applicable)
3. Jill Beasley Technical Supervisor of CSES
   To inform stage crew & Venue Managers
   a. Amy Zimerman Managing Director of Intiman
   b. Morgan Janitor Lead
   c. Ryan Patterson Cornish Facilities Manager
4. Andrew Murray Rentals Manager (if it involves a rental)
   a. To inform rental clients
5. Allison Putnam Patron Services Manager
   a. To inform box office and house manager staff
   b. May also inform TNT staff
   **If Applicable:**
6. Playhouse’s TNT lead contact
Emergency Evacuation

- Coordinate
  - Asses initial state of primary emergency exits, note obstacles
  - Radio, booth operator
    - explain obstacles, give instructions for alternate routes
  - Booth Operator will make announcement over god mic
    - will include instructions to volunteers with alternate routes

- Exits - Playhouse Mainstage:
  - Backstage
    - Exits at back of Stage Left and Stage Right
    - See Evacuation Maps
  - House
    - Lower House Right: exit along West hallway and out Main Lobby Doors
    - Upper House Right: exit out ADA door
    - Lower House Left: exit directly out East side doors
    - Upper House Left: exit down East stairs and out Main Lobby Doors
      - In the event any exit is blocked, take the next closest clear exit
  - Lobby
    - Exits along East Wall, Main Lobby Doors, ADA Door on Mezzanine Level
    - Head South around back of building towards meeting points
    - Make sure to leave clear access for Emergency Responders

- Exits - Alhadeff Studio:
  - Backstage
    - Exits at back of Stage Left onto loading dock
    - Exit onto skybridge from 2nd floor and enter Playhouse with code 2013
    - See posted Evacuation Maps
  - House
    - Exit through house left and house right lobby doors
  - Lobby
    - Exits through front lobby doors
    - Head north to patron meeting point
    - Make sure to leave clear access for Emergency Responders

- Exits - Raisbeck Hall:
  - Backstage
    - Exit through the backstage door and go down the stairs to the right
  - House
    - Exit through the two emergency exits on the left and right of the theater and go
down the stairs closest to the exit
  - Lobby
    - Exit through the main lobby doors and go down the front stairs
- **Exits - Poncho Hall**
  - **Backstage**
    - Exit through the backstage doors/green room area into the 1st Floor Kerry Hallway
    - Exit through the glass doors next to the elevator onto Roy St.
  - **House**
    - Exit through the glass doors at the back of the house
    - If on upper level, exit the house and go down the stairs, exit through the front door of Kerry Hall (by Box Office closet)
  - **Lobby**
    - Exit through the front door of Kerry Hall (by Box Office closet)
    - If down the hallway and closer to the glass doors by the elevator, exit through those doors

- **Meeting Point - Playhouse and Alhadeff**
  - Head south around back of building, leaving clear path for Emergency Responders
  - **Performer Point:** NW corner of Fountain Lawn under propped up tree
  - **Patron Point:** Mercer Street sidewalk between Cornish Playhouse & PNB
  - Inclement Weather: head to the Armory Building
    - be sure to give Unit 1 a heads up you are sending people that way

- **Meeting Point - Raisbeck Hall**
  - **Performers and Patrons:** Gather by the digital marquee in the parking lot next to Raisbeck Hall.

- **Meeting Point - Poncho Hall**
  - **Performers and Patrons:** Across the street from Kerry Hall on the corner of Roy St and Bolyston Ave E.

- **ADA Patrons**
  - Do your best to evacuate them out closest accessible access
    - Note that the elevator will not be in service if fire alarm is triggered or if power is out
  - If you are not able to evacuate, position them as close as possible to exit and immediately tell Emergency Responders they are still inside and exactly where they can be found
  - The Lock Box in Alhadeff Studio has a key to the outside Comish at the Playhouse.

**Fire**

- **Chain of Command**
  - FOH Manager is the lead communicator to all emergency services.
  - **Playhouse and Alhadeff:** If FOH Manager incapacitated then: Master Stage Carpenter. If Master Stage Carpenter is incapacitated then: Master Electrician.
  - **Raisbeck and Poncho:** If FOH Manager incapacitated then: Security.

- **Fire Extinguishers**
Always call 911 FIRST
- Initiate Evacuation
- Attempt to put out fire with extinguisher if smaller than a waste basket

- Coordinate
  - If the Fire Alarm goes off, Emergency Services, and if at the Playhouse Seattle Center, are automatically dispatched
  - Radio Booth Operator to initiate evacuation
    - Booth Operator will make the evacuation announcement over god mic
    - Audio Engineer will cut sound so announcement can be heard
  - Collect bull horn, safety vest, clicker, house count

- Evacuate
  - Ensure that Volunteers are leading audience out to Exits, directing them away from any obstructions
  - Ensure Patrons are clear of space
    - House Manager sweep Lobby/ Bathrooms - close lower doors, exit
    - Booth Operator/ME sweep house - closing upper doors, exit
    - Playhouse: Master Stage Carpenter will sweep backstage and second floor, exit
    - Raisbeck: Raisbeck Manager (or appointed production member) will sweep backstage
    - Poncho: Poncho Manager will sweep backstage

- Meeting Point
  - Cast and Crew will be directed to Performance Point
  - Meet Audience and Volunteers at Patron Point
    - Identify missing patrons, gather description and last known location
    - Do not allow anyone to return to the building until cleared by the Fire Dept.
    - Patrons are permitted to leave if they choose

- Emergency Responders
  - Send Booth Operator/Master Electrician to meet Emergency Responders
    - Give house count and description and last known location of missing persons
  - Wait for further instructions and/or all clear
    - If building is cleared for reentry
      - Coordinate with Stage Manager about whether to resume show
      - Director of CSES must give final OK before re entering building
    - If not cleared for reentry, or 30 minutes have passed from evacuation
      - Address audience, notify them the performance will not resume
      - Coordinate with Fire Department to recover necessary objects (car keys, medication)
      - House Manager stays until all patrons have left

- Who to Call When
  - If Fire Alarm goes off - Fire Dept, and if at the Playhouse Seattle Center, are called automatically
  - When audience is evacuated safely - call Cornish Security and then Technical Supervisor/Patron Services Manager
Violent Incident

If a violent intruder or intruders are in the building, your first priority is **yourself**. Get out if you can, and call 911 remotely from a safe location. No staff members–House Management or otherwise is responsible for patron or performer count in this situation.

If evacuation is not possible, or if the intruder is outside of the building, the following procedure should be followed:

- **Chain of Command**
  - FOH Manager is the lead communicator to all emergency services.
  - *Playhouse and Alhadeff*: If FOH Manager incapacitated then: Master Stage Carpenter. If Master Stage Carpenter is incapacitated then: Master Electrician.
  - *Raisbeck and Poncho*: If FOH Manager incapacitated then: Security.

- **Coordinate**
  - Immediately radio Booth Operator, if possible, with nature/location/direction of threat
  - Call 911 and Unit 1 when possible.
  - Booth Operator will make an announcement to audience based on the nature of the threat
    - Audio Engineer will prepare sound system so announcement can be heard
    - *Do not use any codes in announcements*
    - Give clear, simple description of intruder, including location. Refer to the script in the emergency action plan.
    - HM and Booth Operator to follow ALICE guidelines:

- **ALICE**
  - **Alert**
    - Become aware of the situation and react.
    - Observe sounds and actions of those around you and use your judgement to understand the situation
    - Begin to plan your reaction (evacuate vs. lockdown, etc.)
  - **Lockdown**
    - Lock and barricade doors, close blinds and turn off lights
    - Silence phones
  - **Inform**
    - Call 911 when it is safe to do so and give as much information as possible. This may need to happen after you have evacuated and are out of danger.
    - Inform each other about event by text, voice, email, and/or announcement over speakers.
    - If evacuating, inform those that you come across not to enter the dangerous area.
  - **Counter**
    - Attack, swarm, subdue violent person
    - Distract, yell, throw objects
    - Secure weapon in a safe place
  - **Evacuate**
    - If it’s safe, evacuate
    - Exit building and run erratically
    - Use trees, cars or structures as cover
- Continue out of the area until you are out of danger

- **NOTE: ALICE** does not have to be enacted in the above order. Evacuate is the safest and best option after becoming aware that there is danger.

- **Who to Call When**
  - 911 FIRST
  - Then Unit 1
  - Then Cornish Security
  - Then Technical Supervisor and Patron Services Manager

### Earthquake

- **Chain of Command**
  - FOH Manager is the lead communicator to all emergency services.
  - **Playhouse and Alhadeff:** If FOH Manager incapacitated then: Master Stage Carpenter. If Master Stage Carpenter is incapacitated then: Master Electrician.
  - **Raisbeck and Poncho:** If FOH Manager incapacitated then: Security.

- **Coordinate**
  - It is safest to stay put during an earthquake until the shaking stops completely
  - **EVACUATE IMMEDIATELY if Fire Alarm goes off or if things begin to fall from the ceiling**
    - Radio Booth Operator
      - Booth Operator will make announcement to audience asking them to staff in place and remain calm
    - Collect emergency vest, bull horn, clicker, house count

- **Evacuate**
  - Once shaking stops
  - Radio Booth Operator to initiate evacuation
    - Booth Operator will make the evacuation announcement over god mic
    - Audio Engineer will cut sound so announcement can be heard
    - If power is out, HM makes announcement from stage with bull horn
  - Ensure the Volunteers are leading audience out to Exits, directing them away from any obstructions
  - Ensure Patrons are clear of space
    - House Manager will sweep Lobby and Bathrooms
    - Booth Operator/Master Electrician will sweep house
    - **Playhouse:** Master Stage Carpenter will sweep backstage and second floor
    - **Raisbeck:** Raisbeck Manager (or appointed production manager) will sweep backstage
    - **Poncho:** Poncho Manager will sweep backstage
    - Cast and Crew will be directed to Performance meeting point

- **Meeting Point**
  - Cast and Crew will be directed to Performance Point
  - Meet Audience and Volunteers at Patron Point
    - Call 911 if there is a medical emergency
- Identify missing patrons, gather description and last known location
- Do not allow anyone to return to the building until cleared by the Fire Dept.
- Patrons are permitted to leave if they choose

**Emergency Responders**
- Send Booth Operator/Master Electrician to meet Emergency Responders
- *If at Playhouse, Send Master Carpenter to Fisher Pavilion to coordinate with Seattle Center*
  - Give house count and description and last known location of missing persons
- Wait for further instructions and/or all clear
  - **Performance will NOT resume after an earthquake**
    - Address audience, notify them no one may re-enter building
    - Coordinate with Fire Department to recover necessary objects (car keys, medication)
    - House Manager stays until all patrons have left
    - If audience cannot get home, direct to Armory (coordinate with Unit 1 before sending crowd)
  - **Who to Call When**
    - Emergency Services may be flooded and cell service may not be available. Use landline available to you to make calls
    - If at the Playhouse, call Seattle Center Engineers and report any visible damage
    - Call Cornish Security - report and inform
    - Call Patron Services Manager and/or Director of CSES with report/update
    - If at the Playhouse, be in communication with Seattle Center officials in the Fisher Pavilion

**Power Outage**

- **Coordinate**
  - Radio Booth Operator immediately if possible to make announcement
  - If contact is not possible, collect safety vest and bull horn and head to stage to make announcement to audience
  - When Back up lights will come on
    - Exit Lights
    - By all doors
    - Along Left and Right side of House
    - Throughout Lobby
  - If at the Playhouse, call Seattle Center Engineers to determine scope and length of power outage
  - Coordinate with Booth Operator, Master Carpenter and Stage Manager to determine how long you will hold for power to return.
  - Make another announcement to audience letting them know that you will either hold for ___ minutes OR call show and begin evacuation

- **Evacuate**
  - House Manager wait for 30 minutes max for responders/information before releasing audience
Ensure that Volunteers are leading the audience out to Exits, directing them away from any obstructions. Instruct the audience that performance is over - and to contact the company for questions on tickets.

Ensure Patrons are clear of space

- House Manager will sweep Lobby and Bathrooms
- Booth Operator/Master Electrician will sweep house
- Playhouse: Master Stage Carpenter will sweep backstage and second floor
- Raisbeck: Raisbeck Manager (or appointed production member) will sweep backstage
- Poncho: Poncho Manager will sweep backstage

- Emergency Responders
  - If at the Playhouse, Seattle Center Engineers should be called and will come unless there is a major event.
  - Call 911-Fire Department if anyone is stuck in the elevator (If at the Playhouse, you can also call the Seattle Center Engineers).
  - House Manager waits until the last patron has left before being dismissed.

- Who to Call When
  - If at the Playhouse, Call Seattle Center Engineers
  - Call Seattle Public Utilities
  - Call Comish Security - request their presence
  - Call Technical Supervisor/Patron Services Manager

Severe Weather, Shelter-in-Place

(Procedures listed for severe weather, volcano, catastrophic city wide event - additional procedures for violent events are in bold)

- Coordinate
  - FOH Manager assesses the situation/ listens to City/State/Federal Announcements to Shelter in Place.
  - If authorities are unavailable, use available information to assess the situation.
  - If Shelter in Place is decided then follow the procedure below
  - Lock Lobby doors (unless violent event prevents you from being able to do so)
  - Unless there is an imminent threat, ask everyone to call their emergency contact to let them know where they are and that they are safe.

- Shelter in Place
  - Let Booth Operator know to read Shelter in Place script to audience
  - Sweep Lobby Bathrooms/House and usher people into the Main Auditorium.
  - Use microphone by audio station to make frequent (every 5-10 minutes) announcements to public letting them know what is happening. Remain calm. If power is not available - use bullhorn.
  - Call emergency contacts and have the phone available if you need to report a life-threatening condition. Cellular telephone equipment may be overwhelmed or damaged during an emergency.
  - Take your emergency supplies into Main Auditorium
• **Emergency Responders**
  - If catastrophic event, assume that cell phones will not be working and emergency responders will be flooded.
  - Request patrons stay in Main Auditorium until instructed by Government officials to do otherwise.
  - **At Playhouse, if under Shelter-in-Place during a violent event - usher audience on stage and have MSC drop the fire curtain. Request for calm and quiet.**
  - **At Raisbeck, if under a Shelter-in-Place during a violent event - usher audience into backstage area and close pocket doors. Request for calm and quiet.**

• **Who to Call When**
  - Call UNIT 1 and report of audience - and request constant updates
  - If at the Playhouse, call Seattle Center Engineers with any building needs
  - Call Comish Security and request presence
  - Call Technical Supervisor/Patron Services Manager

**Death in Theater**

In case of death within the theater audience during a live show, the Front of House Manager will be notified. All effort will be made to not disturb the show as to not increase the trauma of the family and friends of the deceased party. 911 is to be called. The body is to be removed from the auditorium if possible. If not possible, then Emergency staff to enter and remove the body.

**Reporting Safety Problems or Injuries**

Potentially hazardous situations should be reported immediately. Problems can be reported first to the staff member working in the area or their supervisor; they should be reported to the Technical Supervisor at the first opportunity.

The first priority should be to remedy the situation before any injury can occur. A hazardous situation could result from:

- Physical damage or a barrier, temporary or permanent.
- Furniture or a tool that needs repair.
- Improper use or storage of hazardous materials.
- Improper activity on the part of an employee, student, patron, or unauthorized visitor.

In the event that an injury does occur, the following steps should be taken:

- Get appropriate medical treatment.
- As soon as is reasonable, an official Comish College of the Arts Accident Report form should be filled out.
- Send a copy of the accident report to the Director of CSES and the employee’s direct supervisor.
Fire Curtain
The Cornish Playhouse to be in compliance with the following NFPA Laws regarding the use of the Fire Curtain.

20.7.1.1 The fire safety curtain assembly shall be closed at all times except when there is an event, rehearsal, or similar activity.

20.7.1.3 Emergency operation shall be verified by the owner every 90 days.

20.9.1 The rigging system shall be inspected annually

20.9.1.3 Retraining of the owner and staff shall be mandatory during each annual inspection.

Hazardous Materials
General
In order to ensure the health and safety of its students, faculty, staff and visitors, the College does not allow the use of certain materials within the academic or housing buildings. No hazardous material will be brought on campus without the approval of the CSES Department and the appropriate person within the school/department. Any chemical or material that may be flammable, combustible, toxic, corrosive, reactive or explosive, must have a Safety Data Sheet (SDS) on file with the Office of Operations, as well as in the department or school which uses the material. Some materials, in order to be used, require that the person using the material wear Personal Protective Equipment (PPE) as a protective respirator (face mask).

Materials
- Spray Paint or other aerosolized mediums cannot be used inside any building with the exception of a designated spray room on the 4th floor of MCC or spray booth at the Comish Playhouse.
- Other materials will not be used by students, faculty or staff without specific authorization of the faculty or staff member responsible for the lab, shop or space in which the material is to be used. Use in general areas of the academic buildings must be approved by the Operations Coordinator. Use within the Comish Commons must be approved by the Director of Housing.

Disposal of Hazardous Material
All hazardous materials must be disposed of by using an authorized disposal agent. The Facilities Department is responsible for the disposal of any hazardous material which has been used on campus. The material will be picked up by the Facilities Department and stored in an appropriate location until picked up by an authorized disposal agent. Any department that has hazardous materials to dispose of shall contact the Facilities Department or through an online Work Order.

- A hazardous chemical is any chemical or mixture of chemicals that can hurt you physically or cause health problems. Most industrial chemicals are hazardous.
- Never assume a chemical is safe. If you aren’t sure how to use a certain chemical, ask your supervisor for information.
- Manufacturers of hazardous chemicals used in your workplace must tell your employer about the nature and effects of those chemicals. In turn, your employer must tell you about them and train you in their proper use.

**Working with Chemicals:**

The chance you will be affected by a hazardous chemical depends on:
- The chemical itself
- Your work surroundings
- The way your specific job is performed and
- Your understanding of the hazards and ways to protect yourself.

The risk of working with a hazardous chemical can be reduced in five (5) ways:

1. **Being aware of the hazards.**
   a. Know the hazards.
   b. Read and understand the chemical label.
   c. Read and understand the SDS.
   d. Understand how to protect yourself.

2. **Controlling the work area.**
   a. Ventilation.
   b. Isolate the work area so that people not working with the solvent aren’t exposed.

3. **Using personal protective equipment.**
   a. A respirator with proper cartridges can help to keep vapors from your lungs.
   b. Use gloves that prevent the chemical from contacting your skin.
   c. Use any other Personal Protective Equipment appropriate to the task (includes eye protection, other skin protection, foot protection)

4. **Practicing safe work habits.**
   a. Avoid breathing vapors.
   b. Avoid skin contact.
   c. Use the chemical only in well-ventilated areas or suitable work spaces.

5. **Using common sense.**
   a. Be aware of your work environment.
   b. Take a moment to think about what you’re doing.
   c. Make sure you’ve had the training and equipment necessary before you begin using the chemicals.
   d. Seek guidance or help if you do not have the knowledge or information necessary to follow these guidelines.

**Finding Out More About A Chemical**

The main sources of information about the chemicals in your workplace are the label on the chemical container, the SDS prepared for that chemical as well as this hazard awareness program.

- To protect your health, read the label on the container. It is very important to read all product labels as this is your first source of hazard information.
- Many labels will also explain how to safely handle the chemical.
- It should tell you exactly what could happen to someone who is exposed to the chemical.
• If the label only has vague warnings such as "caution" or "danger," bring it to your supervisor's attention so that proper information can be obtained.

Container Labeling
• Any employee receiving hazardous materials (if you are signing a delivery slip or the like) or any employee unpacking a hazardous material (opening a box, unwrapping, etc.) needs to verify that all containers received are clearly labeled as to the contents (WAC 296-800-17025).

• This employee is also responsible to see that any information that is included (for example, an SDS) gets to the Technical Supervisor so that it can be evaluated and filed properly. Note the appropriate hazard warning and list the name and address of the manufacturer.

• Any employee putting any chemical into a secondary container is responsible for seeing that that container receives proper labeling. For questions or help with labeling, see the technical supervisor.

• The label must contain the product identity and the appropriate hazard warning.

• The container must be appropriate for the chemical it holds and must be stored in an appropriate fashion for that chemical.

Labeling Exceptions
• You are not required to label portable containers in which hazardous chemicals are transferred from labeled containers and which are intended only for immediate use (within a single work shift) by the employee who makes the transfer.

The Technical Supervisor will review the labeling procedures each season and update as required.

Safety Data Sheets (SDS)
You must maintain and keep copies of an SDS for each hazardous chemical present in your workplace. An SDS is a technical bulletin that tells you about chemicals in your workplace.

• Before working with a chemical, you should look at the SDS. It will outline what the chemical is, and how to protect yourself from its effects.

• Printed copies of all SDS for all hazardous chemicals in use in each specific area is always available and accessible. Each SDS book(s) contains:
  ○ All SDS for all chemicals currently used in each specific department (SDS are filed by use such as paints, dyes, adhesives, etc.) An example SDS and instructions of how to read and interpret an SDS (This is for reference purposes and supplements training.)
  ○ A section for general chemical use information including, but not limited to, the recommended respirator cartridge chart, glove selection chart, etc.

• If any information is missing from an SDS book(s), immediately contact your department supervisor. If any information in an SDS book(s) is unclear, immediately contact your department supervisor.
● If the SDS isn't provided with the shipment of a hazardous chemical, obtain an SDS for each hazardous chemical used as soon as possible from the chemical manufacturer or importer.

The Technical Supervisor will review incoming SDSs for new or significant health and safety information. They will see that any new information is passed on to affected employees.

Respirators

General Respirator Information
If at any point during respirator use you feel disoriented, light headed or dizzy, stop your activity and remove yourself to a fresh air environment. Immediately inform your supervisor.

If at any point during respirator use you start to “taste” the contaminant that you are using, remove yourself to a fresh air environment and access your respirator for fit, cartridge type, cartridge age and for correct cartridge usage.

Choosing Respirators
It is your responsibility to purchase a protective mask before using spaces like the fume rooms, spray rooms or sanding areas.
To help you choose the best fit and type of mask for your work, we have Qualified Respirator Fit Testers on staff. Appointments are necessary. The studio technicians, stage crew, and venue managers can give you the contact information for the staff fit tester. During your fit test appointment you will receive help finding the mask that best fits your face and the most effective filters for your substance exposure.

You will then be provided with the information necessary to follow up on purchasing your personal mask.

Respirators and Masks
Many art processes produce particles or fumes that are dangerous. Some chemicals can harm us immediately, and others cause damage that builds over time.

Many of the smells we associate with our practice are actually harmful. Dusts are often irritants or carcinogens. Solvents from painting or cleaning materials pose a risk to our liver and nervous system. Even that sweet smell of beeswax becomes dangerous when heated beyond a certain temperature.

Cornish requires students, faculty and staff to wear respirators or dust masks during certain processes.

A disposable N95 dust mask may be enough for processes like mixing plaster or cutting wood on a saw, but other processes like spray painting need a respirator fitted with specific cartridges to protect your respiratory system. Your studio technician can help you determine your needs for specific processes.
Choosing Respirators
It is your responsibility to purchase a protective mask before using spaces like the fume rooms, spray rooms or sanding areas.
To help you choose the best fit and type of mask for your work, we have Qualified Respirator Fit Testers on staff. Appointments are necessary- your studio technician can give you the contact information for the staff fit tester. During your fit test appointment you will receive help finding the mask that best fits your face and the most effective filters for your substance exposure.

You will then be provided with the information necessary to follow up on purchasing your personal mask.

Respirator Cartridges
Properly fitted respirators provide a more secure fit that is essential when dealing with processes that produce fumes.

There are many specific cartridges to protect the user against certain hazards in the workplace, but most arts applications can be made safer with just a few different types of respirator cartridge. Each respirator company has its own proprietary filters to fit its respirator masks, but the breathing protection is the same across brands.

For simplicity, Cornish recommends using a P100 filter on respirators because it provides the highest level of protection across a variety of processes.

Descriptions of Applicable Laws
Respiratory Protection (1926.103, 1910.134). Use of respirators, including half-face toxic dust masks, must comply with 29 CFR 1910.134 which requires employers to establish a respirator program. In general, these are:

- A written program and risk assessment detailing how the employer will meet the requirements and how respirators will be selected.
- Medical certification and an annual check on the employee's medical status to assure that they are physically able to wear a respirator and tolerate the added breathing stress safely. New York members can call Beverly Miller in the USA Office for information on getting free certification.
- Fit testing of workers by a qualified person using one of the approved methods done annually.
- Procedures for regular cleaning, disinfecting, and maintaining all respirators. Respirators that are shared must be disinfected after every use.
- Procedures for formal, documented training of workers.

Where to use Breathing Protection
Wood Shop
When working with tools to cut, form or sand wood, protect yourself from exposure to the wood dust with a well fitted disposable N95 dust mask or a respirator with a P100 filter cartridge. Some
tropical woods present hazards in addition to respiratory issues, so talk with a technician if you plan to use a wood type not stocked by the shop.

Apply wood finishes in the fume area, and protect yourself from the volatile fumes with an Organic Vapor cartridge on a fitted respirator. If you’re spraying a finish, whether paint, varnish, shellac or polyurethane, use the spray room, and add a P100 filter to the cartridge to increase its useful life, or use a combination cartridge with organic vapor and P100 filters.

**Metals Shop**

When grinding or sanding, protect yourself from exposure to the wood dust with a well fitted disposable N95 dust mask or a respirator with a P100 filter cartridge.

When welding or plasma cutting, wear a well fitted disposable N95 dust mask or a respirator with a P100 filter cartridge or a P100 “pancake” filter. Bespoke welding respirators have a smaller profile that fits better under a welding hood, but you should only purchase one if you’re able to fit test the respirator.

Apply metal finishes in the fume area, and protect yourself from the volatile fumes with an Organic Vapor cartridge on a fitted respirator. If you’re spraying a finish, use the spray room, and add a P100 filter to the cartridge to increase its useful life, or use a combination cartridge with organic vapor and P100 filters.

**Mold Shop**

When carving, sanding or finishing any object made in the mold area, wear a well fitted disposable N95 dust mask or a respirator with a P100 filter cartridge.

While mixing dry materials including plaster, plaster hybrids, portland cement and concrete, well fitted disposable N95 dust mask or a respirator with a P100 filter cartridge.

**Urethane casting resins** require an extra level of protection during handling and mixing. Wear a respirator fitted with an Organic Filter anytime you’re handling the two components, and measure, mix and pour urethane resins in the fume room.

**Venues**

There is ever changing air quality in a venue. Loading dock and stage areas can vary depending on several conditions. These conditions include, but are not limited to: dust from power tools, mists from water based latex and acrylic paints, chemical and CO2 based fogs from fog machines.

- When wood dust is present in the air from operating machinery, use a well fitted disposable N95 dust mask or a respirator with a P100 filter cartridge.
- Latex and acrylic paints are water-based paint and are non-toxic. When these paints are sprayed, a fine mist can occur. Wear a particle mask when spraying or when in an area where spraying is taking place.
• Chemical based theatrical fogs are not harmful in normal concentrations. Do not exceed limits of concentration on the Material Safety Data Sheet (SDS). See "D. Chemicals, Hazards and Safe Working Practices" of this policy for more information on SDS.
• CO2 fog can be dangerous if inhaled. It doesn’t contain enough oxygen to support inhalation. CO2 fog lies on the ground and seeks low areas. Do not lie down in the fog. Avoid inhaling the fog. Any work that must be done in an oxygen deficient area must be approved through the technical supervisor.

Chemicals and Solvents
Many solvents, adhesives, enamel, spray paints, and Styrofoam are used in the loading dock and stage areas. Many of these chemicals produce toxic fumes and gasses and are extremely flammable. Consult the material safety data sheet (SDS) for proper handling and hazards of each specific chemical.

• Read the SDS on each chemical before using it.
• Wear the proper protective clothing and equipment for the job.
• Prevent inhalation/ingestion of chemicals. Wash hands frequently. Do not eat, drink, smoke, or apply lip balm around chemicals.
• Keep the workplace clean and free of debris.
• Solvents such as paint thinner, lacquer thinner, alcohol, and acetone must be used in well ventilated areas.
• Spray paints must be used in well ventilated areas. See technical supervisor for disposal of empty spray cans.
• A particle mask rated for spraying latex and/or acrylic paint is required when spraying latex and acrylic paints.
• Protective gloves must be worn when handling chemicals, including dry ice. If gloves or any other personal protective equipment, including respirators, does not fit properly, or becomes damaged, contact supervisor, immediately discard the damaged equipment and replace with new, clean equipment. Damaged PPE should never be reused for any reason.
• Eye protection must be worn when handling chemicals, including dry ice.
• Smoking or open flame is not permitted when working with chemicals.
• Waste chemicals must be disposed of properly. See the technical supervisor for questions on proper disposal.
• SDS are to be maintained on file in the technical supervisor’s office or another public access area for all chemicals in use.
• Flammable chemicals are to be stored in safety cans and in properly labeled flammable storage cabinets.

Handling Liquid Spills

Minor Chemical Spill Procedures
• Alert people in the immediate area of spill.
• Avoid breathing vapors from spill.
• Put on protective equipment, including safety goggles, suitable gloves, and long-sleeved lab coat (hanging in the Acid Room with the aprons to the right of the door).
• Confine spill to a small area.
• Use appropriate materials to neutralize and absorb inorganic acids and bases.

• For other liquids, absorb spill with vermiculite, dry sand, or absorbent pads.
• For solid spills. Cover the spill with a slightly damp paper towel to avoid creating a cloud of dust, push the material into a dustpan or other instrument using the towel - DO NOT use a broom/dust brush, this will contaminate it and it will need to be replaced.
• Collect material, used adsorbents/neutralizing agents, etc. in a polyethylene bucket.
• Call Head of Facilities (206) 726-5175 to arrange for collection and disposal of spill residue, if after hours call MCC Security (206)-726-5038

**Major Chemical Spill Procedures**
A spill automatically becomes "major" in the following instances:

⇒ There is a fire, or the threat of fire, outside of a controlled space (fume hood).
⇒ There is a personnel injury or exposure likely to require medical assistance.
⇒ The spill involves unknown or highly reactive material.
⇒ There is a release of a toxic or flammable gas outside of a controlled space.

• Attend to injured or contaminated persons and remove them from exposure.
• Alert people in the area to evacuate. If danger is believed sufficient - pull the fire alarm and evacuate the building.
• If spilled material is flammable, turn off ignition and heat sources if that can be done safely. Keep any static causing tools away from the spill.
• Close doors to the affected area.

Call MCC Security (206)-726-5038. Provide as much of the following as is known.
• What chemical(s) are involved?
• How much was spilled?
• Where the spill is located?
• Nature of any injuries?
• What control measures have been taken?
• Your name and phone number (or where you will be located)?
• Meet responders.

**Spill Clean-Up Procedure**
Wear gloves and a mask. Use the spill kit for anything that needs to be absorbed and containerized. Refer to the SDS.

**Spray Room Protocols**
There are two spray rooms on campus. One is located at MCC on the 4th floor room 417. The other is located backstage at the Playhouse, 1st floor.

**Before Entry**
• Purchase your personal use Respirator. This is required.
- We recommend a 3M 6500 mask and the 6001 respirator cartridge for most curricular uses.
- Contact the CSES Technical Supervisor to make an appointment.
- 1 person occupancy in this room.

Upon Entry
- Use Personal Protection Equipment - (PPE)
  - Use hand sanitizer.
  - Use your respirator, eye protection, and gloves. A dust mask is not a respirator.
  - A respirator is used to protect you from fumes and if used improperly, the wrong fit or not kept clean, the respirator itself can become a hazard to you.
  - If at any point while using your respirator, you feel disoriented, light headed or dizzy, stop your activity and remove yourself to a fresh air environment and inform someone of your issue. If at any point while using a respirator, you start to “taste” the contaminant that you are using, remove yourself to a fresh air environment.
- Do not misuse this Spray Room
  - Do not spray directly on the walls, door, furniture, HVAC, light fixtures or electrical outlets. No open flame or sparks.
  - Do not spray directly on the wall filters. It is critical that these filter properly.
- Project Set Up
  - Use craft paper behind or under your project. When you finish spraying, set work aside inside the spray room to dry and off-gas to prevent fumes/odor from entering classrooms and hallways. Once dry, remove from the spray room. Be mindful and do not disturb other student’s projects if they are still drying. Fill out a label (Name, material, contact info, date) and leave next to your work that is drying.
  - Keep the door closed behind you so fumes do not get into classrooms during use. Close the door when you leave. Do not over saturate the room with fumes and allow proper time for fumes to exit into the filtered ventilation between use.
  - Examples of products you may use in here are spray paint, spray fixative, spray adhesive or spray wood finishes.

Before Leaving
- Sanitize
  - Disinfect shared surfaces that you use or touch. This includes your respirator, door handles, light switch, easel stands, rolls of tape, cabinet surface, scissors, table top etc.
  - Throw away disposable gloves and disinfecting wipes.
  - Clean up your work area. Store your products in the Flammables cabinets in your studios.
  - Close the door completely.

Hazard Awareness
Risk is an inherent factor in every endeavor, and using hand tools and power equipment can amplify the danger. Acknowledging the type and level of risk is the first step to avoiding personal injury and
property damage. The following are personal injury risks commonly encountered in the theater production environment:

**Slips/Falls**
- Wet floors and trip hazards occur often in a theatrical environment
- Darkness increases risks of slip/fall hazards.

**Electrocution**
- Most power tools are electrically motivated and therefore carry a risk of electrical shock because of insulation fault, power line fault, power surge, contact with liquid, short circuit, or ground fault.
- Lighting, sound, and special effects equipment also use electricity and should be subject to the same precautions as other electrical equipment.

**Cuts, Bruises and Abrasions**
- Power tools used in all types of production often have moving blades or abrasive surfaces that can cause severe injury if they contact the body.
- Hand tools can contain cutting/sharp surfaces that must receive the same careful handling.
- Some materials may have sharp edges or rough surfaces that can injure workers.

**Puncture Wounds**
- Powered fastening tools such as staplers/nailers as well as sewing machine needles can produce puncture wounds if used improperly.
- Many construction materials often can fray or splinter and present a similar puncture wound hazard.

**Burns, Thermal and Chemical**
- Metal construction/welding typically involves high heat that can result in contact burns of varying severity.
- Steam irons, steamers, dye vats, heat guns, hot glue guns, hot plates/stoves, and soldering equipment all produce heat that will produce burns or be an ignition source for fire.
- Lighting and other electrical equipment may also become dangerously hot under normal operating conditions.
- Many chemicals used in the production department are caustic and will cause burns if put in contact with the body.

**Blunt Force Trauma**
- Sudden or forceful contact with any variety of items can cause bruises, contusions, broken bones or any number of other injuries. These injuries are commonly caused by falling or moving objects.
- These same circumstances can also produce crushing or pinching hazards.

**Hearing Damage**
Many production activities produce high noise levels that can temporarily or permanently impair hearing if an individual is without hearing protection. These activities include, but are not limited to, using power tools, hammer, pneumatic fasteners, powder actuated fasteners, welding, etc.
Long-term exposure to noise will cause permanent hearing loss that cannot be treated medically.

**Vision Damage**
- Theater lighting can produce light levels high enough to damage sight.
- Production activities such as welding can also be a hazard to vision.
- Injury to the eye itself can occur from debris from cutting and shaping, broken bits, blades or sewing machine needles.

**Respiratory Damage**
- Chemicals used in the production departments may be hazardous if inhaled, even in small quantities.
- Airborne particles from material cutting or shaping can be dangerous.
- Some activities produce smoke or fumes that may be hazardous.

*Note: This list is not inclusive of all possible production department hazards or hazardous circumstances. It is instead intended to increase awareness of possible hazards that workers may encounter in the course of their duties. Employees must understand the risks inherent to their work, and strive to reduce the likelihood of injury by identifying and avoiding or reporting potential hazards. For further information on potential hazards and how to protect yourself, see Personal Protection Equipment & Respiratory Protection Program in this handbook.*

**Wet floor and wet paint**
There are both intended and unintended cases of wet surfaces in a theater.

**Intended**
Any time the floor has been mopped or painted. Mark and block off entrances to wet painted floor areas. A sign declaring "Wet Surface" must be placed near any entrance to the space to prevent potential falls. This sign can be found by asking the Technical Supervisor.

**Unintended**
Floors in the loading dock and stage areas are often wet due to painting and spills. Also, paint from high gloss may render a floor slick. To prevent harm from wet surfaces, ensure that you:
- Stay alert to changes in work conditions.
- Clean up spills as they occur.
- Notify the supervisor of any unsafe condition immediately.

Use extreme caution during a load in if it is raining. Consideration should be given to the surface of any ramp or tread, particularly those which could become wet.

**Ladder Safety Rules**

**General**
- Inspect before use for physical defects.
• Ladders are not to be painted except for numbering purposes.
  ○ Please Note: there are 3 ladders in the Playhouse that are fully painted and still in use.
• Do not use ladders for skids, braces, workbenches, or any purpose other than climbing.
• When you are ascending or descending a ladder, do not carry objects that will prevent you from grasping the ladder with both hands.
• Always face the ladder when ascending and descending.
• If you must place a ladder over a doorway, barricade the door to prevent its use and post a warning sign.
• Only one person is allowed on a ladder at a time.
• Do not jump from a ladder when descending.
• All joints between steps, rungs, and side rails must be tight.
• Safety feet must be in good working order and in place.
• Rungs must be free of grease and/or oil.

**Stepladders**

• Do not place tools or materials on the steps or platform of a stepladder.
• Do not use the top two steps of a stepladder as a step or stand.
• Always level all four feet and lock spreaders in place.
• Do not use a stepladder as a straight ladder.

**Straight type or extension ladders**

• All straight or extension ladders must extend at least three feet beyond the supporting object when used as an access to an elevated work area.
• After raising the extension portion of a two or more stage ladder to the desired height, check to ensure that the safety dogs or latches are engaged.
• All extension or straight ladders must be secured or tied off at the top.
- All ladders must be equipped with safety (non-skid) feet.
- Good rule of thumb is standing with your feet at the base of the ladder, you should grasp the side rails with arms fully extended and parallel to the ground.

<table>
<thead>
<tr>
<th>Rubber Safety Feet</th>
<th>Spikes</th>
<th>Cleats Nailed to the Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladders with supports on the bottom.</td>
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- Portable ladders must be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is about one-quarter of the working length of the ladder.
Scaffold Safety Rule

Before starting work on a scaffold, inspect it for the following:

- Are guardrails, toe boards, and planking in place and secure?
- Are locking pins at each joint in place?
- Are all wheels on moveable scaffolds locked?

Scaffolding Requirements:

- Use a ladder to gain access to a scaffold unless it is specifically designed for climbing.
- Scaffolds and their components must be capable of supporting four times the maximum intended load.
- Any scaffold, including accessories such as braces, brackets, trusses, screw legs, ladders, etc., damaged or weakened in any way, must be immediately repaired or replaced.
- Scaffold planks must extend over their end supports not less than 6 inches nor more than 12 inches, unless otherwise specifically required.
- Scaffold platforms must be at least 18 inches wide unless otherwise specifically required or exempted.
- Where persons are required to work or pass under the scaffold, scaffolds shall be provided with a screen between the toe board and guardrail, extending along the entire opening. The screen must be made of No. 18 gauge U.S. Standard wire, ½ inch mesh or equivalent protection.
- All scaffolds must be erected level and plumb, and on a solid footing.
- Do not change or remove scaffold members unless authorized.
- Do not allow workers to ride on a rolling scaffold when it is being moved. Remove or secure all materials and tools on deck before moving.
- Do not alter any scaffold member by welding, burning, cutting, drilling, or bending.

For other rules and regulations regarding scaffolding, please refer to the Construction Safety Standard, Part J-1 of Chapter 296-155 WAC, and Scaffolds, Chapter 296-874 WAC.

Aerial Lifts

Various types of aerial lifts are used every day. As use of these lifts becomes routine it is easy to overlook the things that must be done to safely use these very effective tools.

Under new March 2020 Guidelines, aerial lifts can only be used by certified operators. All Cornish employees who operate this machinery are certified.

BEFORE OPERATION, AN INSPECTION OF THE EQUIPMENT SHOULD BE DONE AND SHOULD INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING:

- Check for missing, damaged or unreadable safety signs.
- Check for broken, missing, damaged or loose parts.
- Check pivot points for damaged or missing retaining devices.
- If appropriate, check tires for cuts, bulges and pressure as specified by the manufacturer.
- Perform all maintenance procedures outlined by the machine manufacturer.
- Check for cracked welds and other evidence of structural damage.
● Check hydraulic systems for leaks and damage.
● Check outriggers, stabilizers and extending axles if so equipped.
● Check upper and lower control stations including auxiliary/emergency controls for proper operation.
● Check platform handrails and gates.
● Any other inspections that are required by the lift manufacturer.

If the lift does not pass all these inspections **DO NOT USE IT** and notify the technical supervisor.

**WHEN OPERATING THE LIFT REMEMBER THE FOLLOWING:**

● Follow lift manufacturer’s recommendations for use of safety harness and lanyard. When a safety harness is recommended use only an approved fall restraint or fall protection harness and a lanyard attached to the provided anchorage on the boom, basket or other designated location when working from an aerial lift. Exception: ANSI A92.6 series scissor lifts.
● The operator shall always stand firmly on the floor of the basket and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.
● Boom and basket load limits specified by the manufacturer shall not be exceeded.
● Wear whatever personal protective equipment (PPE) the work being performed requires.
● The lift shall NOT be used as a crane.
● Keep a safe distance from electrical lines.
● If there is ANY malfunction of the equipment, shut down the lift and call the technical supervisor.

At no time will a student, faculty, or staff attempt to repair a malfunctioning lift.

No student, faculty, or staff is to modify or alter the equipment in any way or disable or remove any safety device, equipment or sign.

**WHEN SHUTTING DOWN THE LIFT at the end of a shift:**

1. Fully lower the platform.
2. Put the controls in neutral.
3. Remove the operation key.
4. Turn in the operation key.

REMEMBER THE OPERATOR IS RESPONSIBLE FOR THE SAFE OPERATION OF THE LIFT.

**Fall Arrest**

**Parts of a fall arrest system**

● Anchorage
● Lifeline
● Fall arrester
● Lanyard
● Shock absorber (this may or may not be used)
● Harness
Fall Protection Safety Rules

Falls from elevation are a major cause of injuries and deaths in the entertainment industry. We at Cornish are committed to eliminating injuries caused by fall hazards by instituting a program of fall protection for all fall hazards 10 feet or greater. Wherever the word “employee” is used in this document, it will be understood to include all users of the Cornish venues, including but not limited to students, faculty, staff, guests, renters and contractors hired to perform work in the facility.

All work sites with fall hazards of 10 feet or more will have a site-specific fall protection work plan completed before any employees begin work. The employees on that specific job will be trained in the fall hazards and the method used to implement fall protection. The attached training guide will be used to train employees in the inspection and maintenance of their fall protection equipment, as well as fall protection selection criteria. All employees will use fall protection when there is exposure to a fall hazard of 10 feet or more. Employees who fail to follow this policy are subject to disciplinary action, up to and including dismissal.

The evaluation of the jobsite and the completion of the fall protection work plan will be done by a designated “competent person,” who has an understanding of WISHA fall protection requirements, the fall protection systems available for use, and has the authority to take corrective action to eliminate employee exposure to fall hazards.

Fall protection will be provided either through the use of a fall arrest system or a fall restraint system as shown below and thoroughly described in the fall protection work plan available on site for review.

BEFORE YOU START

- Fill out or review existing site-specific Fall Protection Work Plan
• Review work area for hazards.
• Inspect all harnesses, lanyards, lifelines, snap hooks, and attachment point(s). Inspection should include, but is not limited to, the following:
  ○ Check all equipment for wear, damage, mold, mildew, or distortion.
  ○ Check that no straps are cut, broken, torn, or scraped.
  ○ Check for damage from acid, corrosives, or fire.
  ○ Hardware should have no cracks, burs, or sharp edges.
  ○ Snap hooks should close and lock tightly and check the locking device is working properly.
  ○ Buckles should work properly.
  ○ Check ropes for wear, broken fibers, pulled stitches, and discoloration.
  ○ Check to be sure lifeline anchors and mountings are not loose or damaged.
  ○ Any other checks required by the manufacturer of the equipment.
  ○ Harness should fit snugly.
• Defective equipment is to be removed from service immediately.
• A Fall Arrest or Fall Restraint lanyard should be connected to a harness at the center of the back at shoulder level.
• Do not use a chest harness attachment if there is any possibility of free fall.
• Snap hooks:
  ○ Use only locking snap hooks
  ○ To avoid rollouts do not attach your hook to anything that could press it open. Do not attach two snap hooks to each other.
• Unless you have locking hooks specifically designed for these connections, do not connect directly to a horizontal lifeline; directly to webbing, rope or wire rope; back to its own lanyard; to a D-ring which has another snap hook or other connector attached to it; to any object whose size or shape would allow the object to depress or break the snap hook keeper.

Fall protection systems are to be used ONLY by trained personnel under the direction of persons with the knowledge and training to supervise this type of activity.

Only equipment and systems designed for workplace fall arrest or prevention will be used for this purpose. For example, carabiners not designed specifically for fall protection may not be used.

Fall Arrest Terminology

Anchorage means a secure point of attachment for lifelines, lanyards, or deceleration devices that is capable of withstanding the forces specified in this part.

Catch platform means a type of fall arrest system that consists of a platform installed within four vertical feet of the fall hazard, is at least forty-five inches wide and is equipped with a standard guardrail system on all exposed sides.

Competent person means an individual knowledgeable of fall protection equipment, including the manufacturer’s recommendations and instructions for the proper use, inspection, and maintenance; and who is capable of identifying existing and potential fall hazards; and who has the authority to take prompt corrective action to eliminate those hazards; and who is knowledgeable of the rules contained
in this part regarding the installation, use, inspection, and maintenance of fall protection equipment and systems.

**Connector** means a device that is used to connect parts of the personal fall arrest system and positioning device systems together. It may be an independent component of the system, such as a carabiner, or it may be an integral component of part of the system (such as a buckle or D-ring sewn into a harness, or a snap hook spliced or sewn to a lanyard or self-retracting lanyard).

**Deceleration device** means any mechanism, such as a rope grab, rip stitch lanyard, specifically woven lanyard, tearing or deforming lanyards, automatic self-retracting lifelines/lanyards, etc., which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on a worker during fall arrest.

**Deceleration distance** means the additional vertical distance a falling worker travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of a worker's full body harness attachment point at the moment of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the worker comes to a full stop.

**Drop line** means a vertical lifeline secured to an upper anchorage for the purpose of attaching a lanyard or device.

**Equivalent** means alternative designs, materials, or methods to protect against a hazard that the employer can demonstrate and will provide an equal or greater degree of safety for employees than the methods, materials or designs specified in this standard.

**Fall arrest system** means a fall protection system that will arrest a fall from elevation. Fall arrest systems include personal fall arrest systems that are worn by the user, catch platforms, and safety nets.

**Fall distance** means the actual distance from the worker's support to the level where a fall would stop.

**Fall protection work plan** means a documented written plan in which the employer identifies all areas on the job site where a fall hazard of ten feet or more exists. The plan describes the method or methods of fall protection to be used to protect workers, and includes the procedures governing the installation, use, inspection, and removal of the fall protection method or methods that are selected by the employer. See WAC 296-155-24611(2).

**Fall restraint system** means a system in which all necessary components function together to restrain/prevent a worker from falling to a lower level. Types of fall restraint systems include standard guardrail systems, personal fall restraint systems, warning line systems, or a warning line system and safety monitor.

**Floor hole** means an opening measuring less than twelve inches but more than one inch in its least dimension in any floor, roof, platform, or surface through which materials but not workers may fall, such as a belt hole, pipe opening, or slot opening.

**Floor opening** means an opening measuring twelve inches or more in its least dimension in any floor, roof, platform, or surface through which workers may fall.

**Free fall** means the act of falling before a personal fall arrest system begins to apply force to arrest the fall.
Free fall distance means the vertical displacement of the fall arrest attachment point on the worker's full body harness between onset of the fall and just before the system begins to apply force to arrest the fall. This distance excludes deceleration distance, and lifeline/lanyard elongation, but includes any deceleration device slide distance or self-retracting lifeline/lanyard extension before they operate and fall arrest forces occur.

Full body harness means a configuration of connected straps that meets the requirements specified in ANSI Z359.1-2007, that may be adjustable to distribute a fall arresting force over at least the thighs, shoulders and pelvis, with provisions for attaching a lanyard, lifeline, or deceleration devices.

Full body harness system means a full body harness and lanyard which is either attached to an anchorage meeting the requirements of this part; or it is attached to a horizontal or vertical lifeline which is properly secured to an anchorage capable of withstanding the forces specified in this part.

Handrail means a rail used to provide workers with a handhold for support.

Hardware means snap hooks, D-rings, bucklers, carabiners, adjusters, O-rings, that are used to attach together the components of a fall protection system.

Horizontal lifeline means a rail, rope, wire, or synthetic cable that is installed in a horizontal plane between two anchorages and used for attaching of a worker's lanyard or lifeline device while moving horizontally; used to control dangerous pendulum like swing falls.

Lanyard means a flexible line of webbing, rope, or cable used to secure a positioning harness or full body harness to a lifeline, or an anchorage point usually two, four, or six feet long.

Leading edge means the advancing edge of a floor, roof, or formwork which changes location as additional floor, roof, or formwork sections are placed, formed, or constructed.

Lifeline means a vertical line from a fixed anchorage or between two horizontal anchorages, independent of walking or working surfaces, to which a lanyard or device is secured. Lifeline as referred to in this text is one which is part of a fall protection system used as a back-up safety for an elevated worker or as a restraint for workers on a flat or sloped surface.

Locking snap hook means a connecting snap hook that requires two separate forces to open the gate; one to deactivate the gatekeeper and a second to depress and open the gate which automatically closes when released; used to minimize roll out or accidental disengagement.

Personal fall arrest system means a fall arrest system that is worn by a worker to arrest the employee in a fall from elevation. It consists of an anchor point, connectors, a full body harness, and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.

Personal fall restraint system means a fall restraint system that is worn by a worker to keep the employee from reaching a fall point, such as the edge of a roof or elevated work surface. It consists of an anchor point, hardware assemblies, a full body harness and may include a lanyard, restraint lines, or suitable combinations of these.

Platform means a work surface elevated above the surrounding floor or ground.

Positioning device system means a full body harness or positioning harness that is worn by a worker, and is rigged to allow a worker to be supported on an elevated vertical or inclined surface, such as a wall, pole or column and work with both hands free from the body support.
**Positioning harness** means a body support that meets the requirements specified in ANSI Z359.3-2007 that encircles and closes around the waist and legs with attachment elements appropriate for positioning work.

**Qualified person** means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated one's ability to solve or resolve problems related to the subject matter, the work, or the project.

**Restraint line** means a line from a fixed anchorage or between two anchorages to which a worker is secured in such a way as to prevent the worker from falling to a lower level.

**Rope grab** means a fall arrester that is designed to move up or down a lifeline suspended from a fixed overhead or horizontal anchorage point, or lifeline, to which the full body harness is attached. In the event of a fall, the rope grab locks onto the lifeline rope through compression to arrest the fall. The use of a rope grab device is restricted for all restraint applications. See WAC 296-155-24615 (1)(f).

**Safety line** - See lifeline.

**Safety monitoring system** means a type of fall restraint system in which a competent person whose only job responsibility is to recognize and warn workers of their proximity to fall hazards when working between the warning line and the unprotected sides and edges, including the leading edge of a low pitch roof or other walking/working surface.

**Safety net system** means a type of fall arrest system, as described in WAC 296-155-24613(2).

**Self-rescue device** means a piece of equipment designed to allow a worker, who is suspended in a personal fall arrest system, to independently rescue themselves after the fall by moving the device up or down until they reach a surface and are no longer suspended.

**Self-retracting lifeline** means a deceleration device which contains a wound line which may be slowly extracted from, or retracted onto, the device under slight tension during normal worker movement, and which after onset of a fall, automatically locks the drum and arrests the fall.

**Shock absorbing lanyard** means a flexible line of webbing, cable, or rope used to secure a full body harness to a lifeline or anchorage point that has an integral shock absorber.

**Snap hook** - See "locking snap hook."

**Standard guardrail system** means a type of fall restraint system that is a vertical barrier consisting of a top rail and mid rail, and toe board when used as falling object protection for workers who may work or pass below, that is erected along all open sides or edges of a walking/working surface, a floor opening, a floor hole, wall opening, ramp, platform, or runway.

**Standard strength and construction** means any construction of railings, covers, or other guards that meets the requirements of this part.

**Static line** - See horizontal lifeline.

**Toe board** means a vertical barrier at floor level erected along all open sides or edges of a floor opening, platform, runway, ramp, or other walking/working surface to prevent materials, tools, or debris from falling onto workers passing through or working in the area below.

**Unprotected sides and edges** means any open side or edge of a floor, roof, balcony/deck, platform,
ramp, runway, or walking/working surface where there is no standard guardrail system, or parapet wall of solid strength and construction that is at least thirty-nine (39) inches in vertical height.

Walking/working surface means any area including, but not limited to, floors, a roof surface, bridge, the ground, and any other surfaces whose dimensions are forty-five inches or more in all directions, through which workers can pass or conduct work. A walking/working surface does not include vehicles or rolling stock on which workers must be located in order to perform their job duties.

Wall opening means an opening at least thirty inches high and eighteen inches wide, in any wall or partition, through which workers may fall, such as an opening for a window, a yardarm doorway or chute opening.

Some Recommendations and Requirements

Make sure you use the proper and compatible equipment for the job. Use only equipment designed and sold for workplace fall protection. All workers using fall protection systems shall be trained in their use and records of the training must be on file in the Playhouse Technical Supervisors office. Follow ALL manufacturers' instructions.

Do not rig a system or use a system in a way that will allow you to free-fall farther than 6'. Do not rig a system or use a system in a way that will allow you to hit a level below the work level, regardless of length of fall.

When on ladders do not use ladder hooks with D-rings or ANY system that allows a free fall of more than 2'. Be sure snap hooks are compatible with other hardware to which they are attached. Do NOT attach two snap hooks to each other - this could result in rollout. Do not use mismatched (incompatible) attachment (hooks, eyes, D-rings, etc.). All parts of the system must work properly with each other. The Technical Supervisor MUST approve any substitution not specifically authorized by the manufacturer of the equipment.

Fall protection equipment is to be used ONLY for worker fall protection. Rock and recreational climbing equipment is for rock and recreational climbing only and is NOT PERMITTED for worker fall protection. Any fall arrest system that has been subject to impact loading (catching a fall) shall be immediately removed from service until it has been inspected by a competent person and found safe for use.

For other rules and regulations regarding fall protection, please refer to the Construction Safety Standard, Part C-1 of Chapter 296-155 WAC.

Edges/open holes

Whenever working an area with edges or open holes. Proper fall arrest systems must be utilized. Fall Arrest compliance is not just above the deck but also applies to areas below deck. Within the Playhouse this includes but is not limited to: the grid, the catwalks, the box booms.

- Do not leave open traps unattended. Install railings and mark with “Caution” or “Danger” signs and/or tape.
- Any hole that is left open after a shift is completed shall be left well lit in addition to being secured.
Overhead Work

There are many overhead work areas in the theater environment including areas in and around the loading dock, on stage, and in the auditorium. These areas include: ladders, lifts, platforms, grids, and catwalks. There is always a chance that something or someone may fall from an overhead work area. Be cautious when working overhead as well as below.

- Sound off when working overhead.
- Hard hats are required below when overhead work is in progress.
  - When students are working in the space for load in and strike hard hats are required even if no work overhead.
- Secure all tools and equipment when working overhead.
- Stay inside catwalks and railings when working overhead.
- Sound off if something is dropped when working overhead.
  - Note location when possible but do not hesitate.
- If one does not feel safe working at heights, a supervisor should be informed.
- Do not drop objects from any height over four feet; lower them down with a rope.
- Empty unsecured objects from pockets before climbing to grid or catwalks.
- Do not look up if someone sounds off. A hard hat will not protect one’s face or teeth.
- Use safety lines at all times when working in unprotected areas.
- When changing weight at a loading gallery above the stage floor, the floor must be cleared to the proscenium arch and center line before any weight is moved. A floor monitor must be present at all times to ensure the area below remains clear. Sound off when starting and when finished.
- Do not leave unsecured tools or materials unattended in overhead work areas.

Area control:

All workers setting equipment must be aware at all times of where the riggers/grid workers are working overhead and avoid working directly below them. The ground rigger/ground support or another designated person has the responsibility of keeping other personnel on the ground out of immediate harm’s way. Only the ground rigger/ground support should work directly below the high riggers/grid workers. Only the required workers should be allowed in the specific area where work is performed overhead.

PPE:

Workers near overhead work should have personal protective equipment (PPE) suitable to the working environment, according to local authorities. The PPE must include hard hats as a minimum.

Loud and clear communication:

Radios are often used to communicate with high riggers/grid workers when they cannot be easily heard on the deck. However, in many cases simple voice commands are more efficient. Limit communication to clearly understood terms. It is important that everyone is aware of the rigging/grid work going on around them. Even if radios are used the ground rigger/ground support must keep the workers in the vicinity informed of the rigging/grid working process.
Fly System

Manual Rigging System Operation
The system shall be operated only by trained, authorized personnel.

In normal operation counterweights equal to the weight of the scenery attached to the batten are loaded into the counterweight carriage or arbor. These weights are in most cases loaded from the loading bridges after the scenery is attached to the batten.

During rehearsals or performances, a stagehand or "flyperson" moves the scenery by operating the lineset at the lock rail. Scenery attached to a lineset that moves during a performance is called a "Working Piece." The flyperson is to have visual contact with the moving piece of scenery at all times during its movement. If the flyperson cannot maintain visual contact through the entire travel distance, a second person or "spotter" shall be located in a position where he/she can see the working piece during its entire travel distance and is immediately able to communicate any problems to the flyperson.

Crew Responsibilities

(HEAD) Flyperson: The Flyperson directs the loading and unloading of scenery, equipment and counterweights. The Flyperson controls the sequence of operation by giving directions for loading or unloading of counterweights and the removing or attaching of scenery or equipment. The Flyperson also determines when the lineset is in balance. The Flyperson operates the rigging system during the performance. If there is more than one Flyperson, one shall be designated as the head Flyperson. The head Flyperson is responsible for supervision of the entire flying operation. The head flyperson is responsible for maintaining the rigging system usage log.

Loading Bridge Crew or "Loaders"
The loading bridge crew or "loaders" load or unload counterweights as instructed by the Flyperson.

Stage Crew
The stage crew, under the direction of the Master Stage Carpenter, Technical Supervisor or Master Electrician, loads or unloads the scenery, lights or other equipment from the battens (or spot lines). The Flyperson gives the order to attach or remove the scenery or equipment. During setup and strike the stage crew head is responsible for determining that the area around a moving piece is clear and that a piece being loaded or unloaded will not foul on curtains, scenery, battens, lights or other equipment.

When the scenery or draperies are resting on the floor, as they are being attached or removed from the batten, their full weight is not being used to offset the counterweights. Because of this the stage crew may have to hold the batten down while the counterweights are being loaded or removed from the arbor. They may do this by holding the batten with their hands or by using a "bull line." **WHEN**
HOLDING A BATTEN BY HAND, NEVER LEAN OVER IT. IT MAY BE NECESSARY TO LET GO OF THE BATTEN QUICKLY IF THE BATTEN RUNS AWAY.

Loading and Unloading of Counterweights:

**WARNING:** Removing the load from a batten before the counterweights are removed from the arbor is DANGEROUS.

To attach a piece of scenery or other equipment to a batten:

**NOTE:** The loader should load or unload counterweights only when instructed to do so by the Flyperson.

**CAUTION:** An out of balance lineset shall NEVER be left unattended.

- The Flyperson brings the batten that is to be loaded to its lowest position.
- The Flyperson secures the lineset.

**WARNING:** The rope lock is only to be used to secure the arbor from moving when the lineset is in a balanced condition. The rope lock is not intended to secure out-of-balance loads.

- The crew attaches scenery, drop(s), lighting equipment or other items securely to batten.
- The Flyperson determines the weight of the material attached to the batten and calculates the number of weights to be placed on the counterweight arbor.
- The Flyperson informs the weight loader of the number of counterweights to be placed on the arbor.
- The weight loader on the loading bridge adds the estimated amount of counterweight to the arbor, placing spreader plates every 12 weights (or 2 feet, as designated by sign on the back plate of the arbor). The hold down plate and remaining spreader plates are placed on top of counterweights and the set screws on the hold down plate or retaining collars are tightened.

**NOTE:** Weights used for "pipe weight" are counted in the first 12 weights unless a spreader plate is placed on top of the "pipe weight".

- The weight loader informs the Flyperson that the weights have been added and arbor is secured.
- The Flyperson carefully checks to see if the lineset is in balance. If it is in balance the batten is flown to a suitable height (out of the way of the crew) and the rope lock is secured and the next set may be loaded. If the lineset is not in balance steps 5 thru 8 are repeated until the lineset is in balance.

**CAUTION:** At NO TIME should a Flyperson and/or loader be working with more than one lineset at the same time.

To remove a piece of scenery or other equipment to a batten:

- The Flyperson brings the batten that is to be unloaded to its lowest position.
- The Flyperson secures the lineset.

**CAUTION:** The rope lock is only to be used to secure the arbor from moving when the lineset is in a balanced condition. Rope locks are not intended to secure out-of-balance loads.

- The Flyperson requests the weight loader to remove all counterweights except "pipe weight." If only some items are to be removed the Flyperson calculates the number of weights to be
removed and informs the weight loader to remove this number. The weight loader should repeat
the number of weights to be removed or say "going to pipe weight."
• The weight loader removes the requested number of counterweights from the arbor and places
the hold down plate on top of the remaining counterweights and tightens the set screws on the
hold down plate or retaining collars.
• The weight loader informs the Flyperson that the requested number of counter weights has
been unloaded or the arbor is at "pipe weight."
• Scenery, drop(s), lighting equipment, or other items are removed from batten.
• Flyperson carefully checks to see if the lineset is in balance. If it is in balance the rope lock is
secured and the next set may be unloaded. If lineset is not in balance steps 3 thru 8 are
repeated until lineset is in balance.
• When the batten is unloaded and correctly balanced it is flown to its highest point or normal
working level and rope lock is secured.

Approved Methods of Securing an Arbor:
• A stopper hitch (or “snub”) tied around the arbor operating line(s) and to the eye provided for
this purpose on the lock rail.
• Twisting together of operating lines. Manually (for small loads) or by use of a belaying pin or axe
handle.
• Use of a mechanical device (Rope Binder or “Uncle Buddy”) designed for the purpose of
securing linesets.

NOTE: The belaying pin MUST be strong enough (and intended for this use) so as not to break
under the load imposed. The use of scrap pieces of wood for this purpose is NOT permitted.

CAUTION: Never walk or stand under a moving lineset. NEVER move a lineset when someone is
walking or standing under it.

NOTE: The rope lock is for lineset positioning only and is designed to hold only a 50-pounds
MAXIMUM imbalance. The rope lock is not to be used for speed control.

Emergency Procedures - A runaway lineset
If a lineset becomes too far out of balance and the load is in the air, either the batten or the
counterweight arbor, become so heavy that the operating line cannot hold it - it will "run away." If the
out-of-balance condition is not great and the lineset begins to creep, it MAY be possible to stop it by
brute strength. However, if the lineset begins to move rapidly, which indicates a large out-of-balance
condition, DO NOT ATTEMPT TO STOP IT! !

In the event of a runaway
1. Shout a warning to all persons on the stage. Preferred language is yelling “Line Running!”
2. Everyone around the Fly Rail and on the deck Take cover. The possibility of flying
counterweights and objects falling from the grid is great.

RUNAWAYS ARE ALWAYS CAUSED BY HUMAN ERROR AND LACK OF CONCENTRATION ON
THE JOB THAT IS BEING PERFORMED.
Weapons Safety

Weapons On Campus
Cornish will not permit the use or possession of the following items on campus whether concealed or not: firearms, explosives, martial arts weapons, air-powered guns or rifles, or any other dangerous weapons, or replicas of any of the above. Possession of any of these items will be considered a violation of the Conduct Code and dealt with accordingly.

This prohibition, however, does not apply to weapons or replicas of weapons used as part of the academic and artistic activity supervised or assigned by members of the Cornish faculty. Such weapons or replicas of weapons used in academic activities must be approved by the Department Chair and the Provost in advance of their appearance on campus and must be stored in secure, designated spaces. Copies of the official approval of these items should be provided to the Director of Safety and Security. Proper training on the use of such items must be provided and documented by the Department.

Weapons Safety
If the use of a weapon is approved for academic and artistic activity supervised or assigned by members of the Cornish faculty the following safety guidelines apply.

All weapons are dangerous and should always be regarded as such. It is the responsibility of the Cornish Department or external user to ensure compliance with all dictates of the Guidelines for Safe Use of Weapons listed in this policy. Whenever possible, a professional Fight Master should be consulted for all fights to be staged, especially those using weapons of any kind. Weapons for the stage can include, but are not limited to, the following:

- Firearms, such as guns, handguns, rifles, machine guns, cannons, etc.
- Swords, daggers, spears, knives, and other sharp-edged or blunt objects.
- Quarterstaffs, clubs, bats
- Bows and Arrows
- Whips, including bullwhips, “Indiana Jones” whips, cat o’ nine tails, and horse crop.
- Shields (while not actually a weapon, a vital part of stage combat).

Guidelines for Safe Use of Weapons
- Whoever is responsible for procuring weapons will research the common safety practices employed in use of each weapon. Any special information will be passed on to the Fight Master and Stage Manager, and incorporated into the action.
- When a weapon is used in any live performance/exhibit highly visible signage must be posted to alert patrons as they enter the venue, that “At this performance stage weapons are used/blanks are fired.”
- All performers and stagehands must be made aware of the common theatrical prop rule – If it is not your prop, DO NOT touch it! This is particularly critical in dealing with weapons.
- No one is permitted to handle or play with the weapons except as specifically directed in the production.
- If weapons are taken outdoors, notify Seattle Center Security and Cornish Security of your intentions and activities.
• Do NOT engage in horseplay with any weapons.
• No person is to be coaxed, coerced or otherwise forced into handling a weapon.
• Only those who are designated to work with the weapons should be handling them. If it is not your prop, LEAVE IT ALONE!
• Assign a responsible person to care for weapons. One person should be responsible for care, maintenance, and distribution of weapons. The weapons should be secured after use and kept in a locked storage area. ALL FIREARMS MUST BE STORED IN THE LOCKED GUN SAFE.
• Engage a Fight Choreographer. A professional Fight Master can make any fight safer for the participants. He/She will train the actors in how to hold the weapon, how to fight, how to avoid getting hurt, and how to recover from a mistake in the action - an invaluable component to a successful stage fight.
• Rehearse the fight each day. From rehearsal to closing, the fights will need to be rehearsed each day before the show.
• Purchase weapons from a reliable and reputable source. Many attractive weapons are not stage-worthy, and will shatter under the stress of stage combat. Avoid products from companies that will not guarantee that their weapons are stage-worthy. Quality weapons are more expensive and more difficult to locate than reproduction “wall-hanger” weapons. If purchasing is out of the budget, then rent. Do not use cheap weapons.

Firearm Specific Safety

Overview:
All firearms, whether non-functional reproductions or blank-firing adaptations of real guns, must be treated as though they were actual live-firing weapons, and the rules for safe firearm handling, and plain common sense, should always be observed. Please see the safety information on the very comprehensive website for the theatrical weapon rental business Weapons of Choice.

Guidelines for Safe Use of Firearms:

• Blanks can kill.
• Treat all firearms as though they are loaded. This includes real and prop guns.
• Never point a firearm at anyone, including yourself. Consider that whatever you point the gun at will be destroyed.
• A paper test must be done for every weapon used on stage before it is placed into service for a new production. (theatrical blank firing weapons have many paths of discharge and the path should not be assumed until a paper test has been done)
• The same weapon should never be loaded with both blanks and dummy loads in the same production.
• Do not look down the muzzle of a firearm to see if it is loaded. Rather, check by opening the breech of the weapon while it is pointed down or in a safe direction.
• Avoid dropping any weapon. If the stage action requires that a weapon be dropped or thrown, then several backups should be provided. In the case of a blank-firing firearm, the weapon MUST be unloaded before being dropped or thrown.
• Never lay down a firearm or leave it unattended. All firearms should be secured when not in use. All firearms should be handed over to the responsible person immediately after use.
• Do NOT engage in horseplay with any firearms or weapons.
• No person is to be coaxed, coerced or otherwise forced into handling a firearm.
• Avoid dry-firing any firearm. This means do not pull the trigger and let the action fall.
• Avoid dropping any firearm. If the stage action requires that weapon be dropped, then that weapon MUST be unloaded.
• Only those who are designated and trained to work with firearms should be handling them. If it is not your prop, LEAVE IT ALONE!

When using blank firing firearms, these additional guidelines also apply:
• Never place your finger on the trigger until you are ready to shoot. Until then, keep your finger to the side of the trigger.
• Always maintain a distance of at least 20 feet between the muzzle of the firearm and any object or person being fired upon. If, for staging reasons, you must fire at an actor, cheat the action by aiming slightly off to one side so that no one is in the line of fire.
• Protect your eyes and ears. Guns are noisy and can cause hearing loss. Hearing protection in the form of earplugs or ear cuffs should be used whenever blanks are discharged, particularly in a confined space. Whenever possible use eye protection, particularly with weapons that eject casings.
• Do not interchange blanks. Do not assume that a blank is not a “real” bullet. All loading of blanks is to be done by a qualified technician and observed by a minimum of two other trained individuals (preferably including the performer using the weapon onstage).
• Never have live ammunition on the set. Some weapons, though they have been made or altered for stage use, can chamber live ammunition.
• Never load a firearm until you are actually ready to use it.
• Always secure firearms when not in use. A locking case or cabinet is available. Also, when ammunition is used – blank or otherwise – it must be stored separately.

Firearms/Ammunition Policy

The use or carrying of any type of firearm, such as pistols, rifles, carbines, shotguns and any other weapon that fires a powder cartridge, pellet, BB or any type of projectile is not allowed except under the following conditions.

1. Firearms capable of being fired can only be used as a prop in theater productions or in film/video productions.

2. Non-firing firearms/weapons can be used in art exhibits or as props in theater or film/video productions.

3. All firearms and blanks used in exhibits or performances must be:

• Listed on event and performance checklists.
• Inspected and approved by the College Representative, Jessica Christensen.
• Approved by theater production or film/video production manager.
• Be stored in a locked cabinet when not in use.
- Be under the control of a prop master or designated person when not in use on set. The use of a trigger lock is recommended when a gun is not being fired.
- Have a serial number or some form of labeling noted on the firearm for tracking/inventory purpose.
- Use of blanks with no wadding or any form of projectile.

4. Notwithstanding any other provision or elsewhere, there will be no live ammunition brought on campus for use in any firearm that will be exhibited or used in any art exhibit, theater production or film/video production.

5. For student produced events, the Fight Director must inspect, approve and set basic parameters for the firing of each firearm will be submitted. The Fight Director will inspect the firearm and test fire it. This test will help to establish the basic parameter for the firing of the firearm. All ammunition to be used in the firearm is to be included in this inspection and approval. It is highly recommended that only color coded cartridges be used.

6. Basic parameter for all firearms: (if not already established for a certain type of firearm)
   - No one to be in front of a firearm in a 20 degree arc of the firing line.
   - Firearm to be held, when possible, at arm’s length. This should be with the elbow slightly bent.
   - Firearm only to be fired:
     1) during testing
     2) during rehearsals
     3) during performance
   - All safety regulations must be observed.
   - Propmaster and actor who is to fire the weapon, are the only ones on the set authorized to handle weapons.
   - Protocol for cleaning the prop weapon following the rehearsal and performance will be created and followed.

7. Production Manager and/or Stage Manager may set different parameters for the firing of the weapon as needed to suit the requirements of the script. Any changes must be approved by the appropriate college representative. There are ways to fire at someone in such a manner as to look as if they are in a direct line of fire.

8. It is mandatory for all firearms:
   - To be listed in the pre-show event and/or performance checklist.
   - When a weapon is used in any live performance/exhibit highly visible signage must be posted to alert patrons as they enter the venue, that “At this performance stage weapons are used/blanks are fired.”
   - For administration to be made aware that a firearm will be exhibited or used in a performance, event, exhibit or film shoot.
   - The Director of Campus Safety & Security and the Technical Supervisor of CSES must be made aware that a firearm will be exhibited or used in a performance.
● All firearms must be inspected and approved by the College Representative, Jessica Christensen. A picture will be taken of all firearms and ammunition presented for approval.

● Production Manager and/or Stage Manager will be responsible for:
  1) Ensuring that all of the conditions are met for use in performance.
  2) That firearm and ammunition is locked up at all times when the firearm is not in use on stage or set.
  3) That the ammunition to be used is the same as approved by the College Representative, Jessica Christensen, Prop Master.

● Art exhibitor will be responsible for:
  1) Ensuring that the firearm to be exhibited is not capable of being fired.
  2) Will have the firearm secured in the exhibit in such a way that it can only be removed from the exhibit by the exhibitor.
  3) That all ammunition exhibited cannot be removed from the exhibit except by the exhibitor.

8. Failure to comply with this policy could result in injury or death to someone.

9. Failure to comply with this policy will result in disciplinary action.

10. A designated College Representative must be assigned to act as Safety Coordinator for performance, event, exhibit or film shoot. The time for this person will be charged to the department/school responsible for performance, event, exhibit or film shoot.

11. Any and all firearms of any type, including BB guns, found unattended, will be confiscated and given to the Office of Campus Safety & Security to hold.

**Animals Onstage**

Using an animal on stage introduces a special sort of need for care and management. If an animal of any type is requested in any show, contact the American Humane Association for a full briefing of the basic principles and guidelines for use. Toll Free: 888-301-3541; FAX: 818-501-8725.

**Basic Principles**

● “Animal” means all living creatures - including birds, fish, reptiles and insects.

● Animals need their own space – a quiet, climate-controlled environment where they can rest and feed. They need a handler – a qualified individual assigned to care for the animal; feed, exercise, groom, and reward the animal for its good behavior. Animals also need to be protected from too much excitement, too many people and too much noise, in addition to stress, abuse and overwork.

● In many cases, with smaller animals performing on stage, it may be advisable to use two similar looking animals and alternate their performances.

● Animals should be introduced to the work in stages, so as not to overwhelm them. When in doubt as to the animal’s well-being, consult the owner and/or the handler for insight on the animal’s condition. If an animal appears ill or unhealthy in any way, call a veterinarian and have the animal examined.

● No animal is to be injured or killed for the sake of a stage production, animals must be treated humanely.
• Animals are only allowed backstage and they must either be leashed or under voice command.
• All animal waste must be disposed of from their holding area and any accidents in the backstage area must be immediately cleared.

**Animals are NOT props!** (Even if supplied by the props department.)

**General Guidelines of the American Humane Society:**
• AHA staff, the animal coordinator, animal suppliers, veterinarian and props person should communicate and collaborate regarding the care and management of animals during preparation, rehearsal, and the run of a show.
• Only animals that are in appropriate condition to perform the work and that are appropriately trained shall be used.
• No animal shall be allowed to become overheated or suffer discomfort.
• The company must supply adequate water, shade, and protection from cold, rain, and other elements.
• Animals must be observed for changes in temperament that indicate discomfort.
• Adequate exercise and rest shall be provided.
• If an animal becomes fatigued, a rest period shall be provided before proceeding.
• All animals are to be maintained and transported in facilities that provide proper humane care for each animal type. Special environmental conditions and facilities for shelter and protection should be provided if required and be kept in a sanitary condition. Such facilities shall be properly vented, air cooled or air-conditioned, or heated.
• After traveling, animals must be allowed adequate time to rest and acclimate prior to beginning work.
• Care must be taken to assure that animals do not escape.

**Note:** Each animal's needs must be addressed individually, considering such factors as the species, age, and general health.

**Technical Guidelines:**
• **Quiet On The Set.** All non-essential personnel may need to leave the room during animal stunts.
• **Leave the Animal Alone.** Cast and crew shall not be allowed to pet, fondle, or play with animals offstage if the handler feels it is not in the best interest of the animal.
• **No sound, no movement, no smell.** As necessary for the concentration and safety of the animals, cast, and crew members shall limit distracting motion, noises, and smells, such as food or perfume.

**Food Safety**

**General Principles:**
• Food on stage presents a number of unusual challenges. First, the performer must be comfortable with what they are consuming. Second, the food must sometimes appear to be something that it is not – applesauce as oatmeal, tofu for turkey, etc. Lastly, the food must be
easy and quick to prepare, and relatively inexpensive.

- Only use food grade containers
- Food is only prepped in a kitchen environment, never in the shop or bathroom.
- Whenever consumables are in a show, it is the performer who ultimately decides what kind of food will be used. Check with the performers who must eat the food to see what their specific needs are, then begin shopping to meet the other needs of the show.
- Each performer has different food likes and dislikes that must be taken into consideration. Likewise, some people are allergic to some foods. Others will only want low-fat, low-calorie, vegetarian or kosher foods.
- Send samples of different foods to rehearsal and get feedback from the cast and director. This is important to determine if the size, shape, color, and taste meet the needs of the show.
- When something is successful, make a record of where it was purchased, the cost, and any special instructions. This list will pass to the person responsible for consumables for the run of the show.
- One person should be made responsible for gathering, preparing, and handling all food items in a show.
- Food items are usually shopped for on a weekly basis and stored in a refrigerator until the pre-show set up. Any food that goes bad or changes color should be discarded immediately. Never give performers food that appears suspect!
- All containers, dishes, and utensils used for food items should be cleaned after each use.
- Never store food items in props or costumes. Do not leave food items onstage or backstage overnight or between shows. Clean up immediately to prevent attracting insects, rodents, or rot.

Guidelines for Food Safety
- Wash hands in hot soapy water before preparing or handling food.
- Bacteria can live in kitchen towels, sponges, and cloths. Wash/Replace them often.
- Replace sponges every few weeks.
- Never leave perishable food out of the refrigerator for over 2 hours!

**Hot Work**

Where welding or similar hot work is undertaken, a minimum of one 2-A:20-B:C portable fire extinguisher must be readily accessible within 30 feet (9.144 m). In addition, a fire watch must be established during hot work activities and for 30 minutes after the work ends.

**Electric Safety**

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 become very hot with use.
● Use gloves 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. Do not place any lamp in the regular trash. Place in "dead lamp" container, when container is full contact Facilities for pick up and disposal.

Description of Applicable Laws
Electrical Safety (1926.401-.405, 1910.302-308). Recently updated, the federal OSHA standard provides great details about their requirements and they reference the National Electric Code (NEC). This means that OSHA may cite for both their own rules and for items that do not meet NEC code.

Common violations seen in shops and locations include non-compliant panels and cabinets, panels without appropriate clear access in front of them [1910.303(g)(1)(i)], and equipment which is not either ground faulted or double insulated, and plugs that have been altered by clipping off the ground. In addition, new rules require all outlets and power sources including extension cords into which power tools will be plugged must be ground fault circuit interrupted [1926.404(b)(1)].

Automation
Automation or high speed winch loads: Many productions use specialized winches for moving effects. This type of rigging can increase point loading dramatically and should be monitored with measuring devices. When moving elements start and stop they create momentary increases in loading. For a high speed winch in operation, or especially in an emergency stop situation, the rapid increase in point loading can be well over twice the static load. Never use automated winches without qualified professional consultation.

Lockout and Tag Out

Control of Hazardous Energy Sources
Most injuries caused by the failure to control energy sources are:

● Failure to stop equipment.
● Failure to disconnect the power source.
● Failure to dissipate residual energy.
● Accidental restarting of equipment.
● Failure to clear work before activation.

Lockout/Tagout Procedure
The purpose of this procedure is to prevent injury from the unexpected energizing, startup or release of stored energy that could cause injury.
• Shut equipment down by the normal stopping procedure (depress stop button, open toggle switch, etc.).
• Note: Do not use the electrical disconnect switch to stop equipment.

For electrically energized equipment, locate the correct electrical disconnect switch and pull down the disconnect switch.

For mechanically energized equipment, allow mechanical energy, such as that in springs, elevated or out of balance weighted components or rotating flywheels to dissipate: or restrain them by methods, such as repositioning, blocking or tying off.

For thermal, chemical, flammable, pneumatic, hydraulic where such energy is contained in lines or pipes, close valves, disconnect lines, or install isolating "blanks."

Then place the assigned lock on the disconnect switch, valve or other locking device. After assuring that no personnel have exposure, and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate.

Before restoring locked equipment to service you must:
  • Notify personnel in the startup area.
  • Clear all tools and repair equipment.
  • Remove locking devices.
  • Restore all isolating devices.
  • Notify operating personnel of operation status.
  • Reinstall all guards and covers Guards installed

Examples of Stored Energy Where Lockout/Tagout Applies:
Electrical
Mechanical
Thermal, Steam
Explosives, Natural Gas
Hydraulic
Pneumatic
Gravity (Fly System)

A lockout/tagout is mandatory when anyone performs maintenance or service work on machines or equipment that may expose people to the unexpected energizing or startup of the equipment or release of hazardous energy, before removal or bypassing any guard or other safety device, or when a person must place any part of his or her body into a "point of operation" or other danger zone that exists during a machine operation cycle.

A lockout/tagout is not required if the equipment is unplugged and the operator has control of the cord or the work is part of normal production activities in which lockout cannot take place because of the nature of the operation or if the operation is routine, repetitive, and integral to the use of the equipment for production, but only if alternative measures that provide effective protection have been developed.
Open Flame

Permit conditions for Open Flame/Candles on all stages/spaces is the responsibility of the permit holder to train all employees how to properly use a fire extinguisher in an emergency and to make them aware of the following permit conditions:

- A fire extinguisher shall be readily available on each side of the stage with a trained worker standing no more than 15 feet away for the entire time open flame/candles are lit. Each required fire extinguisher must be serviced annually and must have a certification tag indicating the most recent testing and certification. (Newly purchased extinguishers must have the sales slip indicating purchase date.)
- Anyone within a four-foot radius of the open flame shall have flame retardant clothing.
- All scenery and decorations within a 10-foot radius must be flame retardant. Also, this 10-foot radius must be cleared of all combustible materials.
- The floor surface shall be wood or a suitably protected surface, as directed by the Fire Chief.
- Performances shall be conducted with caution and where open flame cannot contact the audience.
- The flaming devices shall not leave the hands of the performer if such an act would in any manner subject the audience to danger.
- Actual CANDLES, LAMPS, WANDS, CHIMNEYS or other devices intended for use with open flame must adhere to the following conditions:
  - NO class I flammable liquids (gasoline, white gas) or Class II flammable liquids (kerosene grade) may be used.
  - Flame shall be enclosed, except as follows:
  - Openings on sides shall not be more than 3/8” in diameter
  - Openings and the distance to the top shall be such that a single layer of tissue paper on the top will not ignite in 10 seconds.
  - All materials except for candle/wick must be non-combustible.
  - Wicks shall be securely attached to the wand or torch.
  - Wick shall be sized so that it will not contain more flammable liquid than needed for the duration of ONE performance.
  - The diameter of the candle base must be at least half the height of the candle or candle holder, and the base must support the entire perimeter. The use of legs is not permitted unless the candle or lamp is stable.
  - Devices containing more than 8 ounces of fuel must self-extinguish and not leak fuel at a rate of more than one-fourth of a teaspoon per minute, if tipped over.
  - Non-self-extinguishing devices or holders shall be designed so that it will return to the upright position after being tilted to an angle of 45 degrees from vertical.
  - Candles MAY NOT be hand held but must be securely attached to a base or holder so that it will not easily separate from the base or holder if dropped. EXCEPTIONS WILL BE MADE ONLY BY THE REVIEW AND APPROVAL OF THE FIRE CHIEF.
- Questionable models of lamps or torches shall be submitted to the Fire Chief for approval by make and model number PRIOR TO USE.
- Candles and candelabras shall be limited to areas out of the reach or way of occupants using the area and away from possible contact of drapes, curtains or other combustibles.
- Chimneys must be securely attached to the open flame device, if such device is not self-extinguishing.
- Flammable liquids shall be dispensed from approved containers of not more than one pint at a time, and total quantities of flammable liquids on the premises shall not exceed one gallon.
- The flaming device shall be extinguished and placed in a non-combustible container immediately after the performance and removed from the premises.
- Permits are subject to final field inspection. Any exceptions to the above conditions must be requested prior to the event and must have Fire Department approval.
- PERMIT MUST BE POSTED near the performance area.
- Violations of any of the above conditions may equate to permit cancellation on the spot and all activities suspended.

**NOTE:** Smoking in public buildings is illegal in the city of Seattle. There are no exceptions for on stage activities.

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**Atmospheric policy**

**Atmospheric Effects that require review before their use:**

**Atmospherics:** Effects intended to create a particular atmosphere or mood  
**Haze:** Homogeneous clouds suspended in the air intended primarily to make light beams visible or create a subtle diffusion.  
**Fog/Smoke:** A thick translucent or opaque cloud.  
**Low lying Fog:** A low lying fog machine (often a dry ice machine) produces a thick, opaque fog that remains close to the ground to create a 'walking on air' effect.  
**Bubbles:** A thin sphere of liquid enclosing air or another gas floating in the air  
**Snow (soap):** Tiny bubbles from a machine engineered to make it look like snow.  
**E-cigarettes/Vaping:** The action or practice of inhaling and exhaling vapor  
Please note: Smoking Cigarettes is not allowed on stage in Washington State  

**Special Effects** not to include lighting effects.

**For use in theater productions, film shoots, art exhibits, and events produced by or held in Cornish College of the Arts.**

Members of the Cornish population may have sensitivities to particulates in the air. Our audiences also may be sensitive. If the creative team wishes to use atmospheric haze or fog in a production, requests should be made to CSES a minimum of two weeks before first use.

Marketing and online information will need to be posted about the show to include this in the messaging information to the public.

The cast and crew will be informed as early as possible and if anyone has a preexisting condition of sensitivity to the effects.
To use Cornish equipment:

- User to fill out the Atmospheric Equipment Form, this form goes to the CSES Department for review.
- The CSES/Operations Staff will authorize the use of the machine after verifying that all necessary steps will be taken to ensure that proper notification is given to anyone who will be in that room/building (audience, participants, etc.).
- CSES/Operations will work with the Fire Department to ensure proper use of the equipment in question when applicable. The special effects machine will often trigger the smoke alarms that are throughout the academic building. This will set off the fire alarm unless prior notification is given.
- Before starting the machine the user will call Cornish Security and inform them of the immediate use.

For parties, receptions, special events, and works of art

- The previous steps must be followed if an atmospheric machine will be in use.

If you are providing your own equipment:

- User to fill out the Atmospheric Equipment Form, this form goes to the CSES Department for review.
- CSES will review the equipment a minimum of two weeks before use.
- CSES/Operations will ensure proper notification to all parties involved including the Fire Department when applicable as stated above.
- Before starting the machine the user will call Cornish Security and inform them of the immediate use.

Power tools

Cornish Playhouse will provide and maintain a work environment that is conducive to safe and effective equipment use. The College recognizes that adequate lighting, proper ventilation, and other workplace characteristics or devices that prevent injury or unusual physical strain are essential to student, faculty, and staff safety and productivity. Staff, faculty and students are responsible for helping maintain a safe space, and will work with supervisors in monitoring and reporting areas in need of attention.

Cornish venues maintain an inventory of hand and power tools to facilitate all manner of entertainment related work. This section outlines the company safety policy regarding the use of Cornish tools and safety guidelines for use of employee-owned tools on Cornish projects or within Cornish premises.

- Cornish assumes responsibility for ensuring that all company-owned tools are properly cared for, in safe working order, and that all manufacturer-installed safety equipment is in place and functioning properly.
- Cornish requires that any employee-owned tools used on the job are in safe working order.
- Department managers will provide for proper personnel, equipment, and services for the maintenance of company equipment.

Faculty, staff and students will use all Cornish Playhouse tools in the manner specified in this policy.

- Equipment will be checked out, cleaned, and returned in accordance with the same guidelines.
- Any managers or supervisors may specify or limit use of certain tools for any reason, especially to enforce company safety policy or protect tools or facilities from harm.
● Under no circumstances may any tools used on Cornish property, whether owned by the company or by employees, be modified in such a way so as to defeat or circumvent manufacturer safety features.
● Cornish will supply an assortment of basic Personal Protective Equipment (PPE).

Students, Faculty, and Staff must:

● Be familiar with safe and appropriate operation of tools. If you do not know how to use a tool, ask for help and review the manual/instructions.
● All tools and equipment should be kept in safe working order—including personal tools used in the loading dock.
● If a piece of equipment or a tool needs repair, it needs to be removed from service until it is repaired.

Power Tools Guidelines
Description of Applicable Laws Machinery rules. There are a number of standards that apply to specific machines in 1910:

.213 Woodworking machinery rules require guards at the point of operation (e.g. the blade), a central cut off switch and lockouts, kickback guards, returns on radial arms, etc.

.215 Abrasive grind wheels must have eye guards, tool rests must be adjusted to 1/8 inch from the wheel, and breakout plates (tongues) must be adjusted to 1/4 inch of the wheel. The air contaminants rule (.1000) also applies to the grinding dust from both the material being ground and the wheel itself which must be vented or collected.

.219 Mechanical power transmission apparatus rules require enclosure of drive belts, flywheels, shafts of certain types, dimensions and sizes.

.242 Hand and portable powered tools and equipment

(a) General Requirements. Each employer shall be responsible for the safe condition of tools and equipment used by employees, including tools and equipment furnished by employees.

(b) Compressed air used for cleaning. Compressed air shall not be used for cleaning purposes except where reduced to less than 30 p.s.i. and then only with effective chip guarding and personal protective equipment [(1910.242(b)].

Welding, Cutting & Brazing (1910.251-.255,1926.350-.351).

Welding done in theaters and loading docks comes under many regulations, not only the standards cited above but rules about compressed gas cylinders, electrical hazards (arc), etc. A common violation seen in theaters and loading docks is welding less than 35 feet away from combustible materials such as wood, dust or Styrofoam, or on wooden floors with cracks between the boards or sections. (1910.252(a)). Welding is also commonly done by non certified welders who may have no formal training. This puts the employer's liability at risk if a set accident involves failure of a weld.
PPE

Personal Protective Equipment (PPE) shall be worn whenever hazards are present. It is the student or worker’s responsibility to:

- Attend training in proper use of equipment.
- Comply with policy requirements.
- Inspect his/her PPE before each use.
- Understand the following about his/her PPE:
  - When it is necessary to wear PPE.
  - What PPE is necessary.
  - How to properly don, doff, adjust, and wear the PPE.
  - The PPE’s limitations.
  - Proper care, maintenance, useful life and the disposal of the contaminated PPE.
- Contact their supervisor when questions arise.

All personal protection equipment used in the Cornish Playhouse shall comply with appropriate ANSI standards, when standards exist.

The need for PPE which fall into the following categories shall be assessed and practices established at each location and in each situation. Differing conditions will exist for different events and requirements will change as those conditions change. The following requirements apply to the various types of PPE listed below.

HEAD PROTECTION

- Hard hats shall be worn in areas where falling overhead objects, material, or electrical installations could present a hazard to workers heads. This includes all areas of the venue when others are working overhead.
- Bump caps are not substitutes for hard hats.
- For any Cornish production, all crew must wear hard hats during any load in, work notes, or strike (load out) work calls.
- When working in an aerial lift or on a ladder, hard hats worn must including chin straps.

EYE AND FACE PROTECTION

- Protection against impact, particles, chemical splash, molten materials, or flash shall be provided for face, neck, and eyes.
- Contact lenses and normal prescription glasses are not considered protective, and appropriate eye protection must be worn where eye protection is required.
- Protection against materials which are liquid or powder in nature would require goggles. Protection against striking objects require safety glasses or face shields.

RESPIRATORY PROTECTION

- Respirator use shall comply with the Comish College of the Arts Respiratory Protection Program.
- Only students and workers who have been fit tested may use respirators.
- Dust masks shall only be used for nuisances and may not be substituted for respirators.
HEARING PROTECTION

- Each student or employee shall wear appropriate hearing protection in environments where noise levels equal or exceed the OSHA Occupational Noise Exposure Standard (29 CFR 1910.95) 8-hour time weighted average (TWA) of 85 dBA.

HAND PROTECTION

- The proper type of glove shall be used to protect the student or worker’s hand from abrasion, temperature extremes, chemical hazards, physical hazards, particulates, electrical hazards, radiation or Bloodborne pathogens where necessary.
- The proper type of glove must be chosen in consultation with your supervisor.
- Gloves must be properly examined prior to each use for their ability to protect the worker against the particular hazard.

FOOT PROTECTION

- Foot protection with closed toes shall be worn in areas where objects could present either a chemical or physical hazard to the foot.
- Where safety shoes or boots are required the footwear must meet ANSI standards.

FALL ARREST SYSTEMS

- Fall arrest must be worn any time a student or worker is working in an unprotected area with a danger of falling. This includes but is not limited to box booms, catwalks and pit edges.
CORNISH
SHOP & STUDIO
PROTOCOLS
Respirators and Masks Safety Guidelines

Many art processes produce particles or fumes that are dangerous. Some chemicals can harm us immediately, and others cause damage that builds over time.

Many of the smells we associate with our practice are actually harmful. Dusts are often irritants or carcinogens. Solvents from painting or cleaning materials pose a risk to our liver and nervous system. Even that sweet smell of beeswax becomes dangerous when heated beyond a certain temperature.

*Cornish requires students, faculty and staff to wear respirators or dust masks during certain processes.*

A disposable N95 dust mask may be enough for processes like dehazing a screen, or filing copper but other processes like spray painting need a respirator fitted with specific cartridges to protect your respiratory system. Your studio technician can help you determine your needs for specific processes.

Choosing Respirators

*It is your responsibility to purchase a protective mask before using spaces like the fume rooms, spray rooms or sanding areas.*

To help you choose the best fit and type of mask for your work, we have Qualified Respirator Fit Testers on staff. Appointments are necessary - your studio technician can give you the contact information for the staff fit tester. During your fit test appointment you will receive help finding the mask that best fits your face and the most effective filters for your substance exposure.

You will then be provided with the information necessary to follow up on purchasing your personal mask.
Spray Room Safety Guidelines

MCC 417

Before Entry

- Purchase your personal use Respirator. This is required.
  - We recommend a 3M 6500 mask and the 6001 respirator cartridge for most curricular uses.
- Sign up by placing a room reservation request in Coursedog.
- 1 person occupancy in this room

Upon Entry

- Use Personal Protection Equipment - (PPE)
  - Use hand sanitizer.
  - Use your respirator, eye protection, and gloves. A dust mask is not a respirator.
  - A respirator is used to protect you from fumes and if used improperly, the wrong fit or not kept clean, the respirator itself can become a hazard to you.
  - If at any point while using your respirator, you feel disoriented, light headed or dizzy, stop your activity and remove yourself to a fresh air environment and inform someone of your issue. If at any point while using a respirator, you start to “taste” the contaminant that you are using, remove yourself to a fresh air environment.

- Do not misuse this Spray Room.
  - Do not spray directly on the walls, door, furniture, HVAC, light fixtures or electrical outlets. No open flame or sparks.
  - Do not spray directly on the wall filters. It is critical that these filter properly.

- Project Set Up
  - Use craft paper behind or under your project. When you finish spraying, set work aside inside the spray room to dry and off-gas to prevent fumes/odor from entering classrooms and hallways. Once dry, remove from the spray room. Be mindful and do not disturb other student’s projects if they are still drying. Fill out a label (Name, material, contact info, date) and leave next to your work that is drying.
  - Keep the door closed behind you so fumes do not get into classrooms during use. Close the door when you leave. Do not over saturate the room with fumes and allow proper time for fumes to exit into the filtered ventilation between use.
Examples of products you may use in here are spray paint, spray fixative, spray adhesive or spray wood finishes.

Before Leaving

- Sanitize
  - Disinfect shared surfaces that you use or touch. This includes your respirator, door handles, light switch, easel stands, rolls of tape, cabinet surface, scissors, table top etc.
  - Throw away disposable gloves and disinfecting wipes.
  - Clean up your work area. Store your products in the Flammables cabinets in your studios.
  - Close the door completely.

Drawing & Painting Studio Safety Guidelines

MCC Rm 502, 504

Solvents

Rules apply to the following Chemicals: Gamsol, Terpenoid, Mineral Spirits, Acetone, Denatured Alcohol, Xylene

- Only use with proper ventilation (MCC 504, MCC 602 or a designated spray room in MCC 4th floor or Playhouse 1st floor).
- Handle with nitrile gloves.
- Use safety goggles when pouring or when splashing may be possible.
- Avoid inhalation, ingestion, and contact with eyes or skin.
- Use an eyewash station to treat contact with eyes.
• Wash skin immediately with soap and water if contact with skin.
• Gamsol is the only approved oil painting solvent.
• Do not pour solvents down the drain.
• To dispose of solvents, deposit into the designated solvent container in MCC 504 (in the corner to the right when you first walk in).
• Do not throw solvent soaked rags in the trash. Use the designated metal rag bin or hang to dry before throwing away.
• Do not mix solvents.
• Do not use solvents near a heat source.
• Report any known allergies relating to solvents to the Studio Technician before using solvents.
• Refer to SDS binders for further information on any one of the solvents. Binders are located to the left of the sink outside of rooms MCC 502/504.

Paint

Rules apply to the following types of paint: Oil paint, Acrylic paint, Watercolor paint, Gouache

• Handle with nitrile gloves.
• Avoid ingestion, prolonged contact with skin, or contact with eyes.
• Use an eyewash station to treat contact with eyes.
• Wash skin with soap and water if contact with skin.
• Paints containing lead are strictly prohibited.
• Avoid the most toxic pigments containing arsenic, barium, chromium, cadmium or mercury.
• Refer to SDS binders outside 504/502 for further information on any one of the paints.
• Dried oil and acrylic paint can be thrown away directly into trash.

Powdered Pigments

Rules apply to the following types of powdered pigment: Hard and Soft Pastels, Powdered Graphite, Charcoal, Pigment, dried paint that is being sanded

• Handle with nitrile gloves.
• Use a dust mask while handling.
• Avoid ingestion, prolonged contact with skin, or contact with eyes.
• Use an eyewash station to treat contact with eyes.
• Wash skin with soap and water if contact with skin.
• Refer to SDS binders for further information on any one of the powders.
• Dispose of any unwanted powdered pigments in the regular trash but be sure that it is sealed in its original container or a secondary airtight container.
Oily Paint Rags

Rules apply to all types of oil on rags.

- Dispose of only in the designated red metal bin outside of 502.
- Do not leave sitting in a pile for any extended period of time.
- If you have any oil paint on paper towels (rather than school provided rags), they should be soaked in water then sealed in an airtight container or plastic bag before being thrown away.

Flammables Cabinet

The following items require storage in the flammables cabinet

- Aerosols
- Solvents
- Oil paint mediums
- Varnishes
- All items must be in their original containers. Or if in a secondary container, it must be labeled with Product name, brand, and necessary PPE/safety requirements.

Aerosols

Rules apply to the following types of aerosol sprays: Spray Paint, Fixative, Spray Adhesive

- Use only in designated Spray Rooms on MCC 4th floor and Playhouse 1st floor.
- Additionally, use only while wearing a respirator mask. See CSES guidelines on respirators.

Containers

- Keep all containers covered when not in use.
- Secondary containers must be clearly labeled with product and hazards.
- Flammable substances must be stored in the flammables cabinet.

Clean Up

- Rags and towels soaked with mineral spirits, paint thinner, linseed oil, oil paints, or other flammable or combustible material must be put in the designated rag bin.
- Clean oil brushes with vegetable oil and a rag before washing with soap in the sink.
• Clean acrylic brushes in the designated water bucket before washing with soap in the sink.
• Dump acrylic paint water into the designated bucket before rinsing in the sink.
• Waste mineral spirits, gamsol, terpenoids, or other flammable liquid must be poured into the waste flammable liquids drum and never down the sink.
• Make sure all containers are tightly closed, correctly labeled, and properly stored.
• Make sure that the hazardous waste drums are closed.
• Ensure that your work area is organized so that exit paths are clear and that fire extinguishers are not blocked.
• Wash your hands thoroughly with soap and water when you are done working, and before eating, drinking, or smoking.

Photo Studio Safety Guidelines

MCC Rm 610

Film Developing and Darkroom Practices

Please follow these rules for handling photo chemicals in the lab. Remember that your eyes, lungs, and skin are porous membranes and can absorb chemical vapors.

• Only 8 students are allowed to work in the darkroom at any given time. Please no guests without permission.
• No eating or drinking in the lab.
• NO PHONES! They are a light source that can cause fogging of paper. Watches that glow or come on automatically can fog film when loading.
• Keep all chemicals off your skin, out of your mouth, and away from your eyes. If you get any chemicals on your skin, flush the area immediately with cool running water.
• Use tongs when processing black and white paper. Developers are toxic, especially if absorbed through the skin over long periods of time.
• Only an instructor or Lab Tech may mix chemistry. If you need chemicals mixed, ask!
• Clean up any chemical spills immediately. Wipe up with paper towels, cleaning until you are certain the chemicals are gone. Chemistry dries, turns to powder, gets on clothes and shoes, and then into your lungs or absorbed into your skin.
• Please familiarize yourself with the SDS sheets of the 4 main chemicals used in film developing and darkroom printing: Developer, Stop Bath, Fixer and Hypo.
• Photographic chemicals can stain clothing. Protective gear is recommended. Each student should have their own towel for hand drying, to save on paper towels. Cornish can provide them for you. No open-toed shoes or sandals.
• Wash your hands thoroughly after you are finished in the lab.
• Avoid touching any electrical equipment with wet hands.
• Keep your workspace clean, dry and uncontaminated. Be mindful of the wet side/dry side in the darkroom.
• Keep all containers and trays closed or covered when not in use to prevent the release of fumes and oxidation of chemicals.
• If you have any pre-existing health problems, seek medical advice before attempting any chemical process in photography.
• People have varying sensitivities to chemicals. If you have had allergic reactions to any chemicals, you should pay close attention to the effects that darkroom chemicals have on you.

Emergencies

There is a red emergency phone right outside the photo lab door, across the hall.

Photo Studio: Room 610  6th Floor
Cornish College of the Arts
1000 Lenora St
Building MCC  9-911 or (206) 726-5038 for Cornish Security

WHAT TO DO IN CASE OF THESE EMERGENCIES:

• INHALATION OF CHEMISTRY: Get the person to fresh air.

• INGESTION OF CHEMISTRY: (800) 222-1222 POISON CONTROL 24hr
Call poison control and tell them what the person ingested and follow their directions to help the person. Check the SDS (Safety Data Sheets) for a complete breakdown of any chemicals we use if poison control needs more data. The SDS are located in the yellow binder next to the film dryer.

• CHEMICALS SPLASHED INTO EYES: Immediately flood the eyes with cold water and continue to flood them for 15 minutes. Seek medical attention. There are 2 orange eyewash stations in the photo area: one right inside the
door in the darkroom and one next to the film developing sink.

- CHEMICALS SPLASHED ON SKIN: Immediately flood skin with water until the chemical is washed away. Seek medical attention if any change in skin condition occurs.

Printmaking Studio Safety Guidelines

MCC Rm 506, 510, 512

To keep the studio a safe and productive workspace, you are not allowed to use any equipment in a studio space until you have been given access and permission by one of the Studio Technicians.

How to Access Cornish Studio Spaces

Enrolling in a studio class will get you an in-depth knowledge of processes and we really recommend taking a studio class if you want to build strong skills in a certain area or technique. Classes provide specific tutorials on processes within their curriculum.

If you’re not enrolled in a class in that studio you’ll begin by making an appointment with the studio technician to discuss your project and arrange an orientation to the studio’s processes and equipment.

The studio technician’s main focus is studio safety, and they provide safety training that ensures uniform safety practices in each studio. Even if you have been engaging in a process for years and have a strong skill set, you need to meet with the technicians for safety training to gain access prior to using equipment. Our training and access process keeps the studio safe for you and other students.

Each studio space has both a calendar on Google and at the door showing available hours to work. Spaces are normally closed to independent use during class sessions.
Studio and Class Supplies

When you enroll in a studio class certain materials and supplies supporting the curriculum are provided in the studio. These are not intended to cover the total material needs of student projects. You will likely need to purchase materials for some class projects. Class supplies are not for personal projects- you will need to purchase your own materials to use in personal projects.

Cornish has relationships with some vendors that give students discounts on materials and supplies. Print makes some materials like copper and litho plates, some papers, and cut vinyl available for on campus purchase. Your technician or instructor has information about purchasing materials locally and online.

Studio Safe Practices

Our philosophy at Cornish is to engage in every process as if you will be doing it the rest of your life.

There are inherent dangers in every printmaking studio - the selection of presses, solvents and safety procedures change at every studio, and you should get reacquainted with the setup of ANY shop before using it. Our goal is to reduce these dangers through training in safe practices. Please follow these protocols in all work areas of the studio.

Do not work in the studio or engage equipment if you are temporarily impaired. Fatigue, illness, medications, recreational drugs or alcohol can impair your ability to focus and work safely. Talk to the technicians or faculty if you have a condition that affects your ability to function safely in the studio environment.

*Never use any equipment before being trained by technicians or faculty.*

Spray paints and other fume intensive processes are only allowed in the dedicated Spray Room 417 on the 4th floor. A respirator is required for utilizing that room.

Follow the specific studio safety protocols for protective equipment or clothing. Those are listed under each area's safety practices in this manual.

Printmaking Studio Etiquette

A community studio requires attentive users to function smoothly. Because these are shared studio spaces, always be aware of those around you as you work and take care of the studio by cleaning up after yourself.
Music headphones or earbuds are allowed but keep tunes low enough that you can hear a direct question. Some of the spaces have speakers that can be used when working in the open lab, if anyone (teacher, tech or another student) asks for this to be turned down or changed to a different type of music please be accommodating or the privileges may be revoked

- Warn peers as you’re moving large materials or projects or are dealing with hot objects or liquids.
- Communicate with others in the studio so that they’re aware of your movements or if you’re about to make a disruptive noise.
- Look behind you before stepping away from a work table or tool.
- Keep floors clear and keep materials from impeding walkways. If extension cords are used they must be wrapped up immediately after use and try to keep clear of walkways as much as possible.
- Clean up at each workstation, like sweeping copper or wood shavings, when you’re moving on to another process. If you plan on coming back to an ink slab after grabbing a break, double check with the lab tech that the space isn’t needed before you return.
- Put your materials and projects into your drawer or on the drying rack before you leave the shop.

Personal Protective Equipment (PPE)

- **Safety Glasses** are required for some processes in the Printmaking Studio.
  - Cornish provides safety glasses for use in the shop.
  - Eyeglasses alone are not suitable for some processes.
  - Safety goggles or glasses can be worn over prescription eyewear.
  - If you use safety glasses a lot and need prescription safety glasses for long term use ask the technicians where to acquire them.
- **Hearing Protection** may be needed for some loud processes - like the pressure washer, or annoyingly scratchy, like filing bevels on copper plates. Cornish provides earmuffs and earplugs to protect hearing.
- **Dust Masks or Respirators** are needed for many processes. More information on specific protection is in the Respirator and Mask section of this manual.
- **Clothing** should include long pants and closed toe shoes. Do not wear clothing that is extremely baggy or has loose dangling parts like long hoodie strings or flowing sleeves - they could get caught on equipment or machines. Bracelets, necklaces, lanyards and rings can be dangerous when operating presses, and should not be worn in work areas. Ink gets on everything in this studio - aprons are provided in several areas of the Printmaking studio. Please leave your nice clothes at home!
- **Long hair** must be tied back so that it cannot get caught in equipment.
- **Gloves** should be worn while using many oil based processes in the studio.
  - Nitrile gloves are provided to protect us from the chemicals in inks and solvents.
  - See notes on specific processes for information on whether gloves are beneficial
or appropriate. Your technician can advise you on when you should be wearing gloves.

Your studio technician will advise you about specific protective gear for your process during safety training.

Respirator Cartridges

Properly fitted respirators provide a more secure fit that is essential when dealing with processes that produce fumes.

There are many specific cartridges to protect the user against certain hazards in the workplace, but most arts applications can be made safer with just a few different types of respirator cartridge. Each respirator company has its own proprietary filters to fit its respirator masks, but the breathing protection is the same across brands.

For simplicity, Cornish recommends using a 3M 6500 mask and the 6001 respirator organic vapor cartridge for most curricular uses. It provides the highest level of protection across a variety of processes.

Solvents

Rules apply to the following Chemicals: Acetone, Asphaltum, Denatured Alcohol, Fast wash, Type wash, Xylene

- Only use in proper ventilation. Make sure the solvent snake is open and above your work area.
- Handle with nitrile gloves.
- Avoid inhalation, ingestion, and contact with eyes or skin.
- Use an eyewash station, flush eyes with water for 15 minutes within a minute of contact. Make the technician aware of your situation, an accident form and possible follow up with your doctor may be required.
- Wash skin immediately with soap and water if contact with skin.
- If ingested DO NOT induce vomiting, rinse your mouth with water, seek immediate medical attention.
- If you experience dizziness or a feeling of being unwell immediately leave the room, move to fresh air and find a place you can breathe comfortably.
- DO NOT pour solvents down the drain. Many of these can explode if they get into the sewer system.
- Dispose of solvent soaked rags in the appropriate container.
- DO NOT mix solvents.
- DO NOT use solvents near a heat source or with statically charged tools.
- Report any known allergies relating to solvents to the lab technician before using solvents.
• Refer to SDS binders for further information on any one of the solvents.

Handling Liquid Spills

Many of the liquids used in the Printmaking Studio are poisonous or hazardous. The studio has spill kits to safely contain and clean up liquid chemical spills. **Notify the technician immediately if you spill any materials in the studio** - they’ll be able to determine the best method for cleanup and disposal.

Minor Chemical Spill Procedures

• Alert people in the immediate area of spill.
• Avoid breathing vapors from spills.
• Put on protective equipment, including safety goggles, suitable gloves, and long-sleeved lab coat (hanging in the Acid Room with the aprons to the right of the door).
• Confine spill to a small area.
• Use appropriate materials to neutralize and absorb inorganic acids and bases.
• For other liquids, absorb spill with vermiculite, dry sand, or absorbent pads. These will be in the spill kit under the large paper soaking sink in the Oil Based Room.
• For solid spills. Cover the spill with a slightly damp paper towel to avoid creating a cloud of dust, push the material into a dustpan or other instrument using the towel - DO NOT use a broom/dust brush, this will contaminate it and it will need to be replaced.
• Collect material, used adsorbents/neutralizing agents, etc. in a polyethylene bucket.
• Call Head of Facilities (206) 726-5175 to arrange for collection and disposal of spill residue, if after hours call MCC Security (206)-726-503

Major Chemical Spill Procedures

A spill automatically becomes "major" in the following instances:

• There is a fire, or the threat of fire, outside of a controlled space (fume hood).
• There is a personal injury or exposure likely to require medical assistance.
• The spill involves unknown or highly reactive material.
• There is a release of a toxic or flammable gas outside of a controlled space.
• Attend to injured or contaminated persons and remove them from exposure.
• Alert people in the area to evacuate. If danger is believed sufficient - pull the fire alarm and evacuate the building.
• If spilled material is flammable, turn off ignition and heat sources if that can be done safely. Keep any static causing tools away from the spill.
• Close doors to the affected area.
• Call MCC Security (206)-726-5038. Provide as much of the following as is known.
  • What chemical(s) are involved?
  • How much was spilled?
Where the spill is located?
Nature of any injuries?
What control measures have been taken?
Your name and phone number (or where you will be located)?
Meet responders.

Spill Clean-Up Procedure

Wear gloves and a mask if you are away from the solvent snakes. Use the spill kit for anything that needs to be absorbed and containerized. These are the common items used in these rooms, for any item not listed here please refer to the SDS sheets which are located on the bookshelf right before the office entry.

Oil Based Room

- **Fast Wash** Absorb, keep away from static discharge and containerize. *KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.*
- **Type Wash** Absorb, keep away from static discharge and containerize. *KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.*
- **Various grounds** Absorb and containerize. *KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.*
- **Lithotine** Absorb and containerize. *KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.*
- **Asphaltum** Absorb and containerize.
- **Gum Arabic** Absorb and containerize.
- **Windex** Absorb and containerize. Clean residue with water. Okay to wash the residual down sink.
- **Isopropyl Alcohol** Absorb, keep away from static discharge and containerize.
- **Hand Sanitizer** Absorb, keep away from static discharge and containerize.

Etching Room

- **Organic acid Acetic** Apply sodium bicarbonate. Absorb and containerize
- **Inorganic acid Ferric** Apply sodium bicarbonate OR sodium carbonate. Absorb and containerize
- **Dawn dishwashing soap** Absorb and containerize. Clean area with water.
- **Soy Sauce** Absorb and containerize. Clean area with water.

Book Arts Room

- **Fast Wash** Absorb, keep away from static discharge and containerize. *KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.*
• **Type Wash**  Absorb, keep away from static discharge and containerize.  
**KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.**  
• **PVA**  Absorb and containerize. Clean residue with water.

**Water Based Room**

• **Murakami Emulsion**  Absorb and containerize.  
**DO NOT DISPOSE OF QUANTITY DOWN SINK.**  
• **Ryonet Reclaim**  Absorb and containerize.  
• **Sgreen Dehaze**  Absorb and containerize.  
• **409**  Absorb and containerize.  Okay to wash the residual down sink.  
• **Aqua-Block**  Absorb and containerize, clean the affected area with water.  
**DO NOT DISPOSE OF QUANTITY DOWN SINK.**  
• **Isopropyl Alcohol**  Absorb, keep away from static discharge and containerize.

**Dark Room (Hazard cabinet)**

• **Water Based Polyurethane**  Dilute with water and mop up  
• **Oil Based Polyurethane**  Absorb with a spill pillow or vermiculite and containerize.  
• **Fast Wash**  Absorb, keep away from static discharge and containerize.  
**KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.**  
• **Type Wash**  Absorb, keep away from static discharge and containerize.  
**KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.**  
• **Denatured Alcohol**  Absorb, keep away from static discharge and containerize.  
**KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.**  
• **Xylene**  Absorb, keep away from static discharge and containerize.  
**KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.**  
• **Acetone**  Absorb, keep away from static discharge and containerize.  
**KEEP AWAY FROM FLAME. DO NOT ALLOW TO ENTER SEWER SYSTEM, IT CAN EXPLODE.**

**Oil Based Room Safety - MCC 510**

• For all the equipment in this room: **Receive instruction from faculty or technician before attempting to operate equipment.**  
• Avoid distractions while operating equipment.  
• Be aware of your surroundings and keep clear of equipment in use.  
• Do not distract the equipment operator.  
• Do not wear loose clothing or long hanging jewelry while operating.  
• Hair hanging below your shoulder blades should be tied back.  
• **If you experience any malfunctions, discontinue use and immediately notify the lab technician.**

**Little John Etching Presses**

• Keep yourself and debris clear of gears and other moving parts while operating equipment.
• Keep limbs and foreign objects clear of the drum.
• Do not raise the upper drum above 2" and fully extend the bed, as the bed could drop off.
• Only send appropriate and approved materials through the press.
• Do not use the press bed as a cutting surface. Cutting mats are available for table use.

Takach Press
• Keep yourself and debris clear of gears and other moving parts while operating equipment.
• Keep limbs and foreign objects clear of the drum.
• Only send appropriate and approved materials through the press.
• Do not remove guards for any reason.
• Do not use the press bed as a cutting surface. Cutting mats are available for table use.

Lithography Press
• Keep yourself and debris clear of gears and other moving parts while operating equipment.
• Keep limbs and foreign objects clear of the press bed.
• Only send appropriate and approved materials through the press.
• Do not use the press bed as a cutting surface. Cutting mats are available for table use.

Hot Plate
• Only place appropriate/approved materials on the hot plate.
• Do not pick up hot metal off of the hot plate with your bare hands.
• Notify others when turning on the hot plate.
• Power off the hot plate when you’ve finished using it.
• Do not use flammable liquids on or near the hot plate.

Board Shear
• Only cut appropriate/approved materials in the board shear.
• Keep hands behind the guard while cutting.
• Do not remove the guard for any reason.

Etching Room Safety - MCC 510B
• For all the equipment in this room: **Receive instruction from faculty or technician before attempting to operate equipment.**
• Avoid distractions while operating equipment.
• Be aware of your surroundings and keep clear of equipment in use.
Do not distract the equipment operator.
Do not wear loose clothing or long hanging jewelry while operating.
Hair hanging below your shoulder blades should be tied back.
If you experience any malfunctions, discontinue use and immediately notify the lab technician.

Etching Chemicals

Acetic Acid & Ferric Chloride

- Only use in proper ventilation.
- Handle with nitrile gloves.
- Avoid inhalation, ingestion, and contact with eyes or skin.
- Use an eyewash station, flush eyes with water for 15 minutes within a minute of contact. Make the technician aware of your situation, an accident form and possible follow up with your doctor may be required.
- Wash skin immediately with soap and water if contact with skin.
- If ingested do NOT induce vomiting, rinse mouth with water, seek immediate medical attention.
- If you experience dizziness or a feeling of being unwell immediately leave the room, move to fresh air and find a place you can breathe comfortably.
- Do not pour acids down the drain.
- Report any known allergies relating to acids to the lab technician before using solvents.
- Only put copper plates in the acid, nothing else.
- Refer to SDS binders for further information on any one of the chemicals.

Electric Etching

- Do not use output greater than 3 volts, 3 amps.
- Stay clear of the bath during the etching process.
- Notify others when equipment is in use.
- Only put copper plates in the electric bath.
- Disconnect power supply when not in use.

Heat Press

- Only place appropriate and approved materials in the heat press.
- Avoid contact with the heating surface when removing materials.
- Notify others when turning on the heat press.
- Power off the heat press when you’ve finished using it.
- Do not use flammable liquids near the heat press.
Book Arts Room Safety - MCC 512

- For all the equipment in this room: **Receive instruction from faculty or technician before attempting to operate equipment.**
- Avoid distractions while operating equipment.
- Be aware of your surroundings and keep clear of equipment in use.
- Do not distract the equipment operator.
- Do not wear loose clothing or long hanging jewelry while operating.
- Hair hanging below your shoulder blades should be tied back.
- **If you experience any malfunctions, discontinue use and immediately notify the lab technician.**

**Lead Type**

- Do not touch your eyes, ears, mouth, or nose while handling lead type.
- Do not eat or drink while handling lead type.
- Wear gloves to avoid contact with open sores or cracked skin.
- Handle type carefully, do not drop.
- Wash hands immediately after handling lead type.

**Platen Presses**

- Keep yourself and debris clear of gears and other moving parts while operating equipment.
- Keep limbs and foreign objects clear of the platen.
- Do not reach into the press for any reason while the press is running.
- Only use appropriate and approved materials in the press.

**Vandercook Press**

- Keep yourself and debris clear of gears and other moving parts while operating equipment.
- Make sure the area is clear before operating equipment.
- Keep limbs and foreign objects clear of the bed and drum track.
- Only send appropriate and approved materials through the press.

**Challenge Press**

- Keep yourself and debris clear of gears and other moving parts while operating equipment.
- Make sure the area is clear before operating equipment.
- Keep limbs and foreign objects clear of the bed.
Only send appropriate and approved materials through the press.

**Multi 2020 Paper Cutter**

- Keep yourself and debris clear of the fence, blade and other moving parts while operating equipment.
- Only cut appropriate and approved materials in the cutter.
- Do not bypass safety switches.
- Other people cannot be within arms reach of the cutter while it is operational.
- Do not hold down switches for longer than is necessary.
- Cutter must remain locked when not in use.

**Water Based Room Safety - MCC 506**

- For all the equipment in this room: **Receive instruction from faculty or technician before attempting to operate equipment.**
- Avoid distractions while operating equipment.
- Be aware of your surroundings and keep clear of equipment in use.
- Do not distract the equipment operator.
- Do not wear loose clothing or long hanging jewelry while operating.
- Hair hanging below your shoulder blades should be tied back.
- If you experience any malfunctions, discontinue use and immediately notify the lab technician.

**Screen Print Exposure Unit**

- Do not stare at the UV light while the unit is operational.
- Do not put weight on the glass or force the lid closed. Check that no washers are on screen corners before placing on glass.
- Do not clean the glass yourself - let the technician know it needs to be cleaned.
- If the vacuum doesn’t fully engage, reposition your screen further from the edge.
- After exposure, lift the lid slowly when removing the screen to make sure the screen is not stuck to the neoprene lid.
- Do not use glass as a cutting surface! Cutting mats are available in the Oil based room.

**Pressure Washer**

- Tread carefully around the sink, water may be present on the floor. Stand on the plastic anti fatigue mat at the sink.
- Turn on water at spigot and pressure washer before using, and turn both off immediately after use (failure to do so could result in flooding or motor burn out).
- NEVER point the pressure washer gun at a human being. NEVER spray chemistry on anything other than a WET screen.
• Check the radius of the spray angle in the sink corner before pointing at the screen. Leave at least 2" between the end of the gun and the screen - closer could pop the screen.
• If the noise of the pressure washer “chugs” release the handle and wait 2 seconds before fully applying pressure to the gun.
• Water based ink and removed emulsion can go down the sink, clear any tape or debris from the sink when you finish cleaning screens.
• Cleaned or burned screens should be put on wood risers in their appropriate sized space along the wall and the box fan turned on and placed in front of the screen to dry.

Screen Vacuum Presses
• Be aware of spring pinch points on the micro adjusters of the Accu-Glide.
• Do not use presses as a cutting surface! Cutting mats are available for table use.
• If using a Sidekick remove from the screen in the upright position - if removed while extended down the spring will jump into the air and it can injure people or pop a screen.
• Use a step block to get more height on the presses if you are short or want more ergonomic down force on your squeegee stroke.
• Keep cords from foot pedals out of walkways when not in use.

Dark Room Safety- MCC 510A
• For all the equipment in this room: Receive instruction from faculty or technician before attempting to operate equipment.
• Avoid distractions while operating equipment.
• Be aware of your surroundings and keep clear of equipment in use.
• Do not distract the equipment operator.
• Do not wear loose clothing or long hanging jewelry while operating.
• Hair hanging below your shoulder blades should be tied back.
• If you experience any malfunctions, discontinue use and immediately notify the lab technician.

Omitrac EF Diazit Blueprint Machine
• Make sure ventilation is running before operating the blueprint machine.
• If you experience dizziness while operating, immediately discontinue use of the machine and leave the darkroom. Move to fresh air, and sit where you can breathe comfortably.
• Keep yourself and debris clear of gears and other moving parts while operating equipment.
• Keep limbs and foreign objects clear of the rollers.
• Do not stare at UV light while the unit is operational.
• Only send appropriate and approved materials through the blueprint machine.
Mercury Vapor Exposure Unit

- Exit the darkroom while the exposure unit is running to avoid harmful UV light.
- Do not attempt to adjust or otherwise handle the bulb.
- Do not remove protective glass from in front of the bulb.
- Only put approved materials into the vacuum bed.

Metal Shear

- Keep yourself and debris clear of the fence, blade and other moving parts while operating equipment.
- Only cut appropriate and approved materials in the cutter.
- Do not bypass safety guards.
- Cutter must remain locked when not in use.
Art Department Studio Safety Guidelines

MCC Rm 602

The Visual Arts studios are community, shared spaces. They should be safe, comfortable and productive work areas for everyone in the program. Students should be respectful of others using the space, and not behave in a manner that is prohibitive to other's productivity. Instances of disruptive behavior should be brought to the immediate attention of your Studio Manager. Failure to follow these Studio Guidelines may result in loss of access to studio space.

General Use

- As these are shared studio spaces, be courteous and clean up after yourself.
- Studio Hours: 7 AM - 9 PM Weekdays (card access ends at 8 PM)
  8 AM - 8 PM Weekends (card access ends at 7 PM)
- Use the freight elevator when moving large or heavy items to studios.
- Hallways and access areas must be kept unobstructed as these are emergency egress pathways.
- You are provided with basic studio furniture of a work table, chair, and tool cabinet. If you want to bring in additional furniture (tables, bookshelves, storage etc) you are responsible for removing it at the end of the Academic year. You are provided one key for your tool cabinet. If lost, you are responsible for purchasing a $9.00 replacement key. You are strongly encouraged to keep valuables locked away when not in use. Cornish College is not responsible for any loss.
- Soft furnishings and rugs may NOT be brought into the studios as these pose a health hazard. Furniture should be easy to clean.
- No structural additions or alterations can be made to your studio space.
- If you paint or use hanging hardware on your wall, you are responsible for patching holes, painting and restoring it back to original condition at the end of the Academic year. (May) White wall paint is provided. The newly constructed walls are all plywood backed and can handle weight. A few existing exterior walls are not plywood backed and are drywall only. Become familiar with your specific studio wall specifications before installing artwork.
• Sinks should be kept free of solids or excess paint, solvents, plaster, clay, paper towels and food. Use garbage for disposal and get in the habit of using the paintbrush washing settling buckets. This process really prevents overly polluting our water system.
• You may check out a limited variety of hand tools in the Multimedia Checkout Center Rm. 609.

Studio Health & Safety
• In case of Emergency - Dial 911 - followed by calling the Cornish College Office of Safety & Security 206-726-5038
  MCC Studios - 1000 Lenora St.
  Lui Building Studios - 2002 9th Avenue
• There will be periodic environmental and safety checks in all of the studios.
• Take a look at the evacuation route maps and be aware of the closest fire extinguisher, eye wash station and 1st Aid Kit locations.
• No obstructions within 6 feet of the sprinkler heads will be permitted. Do not paint, remove, cover, or tamper with any of the fire control systems.
• Do not disconnect any of the overhead fluorescent light bulbs. Contact Studio Tech.
• Do not block exit or emergency pathway lighting.
• No food or garbage should be left out. This poses a health threat to everyone, as well as the potential for an insect or rodent problem.
• No alcohol is allowed in studios.
• Smoking is not allowed in studios. Candles, open flames, and incense are not allowed.
• Hot plates are not allowed in studios (regulated by Fire Marshall). Appliances with heating elements can be a fire hazard as they often do not have an automatic OFF switch. No personal heaters, stoves, hot plates, toaster ovens, or coffee makers. Use options provided in MCC cafe.
• Use heavy gauge extension cords and 3 prong power strips/surge protectors. Use LED bulbs with clamp lighting hardware for everyday use. Clamps must be securely fastened with cable ties. Do not attach to fluorescent lighting, pipes or ducting. Do not have cords on the floor across walkways.
• Use the Flammables cabinets for safe storage of aerosols, Gamsol (no turpentine), wood stains and any flammable or hazardous products. Label with product name and your name. Dispose any paint rags with solvent/oils into the provided covered metal disposal cans.
• Use proper ear and eye protection.
• Notify Studio Tech. or Security asap for any spills of flammable or toxic substances.
• Please be mindful of others regarding using products with strong smell, odor, or fumes. Many have sensitivities and/or allergies. Use direct ventilation in MCC 417 Spray Room or outside. Be courteous.
• Examples of materials and processes that require proper ventilation:
- Aerosols (paint, adhesive, fixative, finishes etc.), Enamels, Encaustics, Flammables, Heating (in general), Resins (including Fiberglass), Sanding (any process that creates dust), Solvents (thinners) or solvent containing products, toxins... (anything with noxious fumes)
- Examples of materials and processes that MAY require ventilation:
  - Adhesives, Airbrushing, Cleaners/removers, Emulsion, Inks, Markers, Mediums, Mold making, Sealants, Stains.
  - Ventilation needs can vary by product, so always check the label before using.
- Any material process that produces excessive dust, sawdust or other airborne particles should be undertaken in the appropriate ventilated area and not in the art studios. The Fabrication Studio is located at the Scene Shop this year while the MCC Fablab is renovated.
Art Department Studio Safety Guidelines

MCC Rm 110

The Visual Arts studios are community, shared spaces. They should be safe, comfortable and productive work areas for everyone in the program. Students should be respectful of others using the space, and not behave in a manner that is prohibitive to other’s productivity. Instances of disruptive behavior should be brought to the immediate attention of your Studio Manager. Failure to follow these Studio Guidelines may result in loss of access to studio space.

General Use

- As these are shared studio spaces, be courteous and clean up after yourself.
- Studio Hours: **7 AM - 9 PM Weekdays** (card access ends at 8 PM)
  **8 AM - 8 PM Weekends** (card access ends at 7 PM)
- Use the freight elevator when moving large or heavy items to studios.
- Hallways and access areas must be kept unobstructed as these are emergency egress pathways.
- You are provided with basic studio furniture of a work table, chair, and tool cabinet. If you want to bring in additional furniture (tables, bookshelves, storage etc) you are responsible for removing it at the end of the Academic year. You are provided one key for your tool cabinet. If lost, you are responsible for purchasing a $9.00 replacement key. You are strongly encouraged to keep valuables locked away when not in use. Cornish College is not responsible for any loss.
- Soft furnishings and rugs may NOT be brought into the studios as these pose a health hazard. Furniture should be easy to clean.
- No structural additions or alterations can be made to your studio space.
- If you paint or use hanging hardware on your wall, you are responsible for patching holes, painting and restoring it back to original condition at the end of the Academic year. White wall paint is provided. The newly constructed walls are all plywood backed and can handle weight. A few existing exterior walls are not plywood backed and are drywall only. Become familiar with your specific studio wall specifications before installing artwork.
- When assigned to MCC 110 Studios, use the 5th Floor Painting Lab Sink. Sinks should be kept free of solids or excess paint, solvents, plaster, clay, paper towels and food. Use garbage for disposal and get in the habit of using the paintbrush washing settling buckets. This process really prevents overly polluting our water system.
• You may check out a limited variety of hand tools in the Multimedia Checkout Center Rm. 609.

Studio Health & Safety

• In case of Emergency - Dial 911 - followed by calling the Cornish College Office of Safety & Security 206-726-5038
  MCC Studios - 1000 Lenora St.
  Lui Building Studios - 2002 9th Avenue
• There will be periodic environmental and safety checks in all of the studios.
• Take a look at the evacuation route maps and be aware of the closest fire extinguisher, eye wash station and 1st Aid Kit locations.
• No obstructions within 6 feet of the sprinkler heads will be permitted. Do not paint, remove, cover, or tamper with any of the fire control systems.
• Do not disconnect any of the overhead fluorescent light bulbs. Contact Studio Tech.
• Do not block exit or emergency pathway lighting.
• No food or garbage should be left out. This poses a health threat to everyone, as well as the potential for an insect or rodent problem.
• No alcohol is allowed in studios.
• Smoking is not allowed in studios. Candles, open flames, and incense are not allowed.
• Hot plates are not allowed in studios (regulated by Fire Marshall). Appliances with heating elements can be a fire hazard as they often do not have an automatic OFF switch. No personal heaters, stoves, hot plates, toaster ovens, or coffee makers. Use options provided in MCC cafe.
• Use heavy gauge extension cords and 3 prong power strips/surge protectors. Use LED bulbs with clamp lighting hardware for everyday use. Clamps must be securely fastened with cable ties. Do not attach to fluorescent lighting, pipes or ducting. Do not have cords on the floor across walkways.
• Use the Flammables cabinets for safe storage of aerosols, Gamsol (no turpentine), wood stains and any flammable or hazardous products. Label with product name and your name. Dispose any paint rags with solvent/oils into the provided covered metal disposal cans.
• Use proper ear and eye protection.
• Notify Studio Manager or Security asap for any spills of flammable or toxic substances.
• Please be mindful of others regarding using products with strong smell, odor, or fumes. Many have sensitivities and/or allergies. Use direct ventilation in MCC 417 Spray Room or outside. Be courteous.
• Examples of materials and processes that require proper ventilation:
  ○ Aerosols (paint, adhesive, fixative, finishes etc.), Enamels, Encaustics, Flammables, Heating (in general), Resins (including Fiberglass), Sanding (any process that creates dust), Solvents (thinners) or solvent containing products, toxins...(anything with noxious fumes)
• Examples of materials and processes that MAY require ventilation:
  ○ Adhesives, Airbrushing, Cleaners/removers, Emulsion, Inks, Markers, Mediums, Mold making, Sealants, Stains.
  ○ Ventilation needs can vary by product, so always check the label before using.
• Any material process that produces excessive dust, sawdust or other airborne particles should be undertaken in the appropriate ventilated area and not in the art studios. The Fabrication Studio is located at the Scene Shop this year while the MCC Fablab is renovated.

Art Department Studio Safety Guidelines

Lui Rm 203, 205

The Visual Arts studios are community, shared spaces. They should be safe, comfortable and productive work areas for everyone in the program. Students should be respectful of others
using the space, and not behave in a manner that is prohibitive to other’s productivity. Instances of disruptive behavior should be brought to the immediate attention of your Studio Manager. Failure to follow these Studio Guidelines may result in loss of access to studio space.

General Use

- As these are shared studio spaces, be courteous and clean up after yourself.
- Studio Hours: **7 AM - 9 PM Weekdays** (card access ends at 8 PM)
  **8 AM - 8 PM Weekends** (card access ends at 7 PM)
- Hallways and access areas must be kept unobstructed as these are emergency egress pathways.
- You are provided with basic studio furniture of a work table, chair, and tool cabinet. If you want to bring in additional furniture (tables, bookshelves, storage etc) you are responsible for removing it at the end of the Academic year. You are provided one key for your tool cabinet. If lost, you are responsible for purchasing a $9.00 replacement key. You are strongly encouraged to keep valuables locked away when not in use. Cornish College is not responsible for any loss.
- Soft furnishings and rugs may NOT be brought into the studios as these pose a health hazard. Furniture should be easy to clean.
- No structural additions or alterations can be made to your studio space.
- If you paint or use hanging hardware on your wall, you are responsible for patching holes, painting and restoring it back to original condition at the end of the Academic year. White wall paint is provided.
- Sinks should be kept free of solids or excess paint, solvents, plaster, clay, paper towels and food. Use garbage for disposal and get in the habit of using the paintbrush washing settling buckets. This process really prevents overly polluting our water system.
- You may check out a limited variety of hand tools in the Multimedia Checkout Center at MCC Rm. 609.

Studio Health & Safety

- In case of Emergency - **Dial 911** - followed by calling the Cornish College Office of Safety & Security **206-726-5038**
  MCC Studios - 1000 Lenora St.
  Lui Building Studios - 2002 9th Avenue
- There will be periodic environmental and safety checks in all of the studios.
- Take a look at the evacuation route maps and be aware of the closest fire extinguisher, eye wash station and 1st Aid Kit locations.
• No obstructions within 6 feet of the sprinkler heads will be permitted. Do not paint, remove, cover, or tamper with any of the fire control systems.
• Do not disconnect any of the overhead fluorescent light bulbs. Contact Studio Tech.
• Do not block exit or emergency pathway lighting.
• No food or garbage should be left out. This poses a health threat to everyone, as well as the potential for an insect or rodent problem.
• No alcohol is allowed in studios.
• Smoking is not allowed in studios. Candles, open flames, and incense are not allowed.
• Hot plates are not allowed in studios (regulated by Fire Marshall). Appliances with heating elements can be a fire hazard as they often do not have an automatic OFF switch. No personal heaters, stoves, hot plates, toaster ovens, or coffee makers. Use options provided in MCC cafe.
• Use heavy gauge extension cords and 3 prong power strips/surge protectors. Use LED bulbs with clamp lighting hardware for everyday use. Clamps must be securely fastened with cable ties. Do not attach to fluorescent lighting, pipes or ducting. Do not have cords on the floor across walkways.
• Use the Flammables cabinets for safe storage of aerosols, Gamsol (no turpentine), wood stains and any flammable or hazardous products. Label with product name and your name. Dispose any paint rags with solvent/oils into the provided covered metal disposal cans.
• Use proper ear and eye protection.
• Notify Studio Manager or Security asap for any spills of flammable or toxic substances.
• Please be mindful of others regarding using products with strong smell, odor, or fumes. Many have sensitivities and/or allergies. Use direct ventilation in MCC 417 Spray Room or outside. Be courteous.

• Examples of materials and processes that require proper ventilation:
  o Aerosols (paint, adhesive, fixative, finishes etc.), Enamels, Encaustics, Flammables, Heating (in general), Resins (including Fiberglass), Sanding (any process that creates dust), Solvents (thinners) or solvent containing products, toxins...(anything with noxious fumes)

• Examples of materials and processes that MAY require ventilation:
  o Adhesives, Airbrushing, Cleaners/removers, Emulsion, Inks, Markers, Mediums, Mold making, Sealants, Stains
  o Ventilation needs can vary by product, so always check the label before using.

Any material process that produces excessive dust, sawdust or other airborne particles should be undertaken in the appropriate Lab area and not in the studios. The
Fabrication Studio is located at the Scene Shop this year while the MCC Fablab is renovated.

Costume Shop Safety Guidelines

MCC Room 418

Introduction

Purpose

Cornish College of the Arts is committed to providing a safe shop environment for all faculty, staff, students, and other users of the space. The purpose of this handbook is to provide general information, safety information, and usage policies for the Scene Shop. It is the responsibility of all shop users to maintain a safe and healthy work environment, free from recognized hazards. All faculty, staff, and students are
expected to be supportive of the goals of this handbook.

The Cornish College Scene Shop strives to be a leader in promoting safety and health practices both on campus and within the theatre industry. To this end, any errors, omissions, or additions to this handbook should be brought to the attention of the shop supervisor and CSES Department.

General Shop Information

Address & Phone

1000 Lenora Street
MCC room 418
Seattle Washington 98121
206-726-5128

Access and Hours

- Keys and door codes will be distributed to individuals based on their shop use privileges. These are not to be shared with any non-authorized users.
- The building is open during all scheduled class and practicum hours.
- General Shop hours are M/W/F 1 to 4pm. To access the shop outside of these hours contact Faculty/Staff.

Shut down and Lock-up

At the end of the day, the following must occur:

- All tools and equipment picked-up and put away in appropriate storage locations.
- All projects in progress are cleaned up and put away in appropriate places.
- All windows closed
- All machines neutralized, turned off and with chairs pushed in.
- Turn off all lights, Irons, and other equipment (unless specifically required to remain on)

Waste Disposal

- Waste baskets are located throughout the shop for the disposal of waste. Recycling bins are located near the front door.
- Trash should be emptied at the end of every work day into the larger trash
- Be mindful of placing waste in the appropriate container.
- Educate new shop users to the locations of bins.

Roles and Responsibilities

All students, faculty and staff who use the Cornish College Costume shop are expected to take responsibility for their own safety, health, and security, as well as for the safety of those with whom they work, mentor, teach, and interact.

The Cornish Costume Shop supervisor is responsible for providing reasonable access to PPE, SDS and training for anyone who is unfamiliar with the safety practices and standards outlined in this manual.

Faculty/Staff

Responsibilities:

- Inform new shop users of the safety policies, procedures, and rules of the shop.
- Ensure all shop users follow safety policies, procedures, and rules of the shop.
- Train all shop users to properly use all tools and equipment.
- Ensure that required Personal Protective Equipment (PPE) is provided and used.
- Ensure that all tools and equipment are maintained in a safe, working order.
- Take prompt action when unsafe acts or hazardous conditions are reported or noticed.

The Costume shop supervisor, or a shop staff person, has authority over shop use and rules.

One of these people must be present for all student work that involves the dye vat and the industrial sewing machines.

Students

Responsibilities:

- Follow all safety policies, procedures, and rules of the shop.
- Report all unsafe acts and hazardous conditions to your supervisor and faculty/staff.
- Report any injury, accident, or near-miss to faculty/staff. Call 911 then Cornish security for emergencies.
- Injuries require the completion of a cornish injury report form, please see the Costume shop supervisor.
- Refrain from using any tools or equipment, or performing any task, for which you are not properly trained or authorized.
• Take prompt action when unsafe acts or hazardous conditions are reported or noticed.

Guests & Visitors

Responsibilities:

• Follow all safety policies, procedures, and rules of the shop.
• Report all unsafe acts and hazardous conditions to faculty/staff.
• Report any injury, accident, or near-miss to faculty/staff. Call 911 then Cornish security for emergencies.
• Refrain from using any tools or equipment, or performing any task, for which you are not properly trained or authorized.

All guests and visitors must be supervised in the shop at all times. Use of any tools and equipment is at the discretion of the Costume Shop Supervisor.

Emergency Procedures

Familiarize yourself with the information provided on the emergency Procedures booklets located near the front door of the shop on the right hand side as you enter.

Contact Numbers

• Medical, Fire, Police Emergency – 9-911
• Cornish Security – 206-726-5083
• WA Poison Center – 1-800-222-1222
• Cornish Facilities – 206-726-5085

Evacuation Locations

• Primary: parking lot on the SW corner of Denny way and Lenora street.
• Secondary: SE corner of the intersection of Lenora street and Terry avenue, in front of the cornish commons building

Fire

What To Do:

• Exercise caution, most of the materials in the shop are combustible.
• Irons should be kept on their safety rubber pads, and turned off when the room is empty and at the end of the day.
• Spray paints, solvents, and other flammable products must be stored in the designated cabinet in the dye room.
• Know where the exits are located. Know where the fire extinguishers are and what types we have in the shop.
• There is a Fire Extinguisher located just inside the front costume shop door,
to the right on the wall.
• There is No smoking or flame use in the shop!

General Shop Safety

Follow all rules in the "Shop Safety Rules" handout.

• Be conscious of your surroundings.
• The main causes of accidents are:
• Insufficient training/knowledge
• Improper use of tools and equipment
• Failure to safeguard hazardous equipment
• Failure to remove faulty equipment
• Carelessness
• Taking unnecessary risks
• Being in a hurry
• Being sick or tired can impact your ability to work safely. Please talk to faculty/staff if you are not feeling well. Take care of your health.

Training

• Before operating any machinery, equipment or power tools for the first time, you must be trained by a faculty/staff supervisor.
• Always ask for re-instruction or tool use clarification if you are unsure, or if it has been a while since you last used the tool.

Lifting and Moving

• Lift correctly: bend your knees and lift with your legs.
• Communicate with others. If you need help, ask before you start.
• Look where you are going. Create a clear pathway before you start.
• If something is too large, heavy or awkward, consider repackaging it in a smaller, more manageable container.

Cleaning up

• Each shop user is personally responsible for clean-up, tool, and equipment return. This includes cleaning up threads and trimmings from all work surfaces and floors.
• Do not leave tools and supplies out unnecessarily.
• Do not let the work area become too cluttered; this can lead to trip hazards. Clean as you go.
• Each student is required to assist in a general clean-up of the shop at the end of each lab, work session, or when deemed necessary by faculty/staff supervisors.
What to do with damaged equipment

- If a tool or equipment seems damaged or is not working properly, immediately stop use.
- Notify faculty/staff of the issue so that it may be resolved.
- Only make repairs to tools and equipment if you are trained to do so.

Chemical Safety/SDS

- All chemicals and products that pose a health hazard have a Safety Data Sheet (SDS) available from the manufacturer.
- The shop will strive to maintain an up-to-date SDS manual for commonly used products.
- If you are using a product that is new to the shop, ask the supplier or manufacturer for a SDS to add to the shop binder.
- Notify faculty/staff that a new product has been introduced to the shop and provide them with the SDS, or ask them to provide an SDS for the product.
- SDS sheets will be stored in a binder and are available for all shop users to read.
- In case of an emergency involving a particular product or chemical, consult the SDS sheet and make it available to emergency responders.
- Please use paints and chemicals in the appropriate space, chemicals and spray paints should only be used in the 4th floor spray booth.

Personal Protective Equipment (PPE)

Eye Protection

- It is recommended to use eye protection at all times while work is being performed in the shop.
- Eye protection is required any time a tool plugs in (electrical or compressed air), creates debris, or poses a splash hazard.
- Be aware of your surroundings. You may not be using a tool or chemical, but someone else near you might be.
- Face shields are available for tasks that produce larger amounts of debris, such as using the lathe or grinder.
- Wear appropriate eye protection for the specific hazards to your eyes and face. If unsure, ask a faculty/staff supervisor.
- Make sure your protective eyewear fits properly and is in good, clean condition. If there are numerous scratches the eyewear should be replaced.
- Normal prescription eyewear will not qualify unless rated for impact and equipped with a side shield.

Clothing

- Closed-toed shoes with a flat to moderate heel are required in the shop.
- Stilettos, high heels, sandals, very thick platform soles, slippers and flip flops are not permitted, these pose a safety or tripping hazard and make it difficult to operate sewing machines.
- Loose-fitting overly flowing clothing, jewelry or sleeves are not permitted.
- Jeans, flannels and t-shirts with non-offensive logos are acceptable clothing. Do not wear clothing in the shop that you do not want lint, threads, fibers, paint, grease, sawdust, or dirt to possibly get on.
- You should be able to stand, sit, bend, and move about the shop comfortably and safely, clothing items that hinder your movement should not be worn.

Gloves
- Gloves should be worn to protect hands against abrasion, punctures, and chemicals.
- Gloves shall NOT be worn when operating any equipment that could grab the fabric of the glove and pull your hand into the machine.
- Disposable gloves should be worn for all paint and dye applications, and the gloves properly disposed of after use.

Respiratory/Dust Protection
- Dust collection must be used for tools that are equipped with it.
- Disposable dust masks are available. They are recommended when cutting MDF, sanding, or sweeping up dust. Dust masks DO NOT protect against vapors.
- Respirators are available when working around chemical vapors, including spray paint. It is imperative that a respirator fit properly and seal around your face. Facial hair can make this seal difficult or impossible to achieve.
**Beginning Fall 2020 all PP students will be required to provide their own personal respirator**
- There is a spray booth located on the 4th floor room 417. It should be utilized for spray painting and any chemical use whenever possible.

Equipment Safety
General
- Always use the correct tool for the job. Do not use a wrench as a hammer, or a chisel as a screwdriver or your hand as a hammer.
- Ensure the tool or piece of equipment is in good working condition before using it.
- Do not leave tools lying around. **If you are done using it, put it away.**
- If you are unsure of which tool to use, consult faculty/staff.

Craft Knives/Blades
- A sharp knife makes a better cut, a dull knife causes more accidents. Replace a dull blade.
- Always be conscious of your cutting direction. Ensure your free hand or other body parts won’t be in the way if the blade slips.
Use a metal straight edge as a cutting guide, hold it securely in two places.
Slow down, working too quickly can cause accidents and slippage.
Dispose of all blades in the designated sharps container. DO NOT throw into garbage.
If possible, always retract the blade when not in use.

Cutting mats
Always use the cutting mats on an even, flat, hard surface, do not use on the floor.
Unroll the mat (if stored rolled) and let it sit to flatten out before use.
Always use thick plexiglas cutting guides or rulers on the mat, not thin plastic gridded or metal rulers.

Rotary cutters
Always keep the rotary cutting blade in its closed and locked position when not in use.
Always cut away from the body, fingers, or other people.
Use the appropriate cutting guide with a thick edge, 1/8” or more. Hold securely with wide spread fingers to prevent twisting.
Make sure the cutting line is free of obstructions (pins, papers, scissors, rulers, fabric folds) before you cut.
Always use a sharp blade with no nicks. If you need to replace a blade or we are out of blades, please inform the shop supervisor.
Only use rotary cutters that are equipped with a built in blade guard.
Only use the rotary cutters with the appropriate cutting mat and cutting guide rulers. Follow the manufacturer’s instructions for changing the rotary cutter blades.

Scissors
Always cut away from your body and hands.
Keep your hands and fingers away from the cutting line.
Always carry manual scissors with the point toward the floor and with your hand around the closed blades.
Walk slowly when carrying scissors and be alert to your surroundings to avoid trips and falls.
Hand off the scissors to someone else by holding the scissors by the closed blades in a loose grip and offering the handles (known as bows) to the person receiving the scissors.
Inform the costume shop supervisor if any scissors are dull.
Use scissors only for their intended cutting purpose.
Seam Rippers, standard type

- Always aim the sharp point away from, hand, fingers or body.
- Check blade for sharpness, do not use a dull seam ripper.
- Use light pressure, force should not be necessary to use successfully.

Seam Ripper, scalpel type for serging

- Always keep the seam ripper capped when not in use
- Always aim the sharp point away from, hand, fingers or body.
- Check blade for sharpness. Do not use a dull seam ripper.
- Use light pressure, force should not be necessary to use successfully.
- The seam ripper is for thread and fabric only. Do not use on other materials.

Dye and Laundry room general safety

- Clear room of any stored racks, tubs, etc. You should have a clear floor work area.
- Cover any working counter spaces with brown paper, Tape in place securely to prevent slipping.
- Assemble Tools and supplies and set up a workspace before you begin working.
- Use appropriate safety gear for the work you are doing - Gloves, mask, lab coat etc.
- No open shoes are allowed in the dye room.
- Watch for the yellow spill lip.
- Keep spills cleaned up promptly as you work.
- Keep all product lids closed when done with use.
- Keep surfaces and working items wiped down and clean.
- Keep all flammable or corrosive paints and solvents in the flammables cabinet.
- No cellphone, headphone or other sound producing device use in Dye /laundry room.
- Clean up your work area thoroughly when you are done.

Dye safety

- Review SDS forms for all dyes, and other dye and cleanup materials prior to use.
- Do not eat, or drink anything in the dye/laundry room when dyeing or painting.
- Keep all dye containers closed when not in use.
- Keep dye containers safely on the counter when in use, keep away from the edge.
• Wear a mask that covers the mouth and nose, and use gloves for all dye work.
• Wear a lab coat for all dyeing procedures, launder when completed.
• If you are using liquid dye wear safety goggles.
• Promptly clean up any spills, and completely clean up work space, tools and materials upon job completion.

Industrial hot plate
• Clear space for the hot plate to sit on a flat sturdy surface, (do not use on top of the washer or dryer)
• Keep all cords in a safe place and not near water.
• Maintain space around the hotplate for safety. Items should not be against the hot plate housing.
• Keep open space around the hot plate to place tools, containers etc.
• Only plug in the hot plate when you are using, when not in use keep unplugged.
• When done with using, make sure it is turned off, let cool then wipe the entire hotplate down to clean.
• Only use approved metal containers on the hotplate. Do not use glass containers.
• Never use any containers used for dying for any food or drink purposes.
• Never use any flammable materials around the hot plate.

Industrial soup kettle (dye Vat)
• The dye vat may only be used with a shop staff person in the shop.
• Please see a shop staff person to get the key to the breaker lever. Always unlock the breaker switch, throw the breaker, and replace the lock(unlocked) in the loop. Do not walk away with the key and lock.
• Always use the lid handle to raise the lid. You may need a hand towel if the vat is hot. Always heat the vat with the lid closed.
• Clear the area around the vat of any objects before use.
• Always stay in the room as you fill the vat. It should only be filled three-quarters of the way to the top.
• Never heat the vat empty.
• Always turn the vat temperature dial off first and then the breaker as soon as you are done with your dying.
• Open the vat slowly when it is heating and keep your head, face and extremities away from the lid. Steam will need to escape before you can do anything.

Hot tools and equipment
This section applies to tools such as a heat gun, hot glue gun, hot knife, etc.
• Do not leave tools unattended while hot.
• Be conscious of how the heat will affect the materials around you.
• Remove flammable items from the work area. Always unplug or turn off when you are finished.
Industrial iron

- The industrial iron always sits on its face on the rubberized metal pad, never on its end like a domestic iron.
- Use the steam button in one smooth motion and then press without steam. Do not press the steam button repeatedly in succession.
- If the iron starts to "bleed" water onto the fabric, stop, it needs to reheat, wait until the red light goes off and then begin to use again.
- Keep your fingers away from the base of the iron, especially when you use steam.
- Always test a scrap of material to see if it can withstand pressing.
- If you have problems or questions - ask for help!

Stove

- Stove should be clear of all items, before and during use.
- Inform the room occupants if you are going to be using the stove, or if you have just used the stove and any of the items on it or the burners are hot.
- Use only heat safe containers on or in the stove and oven.
- Use a hot pad or gloves to remove any hot items from the stove or oven.
- Do not use the stove top for a desk or put any papers or flammable materials on the stove top.

Domestic sewing machine

- Make sure the machine is sitting securely on the table parallel to the table edge.
- Make sure the machine is threaded correctly, top thread and bobbin. Do not wind one thread over another on a bobbin, if the bobbins are all full unwind one before winding a new color.
- Have all necessary tools available before you begin to sew - pincushion, scissors or clips, etc.
- Place the foot control pedal in a comfortable spot, with cords out of the way. Sit upright in the chair, parallel to the table and machine.
- Always begin with the presser foot and needle in the "up" position.
- Use the flywheel to raise the needle out of the way.
- When setting up your work and when pausing, take your foot off of the control pedal.
- Keep fingers away from the needle area when operating the machine and any time your foot is on the control pedal.
- Always disengage the bobbin winding mechanism when not in use.
- Raise the presser foot and needle when finished sewing a seam.
- Remove work carefully from the machine, do not jerk or pull, if you encounter resistance, stop and figure out what is preventing the work from releasing. Ask for help if necessary.
Industrial Sewing Machine

- Only use an industrial sewing machine with a staff person in the shop.
- Sit parallel to the machine in a sturdy chair.
- Only use the bobbins for that machine, they can be found in the accessory drawer or container for that machine.
- Make sure the machine is correctly threaded before sewing.
- Always use the correct industrial sewing needle for each machine, ask for help if you are unsure. Remember industrial needles thread left to right, not front to back.
- Always tighten industrial needle set screws securely after replacing a needle.
- Always keep your hands and fingers away from the drive belt and wheel when using the machine.
- When gripping the flywheel, place hands and fingers carefully to avoid injury.

Portable blind hemmer

- Only use the blind hemmer after receiving instruction and performing some samples and practice work.
- Use the blind hemmer on a flat stable work surface.
- Do not sew over pins, remove them as you go.
- The Blind hemmer works best on natural fibers, wool and cotton, and some knits. It does not work well on thin tight fabrics, polyester and other synthetics. Do a sample to check first, before using.
- The Blind Hemmer does not work well over thick fabrics, or thick pleats in a curved surface, shrink the excess to fit instead.

Domestic iron

- Irons should be used on the ironing tables or a portable ironing board.
- Keep cords safely out of the way especially in traffic areas, particularly when in use.
- When finished, please empty the iron water chamber (if used) and let cool in a safe place before putting away.

Grommet setting machine

- Use a solid, stable chair, do not use a wheeled chair with this machine.
- Keep your fingers completely out of the way of the dies before you press on the foot pedal.
- Keep your foot off of the foot pedal until you need to use it.
- When using the foot pedal use a sharp push away from you to produce enough force to set the die.
- Place the ring with the tube extended in the lower die, then the fabric, and then the ring on the grommet tube on the upper side.
• Mark and cut all setting holes prior to coming to the machine.
• Check the machine settings (height and depth of the two dies) and make a couple practice grommets before beginning.
• Make sure that the large bolt at the back of the central machine body does not hit the top of the foot pedal arm at the back of the machine. If it does readjust the lower die height to prevent this, the silver die chuck in the base screw holder should be slightly higher than the surrounding machine body housing.

Work Equipment

Ladders
• Use ladders and step stools to access elevated work areas. Never climb on railings, shelves, stools, tables, and chairs for such access.
• Follow all manufacturers’ requirements and information related to each type of ladder used.
• Ladders must be inspected for defects before and after each use, and taken out of service for repair or replacement if any are found.
• Always face the ladder and maintain three points of contact when ascending or descending.
• Fold and/or carry a step ladder to move it; do not drag an opened ladder from place-to-place.
• Use a line and bucket to hoist tools, materials, and equipment up the ladder; do not carry such items when ascending or descending.
• Make sure the ladder is on firm, level, and stable base and adequately supported before ascending.
• Do not stand on the top three rungs of a straight ladder or extension ladder.
• Do not stand on the top cap or top step of a stepladder.
• Ladders are not to be painted, except minimally for identifying and labeling purposes.
• Manufacturer’s labels and markings must never be covered.
• Ladder rungs and steps must be kept free of dust and debris.
• Do not leave tools, hardware, materials, or anything else on the top of a ladder. Objects may fall if the ladder is moved and present a hazard to those below.
• Do not use a step ladder as a straight ladder.
• All ladders must extend three feet beyond the supporting object when used as an access to an elevated work area.

A good rule of thumb for the slope of an extension ladder is that standing with your feet at the base of the ladder, you should grasp the side rails of the ladder with your arms fully extended and parallel to the ground.
Costume Racks

- Always keep the rack on flat stable ground.
- Keep wheels unlocked so they don't drag or catch on the floor.
- Keep rod extensions (or outriggers) slid "in" when not in use, When in use keep the ends of the rods close to the clothing, not sticking out beyond.
- Do not overload racks. If it won't fit, get another rack.
- When moving racks outside of the costume shop, use two people (large Racks may require 3), one at each end, and a possible spotter in the middle.
- Keep the rack on solid, even, stable ground, and plan your movement route before you get to it.
- Use a third person to "spot" the center of the rack and assist when moving over uneven or unstable ground, or when making turns.
- Larger racks can be topheavy, make turns and movement over uneven ground carefully and with more space and assistance then you would expect.
- When moving, grab by the metal end posts only, using one hand high and one hand low.
- If the rack does start to tip and cannot be easily caught, let it go! You are more important than the costume, we do not want you to be injured.
- When crossing the street, use a third person to check and spot traffic before you move. Safety First, do not rush crossing the street.
- Always use hangers in good stable condition, and ones that can take the weight of the garment on it. Do not overload hangers.
- When moving periodically check behind you for dropped items, especially before turning corners, exiting elevators etc.

Cutting tables

- There is no standing or sitting on the cutting tables.
- Please keep feet off of the table shelves.
- Table tops should be covered with paper at all times, this should be changed as they become worn.
- There is no painting, dying or any other wet, sticky, or dirty work done on any of the cutting tables, do these in the Dye room.
- Use of knives or rotary cutters should only be done on an appropriate cutting mat, not on the bare table.
- Table space is limited in the shop, tables are to be used as shared workspace.
- Tables are not to be used as storage space, or as a desk. If you need to do paperwork please use the shorter table.
- Please keep materials, tools and supplies organized on the tables when working.
Carts

- Do not overload carts.
- Use care when moving over uneven ground.
- Keep small items in boxes placed in the cart.
- Carts are used for transport of items only, no people are to be pushed in carts.
- Keep carts out of the way in traffic areas.
- Unload carts promptly when finished.

Scene Shop

Safety Guidelines

Introduction

Purpose

Cornish College of the Arts is committed to providing a safe shop environment for all faculty, staff, students, and other users of the space. The purpose of this handbook is to provide general information, safety information, and usage policies for the Scene Shop. It is the responsibility of all shop users to maintain a safe and healthy work environment, free from recognized hazards. All faculty, staff, and students are expected to be supportive of the goals of this handbook.

The Cornish College Scene Shop strives to be a leader in promoting safety and health practices both on campus and within the theatre industry. To this end, any errors, omissions, or additions to this handbook should be brought to the attention of the shop supervisor and CSES Department.
General Shop Information

Address & Phone

621 2nd Ave N
Seattle, WA, 98109
206-726-5091

Access and Hours

- Keys and door codes will be distributed to individuals based on their shop use privileges. These are not to be shared with any non-authorized users
- The building is open during all scheduled class and practicum hours and during select Saturdays when Cornish is in session. General Shop hours are M/W/F 1 to 4pm. To access the shop outside of these hours contact Faculty/Staff.
- When travelling to and from the scene shop, please use the “buddy system” and travel in pairs or groups for mutual safety.

Shut down and Lock-up

At the end of the day, the following must occur:

All tools picked-up and/or locked in appropriate cabinets

- Stationary tool kill-switch in office is in OFF position
- All windows closed
- All doors closed and locked
- Turn off all lights, fans, and other equipment (unless specifically required to remain on)

Waste Disposal

- Labeled bins are located throughout the shop for the disposal of waste and recycling.
- Trash should be emptied at the end of every work day into the dumpster in the loading dock.
- Be mindful of placing waste in the appropriate container.
- Educate new shop users to the locations of bins.
Roles and Responsibilities

All students, faculty and staff who use the Cornish College Scene Shop are expected to take responsibility for their own safety, health, and security, as well as for the safety of those with whom they work, mentor, teach, and interact. The Cornish Scene Shop supervisor is responsible for providing reasonable access to PPE, SDS and training for anyone who is unfamiliar with the safety practices and standards outlined in this manual.

Faculty/Staff

Responsibilities:

- Inform new shop users of the safety policies, procedures, and rules of the shop.
- Ensure all shop users follow safety policies, procedures, and rules of the shop.
- Train all shop users to properly use all tools and equipment
- Ensure that required Personal Protective Equipment (PPE) is provided and used.
- Ensure that all tools and equipment are maintained in a safe, working order.
- Take prompt action when unsafe acts or hazardous conditions are reported or noticed.

The Faculty Technical Director, Shop Supervisor, and Paint/Props Supervisor have authority over shop use and rules. One of these people must be present for all student work that involves power tools.

Students

Responsibilities:

- Follow all safety policies, procedures, and rules of the shop.
- Report all unsafe acts and hazardous conditions to your supervisor and faculty/staff.
- Report any injury, accident, or near-miss to faculty/staff. Call 911 then Cornish security for emergencies.
- Refrain from using any tools or equipment, or performing any task, for which you are not properly trained or authorized.
- Take prompt action when unsafe acts or hazardous conditions are reported or noticed.
Guests & Visitors

Responsibilities:

- Follow all safety policies, procedures, and rules of the shop.
- Report all unsafe acts and hazardous conditions to faculty/staff.
- Report any injury, accident, or near-miss to faculty/staff. Call 911 then Cornish security for emergencies.
- Refrain from using any tools or equipment, or performing any task, for which you are not properly trained or authorized.

All guests and visitors must be supervised in the shop at all times. Use of any tools and equipment is at the discretion of the Faculty TD, Shop Supervisor, or Paint/Props Supervisor.

Emergency Procedures

Familiarize yourself with the information provided on the emergency Procedures posters located around the shop.

Contact Numbers

- Medical, Fire, Police Emergency – 9-911
- Cornish Security – 206-726-5083
- WA Poison Center – 1-800-222-1222
- Cornish Facilities – 206-726-5085

Evacuation Locations

- Primary: Roy St and 2nd Ave N (Turn right when exiting the building)
- Secondary: Roy St and Warren Ave (Turn left when exiting the building)

Fire

Exercise caution, most of the materials in the shop are combustible. Welding and grinding produce sparks, therefore paper, sawdust, oil, and all flammable items must be moved away from the work area around these processes. Spray paints, solvents, and other flammable products must be stored in the designated cabinet in the paint area.

Know where the exits are located. Know where the fire extinguishers are and what types we have in the shop.

No smoking!
General Shop Safety

General Safety Rules

- Follow all rules on the “Shop Safety Rules” poster.
- Be conscious of your surroundings.
- The main causes of accidents are:
  - Insufficient training/knowledge
  - Improper use of tools and equipment
  - Failure to safeguard hazardous equipment
  - Failure to remove faulty equipment
  - Carelessness
  - Taking unnecessary risks
  - Being in a hurry
- Being sick or tired can impact your ability to work safely. Please talk to faculty/staff if you are not feeling well. Take care of your health.

Training

- Before operating machinery or power tools for the first time, you must be trained by a faculty/staff supervisor.
- Always ask for re-instruction or tool use clarification if you are unsure, or if it has been a while since you last used the tool.

Ventilation

- To protect against respiratory hazards, proper ventilation of the shop should be maintained.
- Use dust collection for the tools that are equipped with it.
- Use exhaust vents to help circulate air in the shop.
- Use fans to help circulate air when using products that give off vapors.
- Use a dust mask or respirator when appropriate.

Lifting and Moving

- Lift correctly: bend your knees and lift with your legs.
- Communicate with others. If you need help, ask before you start.
- Look where you are going. Create a clear pathway before you start.
- When carrying tall objects, like flats or ladders, lift with one hand low and one hand high. Be aware of overhead obstacles.
- If you are losing your grip or something is too heavy, tell the person helping you and stop. Do not unexpectedly drop something and leave the other person with all of the weight.
• Be aware of toes and fingers when setting things down. Good communication is vital to prevent pinching or crushing injuries.
• When leaning objects against a wall, be sure there is sufficient distance between the base of the object and the wall to ensure it will not fall by itself.

Cleaning up
• Each shop user is personally responsible for clean-up and tool return. This includes cleaning up dust and debris from all work surfaces and floors.
• Do not leave tools and supplies out unnecessarily.
• Do not let the work area become too cluttered; this can lead to trip hazards. Clean as you go.
• Remove all nails and screws from reused materials. Flatten nails in lumber that is trash.
• Each student is required to assist in a general clean-up of the shop at the end of each lab, work session, or when deemed necessary by faculty/staff supervisors.

What to do with damaged equipment
• If a tool or equipment seems damaged or is not working properly, immediately stop use.
• Notify faculty/staff of the issue so that it may be resolved.
• Only make repairs to tools and equipment if you are trained to do so.

Chemical Safety/SDS
• All chemicals and products that pose a health hazard have a Safety Data Sheet (SDS) available from the manufacturer.
• The shop will strive to maintain an up-to-date SDS manual for commonly used products.
• If you are using a product that is new to the shop, ask the supplier or manufacturer for a SDS to add to the shop binder.
• Notify faculty/staff that a new product has been introduced to the shop and provide them with the SDS, or ask them to provide an SDS for the product.
• SDS sheets will be stored in a binder and are available for all shop users to read.
• In case of an emergency involving a particular product or chemical, consult the SDS sheet and make it available to emergency responders.
Personal Protective Equipment (PPE)

Eye Protection

- It is recommended to use eye protection at all times while work is being performed in the shop.
- Eye protection is required any time a tool plugs in (electrical or compressed air), creates debris, or poses a splash hazard.
- Be aware of your surroundings. You may not be using a tool or chemical, but someone else near you might be.
- Face shields are available for tasks that produce larger amounts of debris, such as using the lathe or grinder
- Wear appropriate eye protection for the specific hazards to your eyes and face. If unsure, ask a faculty/staff supervisor.
- Make sure your protective eyewear fits properly and is in good, clean condition. If there are numerous scratches the eyewear should be replaced.
- Normal prescription eyewear will not qualify unless rated for impact and equipped with side shields.

Ear Protection

- Ear plugs or muffs are required for all high-noise jobs. This includes, but is not limited to, using the table saw, chop saw, grinder, any metal saw, and pneumatic tools.
- The shop is a loud environment and it is highly recommended that you wear ear plugs at all times when work is being performed.
- Earbuds that amplify audio are prohibited at all times.

Clothing

- Sturdy, closed-toed shoes are required in the shop. Examples include: boots, athletic shoes and safety shoes. Closed toed shoes such as ballet flats, crocs, or Vans are not permitted.
- Loose-fitting clothing, scarves, ties, ID lanyards, jewelry, and other accessories should not be worn when using power tools. Hooded sweatshirts should be removed during work.
- Long hair must be tied back.
- Jeans, flannels and t-shirts with non-offensive logos are acceptable clothing. Do not wear clothing in the shop that you do not want paint, grease, sawdust, or dirt to get on.
- Clothes made from cotton, wool, or leather must be worn when welding or working with flame.
- Synthetic fabrics such as nylon or polyester are not permitted during work hours.
Gloves

- Gloves should be worn to protect hands against abrasion, punctures, and chemicals.
- Gloves shall NOT be worn when operating saws, drills, lathes, or other equipment that could grab the fabric of the glove and pull your hand into the machine.

Respiratory/Dust Protection

- Dust collection must be used for tools that are equipped with it.
- Disposable dust masks are available. They are recommended when cutting MDF, sanding, or sweeping up dust. Dust masks DO NOT protect against vapors.
- Respirators are available when working around chemical vapors, including spray paint. It is imperative that a respirator fit properly and seal around your face. Facial hair can make this seal difficult or impossible to achieve. **Beginning Fall 2020 all PP students will be required to provide their own personal respirator**
- There is a spray booth located in the Cornish Playhouse. It should be utilized for spray painting whenever possible.
- Spray painting in the shop may only occur in the loading dock area and only with the permission of the Paint/Props Supervisor and/or Scene Shop Supervisor. Working fans are required to help provide a well ventilated space.

Hard Hats

- Hard hats must be worn during all load-in, work notes, and strike calls in all Cornish performance spaces, including the Cornish Playhouse, Raisbeck Performance Hall, and Alhadeff Studio Theatre.
- Hard hats must be worn whenever work is being performed overhead.
- Hard hats must be worn whenever there is a risk of head injury by bumping against hard and/or sharp objects in a low-ceiling area.

Hand Tool Safety

General

- Always use the correct tool for the job. Do not use a wrench as a hammer, or a chisel as a screwdriver or your hand as a hammer.
- Ensure the tool is in good working condition before using it.
- Do not leave tools lying around. **If you are done using it, put it away.**
- If you are unsure of which tool to use, consult faculty/staff.
Knives/Blades

- A sharp knife makes a better cut, a dull knife causes more accidents. Replace a dull blade.
- Always be conscious of your cutting direction. Ensure your free hand or other body parts won’t be in the way if the blade slips.
- Dispose of all blades in the designated container. DO NOT throw into garbage.
- If possible, always retract the blade when not in use.

Hot Tools

This section applies to tools such as a heat gun, hot glue gun, hot knife, etc.

- Do not leave tools unattended while hot.
- Be conscious of how the heat will affect the materials around you.
- Remove flammable items from the work area.
- Always unplug the tool when you are finished.

Pneumatic Tool Safety

- Always wear eye protection when using pneumatic tools.
- It is best practice to point the tool away from yourself and others when connecting the air supply.
- Keep fingers off the trigger except when ready to shoot a fastener.
- Make sure the safety works and does not stick or jam.
  - NOTE: The pneumatic fabric stapler does not have a safety. Use extra caution when using this tool.
- Keep hands clear of the area where the fastener is to be driven. If the staple or nail encounters an imperfection in the wood, it may bend and poke out of the material unexpectedly. Use clamps to hold material in place if necessary.
- Notify faculty/staff if hose connections do not fit, get jammed, or leak excessive amounts of air.
- Do not carry a pneumatic tool by the hose.
- Always remove the air supply from the tool before performing any maintenance, such as removing a jammed fastener. As well as reloading fasteners in the tool.
- Only use fasteners intended for use with the specific tool. Ask faculty/staff if unsure which fasteners to use or how to load the tool.
- Never point and shoot a pneumatic tool in the direction of someone else. This is a zero tolerance policy!
- All pneumatic tools should be lubricated before each use. Please see faculty/staff for guidance on how to properly lubricate pneumatics.
Portable Electric Tool Safety

- ALWAYS disconnect power from the tool before servicing, such as changing blades or making adjustments.
- Double check that the switch is in the OFF position prior to plugging in a tool.

Power Drill

- Secure the workpiece before drilling. Larger pieces may be stable on their own, but smaller pieces should be clamped.
- When drilling metal, use a punch to make a dimple in the metal to keep the bit in place.
- If using a corded drill, keep the cord away from the drilling area.
- Large drills and bits may be powerful enough to twist your wrist or arm if they catch. Some drills have a secondary handle to help hold the tool. Make sure you have a good footing and stance when drilling.

Impact Driver

- The hammering noise is very loud and ear plugs should be worn when using an impact driver.

Circular Saw

- Position material so that it is stable and stationary. Smaller pieces need to be clamped securely.
- Make sure you can cut from a balanced and comfortable position.
- Be sure the path of the blade under the workpiece is clear. Common obstacles include the table, sawhorse, or power cord.
- Start the tool away from the material. The saw will kick back if touching the material when you pull the trigger.
- Make sure the blade guard is working smoothly. Do not set the tool down on an unprotected blade.
- Never jam the blade guard so it is forcefully propped open.

Router

- Start the tool away from the workpiece and let the tool come to speed before cutting.
- Make sure the work surface is stable and/or clamped.
- Always cut against the rotation of the bit, generally LEFT TO RIGHT.
Jig Saw

- Choose the correct blade for the material being cut. Replace any blade that becomes bent or otherwise damaged. Generally fine toothed blades are for metal and coarse tooth blades are for wood.
- Keep the power cord clear of the cutting area.
- Start tool out of contact with material.
- Be aware of what is below what you are cutting (like the table or sawhorse).
- Keep the base firmly in contact with material being cut.

Reciprocating Saw

- Choose the correct blade for the material being cut. Replace any blade that becomes bent or otherwise damaged. Generally fine toothed blades are for metal and coarse tooth blades are for wood.
- Keep the power cord clear of the cutting area.
- Start tool out of contact with material.
- Be aware of what is behind what you are cutting.
- Use both hands to safely control the tool.
- Keep the base shoe firmly in contact with material being cut.

Angle Grinder

- Check that there are no flammables in the area before grinding.
- Make sure the work piece is secure before grinding.
- Be conscious of where the sparks are going, taking care not to endanger yourself or others.
- Never remove the disc guard.
- Grinding will cause the workpiece to get very hot. Use caution, wait for the piece to cool or use appropriate gloves.

Stationary Tool Safety

- ALWAYS disconnect power from the tool before servicing, such as changing blades or making adjustments.
- Turn on dust collection for any tool that uses it.

Table Saw

- Make sure that the blade guard is in place before starting. Remove the guard ONLY if it is absolutely necessary for the type of cut being
performed. The guard must be re-installed immediately after completing the cut(s).

- Make sure the fence is locked in place so that it doesn’t shift during cutting. Always use the fence,
- NEVER cut “free hand” on the table saw.
- Ensure that the table surface is clear of materials, tools, and other debris.
- Check the height of the blade BEFORE turning on the saw and beginning the cut.
- The table saw should only be used for ripping, not cross cutting. The workpiece must be longer than it is wide. Cross cutting vs ripping is about geometry, not material grain.
- Use a partner to help support large sheet goods.
- Push sticks, feather boards, and other holding devices must be used whenever the operator’s hands are too close to the blade to cut safely.
- Do not let go of the piece between the blade and the fence, this can easily result in a kick back.
- If you tilt the blade for a cut, make sure that it is restored to vertical before you walk away.
- Sweep up any dust off the floor in front of the table saw to prevent slipping while using the tool.
- If you are performing a task that requires use of the saw for an extended period of time or for several cuts, please allow others to use the saw when appropriate and then return to your task.
- Only faculty/staff may change the saw blade or supervise changing the blade.
- Check that the material has no nails or screws prior to cutting. These could damage the blade and pose other hazards while cutting.

**SawStop**

The SawStop is there for your safety. All safety rules from the Table Saw section above still apply. For certain cutting conditions the SawStop does have an override. The override may not be accessed without supervision of faculty or staff.

- You are cutting wet wood.
- There are small fasteners in the wood that will not damage the blade to cut through.
- Cutting through a material with aluminized backing.
- Cutting through certain types of plastics. Ask faculty/staff for guidance.
- Cutting circles, using the circle jig.

DO NOT override SawStop. Only faculty/staff may override, or make adjustments to SawStop. If you set off the SawStop DO NOT attempt to change the cartridge by yourself. Inform the faculty/staff that it has been set off.
Sliding Compound Miter Saw

- Do not place hands within four inches of blade, follow all indicators on the tool.
- Hold all pieces securely against the fence while cutting. Clamp any materials that are too close to the blade to be held by hand.
- Make sure all miter and tilt adjustments are locked before cutting.
- Make sure the blade guard is working correctly before using the tool.

Panel Saw

- Use the panel saw for cross cutting sheet goods. Do not use for rip cutting. Cross cutting vs ripping is about geometry, not material grain.
- Make sure the material to be cut is stable on the tool’s rack before cutting.
- Do not force the blade through the cut. At the end of the cut, let the blade come to a complete stop before retracting.

Band Saw

- Ensure that the table is clear of any material, tools, or debris.
- The blade guard should be kept at a height just above the thickness of the material being cut.
- Approximately 1/4” or the thickness of your pinky finger.
- Use a push stick to keep fingers well clear of the blade.
- Use relief cuts to avoid having to back out of a long cut. Never back out of a long cut with the tool running.
- Do not force the workpiece along a tighter radius than the blade will allow. The blade will bind or break.
- Make sure the blade comes to a stop before walking away.
- Do not change blades or make adjustments to the band saw tension wheels. Ask faculty/staff if adjustments need to be made.

Stationary Sander

- Be aware that both the belt and disc are moving while the tool is turned on.
- Keep the work surface you are not using clear to keep items from shifting into the sandpaper.
- Rest material against the work surface, do not hold against sandpaper up in the air.
- Keep your fingers well clear of moving sandpaper.
Drill Press

- Be sure the table is securely locked in place.
- Always use sharp drill bits and check that the speed is appropriate for the bit and material.
- Check with faculty/staff if unsure.
- REMOVE CHUCK KEY BEFORE TUNING TOOL ON. The chuck key could be thrown from the machine or the cord could get wrapped around the spindle causing damage.
- ALWAYS clamp down material being drilled.
- Pay attention to what is below your material and be aware of how deep you are drilling. Do not drill into the drill press table. Use scrap material under the workpiece if needed.
- Use lubricating oil when drilling through metal.
- Keep your hands clear of the bit when the tool is on. Roll up sleeves and be mindful of anything that could get caught in the rotating spindle. Eye protection and ear plugs/muffs are required during operation.
- If material becomes loose or a drill bit gets stuck, turn off the tool immediately.

Cold Saw

- All stock must be clamped tightly in the vice before cutting. If material begins to slip, stop cutting.
- Check that the blade will not contact the vice jaws while cutting. This is especially true after making any adjustments to the miter angle of the saw.
- Frequently clear chips and other debris from the vice area. A build up can jam the vice and prevent it from fully tightening onto the material to be cut.
- Ensure that coolant is flowing over the blade before starting the cut. The coolant is necessary to protect the blade and lubricate the cut. Notify faculty/staff if there is an issue with the coolant.
- Be careful of sharp edges and/or metal burrs on cut pieces. It is recommended to grind off all burs as soon as practical.

Bench Grinder

- Check that there are no flammables in the area.
- Make sure the tool rest is about 1/16” away from the grinding wheel. A larger gap will more
- easily grab or pinch the work piece.
- Only grind on the outer edge of the grinding wheel, not the side.
- The workpiece should be moved back and forth slightly while grinding to avoid creating a groove in the grinding wheel.
- Do not use heavy pressure while grinding, it can stress the machine and
unnecessarily heat the work material.

- Small work pieces should be held with vice grips to keep your hands away from the grinding wheel and protect against heat. Use caution, small pieces are more easily pinched and grabbed by the machine.
- A face shield is recommended.

**Router Table**

- Set fences and bit guards to expose as little of the router bit as is necessary for the cutting task.
- Use a push stick(s) to guide the workpiece through the bit. Keep fingers well clear of the rotating bit.
- Feed material against the rotation of the bit, generally right to left.
- Lower bit into table or remove bit when table is not in use.

**Planer**

- Make sure stock is long enough to engage both rollers.
- Do not plane more than 1/8" per pass.
- Stand to the side of the planer in case a kick-back occurs.
- Keep hands well away from the planer table. Watch for loose items that could get caught by the wood feeding into the machine.
- If the wood gets stuck, turn off the machine and unplug before trying to clear the jammed piece.
- Clear chips frequently to avoid a hazardous build-up of debris.

**Welding Safety**

- Remove any flammable materials from your work area. This can include rags, sawdust, paper, oils, etc.
- Know the location of fire extinguishers in case something unintentionally catches flame.
- The arc welding process creates bright light, spatter, and high temperatures. Specific clothing must be worn to protect against these hazards.
  - Wear long sleeves and pants made of natural fibers: cotton, wool, and leather.
  - Synthetic fibers can melt and burn your skin.
  - Welding specific leather gloves are required to protect your hands while welding. These gloves are also necessary for handling recently welded metal until it has cooled.
  - Sneakers or similar shoes with lots of mesh panels are not recommended. Shoes made of leather or canvas are better.
  - A full face welding helmet must be worn when welding or watching welding.
- Protect others in the shop from seeing the arc by using welding screens.
around your work area.

- Announce “WELDING” before you pull the trigger so that those around you know to look away.
- Ensure there is enough ventilation to remove welding fumes from your work area.
- Be conscious of hot metal while you are working. This also includes any clamps near the weld area. Feel for heat without touching before picking up any metal without gloves.
- Guard hot metal until it has a chance to cool.
- If someone comes to help you move a recently welded frame, inform them of hot areas and ensure they wear gloves.

Work Equipment

Ladders

- Use ladders and step stools to access elevated work areas. Never climb on railings, shelves, stools, tables, and chairs for such access.
- Follow all manufacturers’ requirements and information related to each type of ladder used.
- Ladders must be inspected for defects before and after each use, and taken out of service for repair or replacement if any are found.
- Always face the ladder and maintain three points of contact when ascending or descending.
- Fold and/or carry a step ladder to move it; do not drag an opened ladder from place-to-place.
- Use a line and bucket to hoist tools, materials, and equipment up the ladder; do not carry such items when ascending or descending.
- Make sure the ladder is on firm, level, and stable base and adequately supported before ascending.
- Do not stand on the top three rungs of a straight ladder or extension ladder.
- Do not stand on the top cap or top step of a stepladder.
- Ladders are not to be painted, except minimally for identifying and labeling purposes.
- Manufacturer’s labels and markings must never be covered.
- Ladder rungs and steps must be kept free of dust and debris.
- Do not leave tools, hardware, materials, or anything else on the top of a ladder. Objects may fall if the ladder is moved and present a hazard to those below.
- Do not use a step ladder as a straight ladder.
- All ladders must extend three feet beyond the supporting object when used as an access to an elevated work area.
- A good rule of thumb for the slope of an extension ladder is that standing
with your feet at the base of the ladder, you should grasp the side rails of the ladder with your arms fully extended and parallel to the ground.

Lifts

- Always follow all manufacturer labels and manuals.
- Never override or disable any safety feature of a lift.
- Training must be provided before use of any lift.
- Inspect the lift for any damage prior to use.
- Be aware of any overhead obstructions while ascending.
- Visually check below the lift and notify others before descending.
- Only stand on the floor of the work platform. NEVER stand on the railings.
- A lift cannot be used as access to upper level areas such as catwalks and platforms. The operator must stay in the basket at all times.

Aerial Work Platforms

- Ensure the lift and its outriggers are on a firm, level surface.
- Do not place the lift on temporary stage platforms unless they are designed for the load capacity.
- The combined weight of operator and tools must not exceed the rated capacity. A lift should not be used to raise or lower scenery or large, heavy equipment.
- Only move the lift while fully lowered. NEVER loosen the outriggers or move a lift while someone is elevated.

Scissor Lifts

- Never climb into or out of a lift unless it is fully lowered.
- Check all sides of the lift and notify others before driving.
- Do not drive the lift onto temporary stage platforms.
- Do not place a ladder, stepstool, or other device in the basket of the lift to increase the working height.
- When done with the lift, push the emergency stop buttons and turn off the lift. Plug in to charge the battery.
- **NOTE:** ALWAYS have at least two people when working at height.

Weapons Safety

- Prop weapons are not toys. Do NOT handle prop weapons unless your role on the production requires you do so.
- For each production, one person shall be designated to be in charge of all the weapons.
- Weapons are to be stored in a designated locked cabinet when not in use. This applies to the shop, rehearsal room, and backstage during a
production.

- Transporting weapons should be done only in a secure, opaque case. Under no circumstances should you exit a building carrying a visible weapon.
- Any practical use of weapons in a show must be done in consultation of a trained fight choreographer.
- Treat any gun as though it were loaded. Never point it at anyone.
- Use of a blank gun requires specific training from an expert.
- Ear protection must be provided to those firing or in close proximity to the firing of a blank gun.
- This should be kept in mind for costume and staging. If possible, such as when firing a blank gun offstage, use eye protection.
- A loaded blank gun must never be left unattended and cannot be left preset on the set prior to use.
- All swords, knives, or other blades must be dulled unless the cutting effect cannot otherwise be simulated.
- When there is prop weaponry in a show Cornish Security needs to be notified.
  - What it is.
  - Where it is stored.
  - When it is used.
Fabrication Studio Safety Guidelines

MCC 109

Introduction

Purpose
Cornish College of the Arts is committed to providing a safe shop environment for all faculty, staff, students, and other users of the space. The purpose of this handbook is to provide general information, safety information, and usage policies for the Fabrication Studio. It is the responsibility of all shop users to maintain a safe and healthy work environment, free from recognized hazards. All faculty, staff, and students are expected to be supportive of the goals of this handbook.

The Cornish College Fabrication Studio strives to be a leader in promoting safety and health practices both on campus and off. To this end, any errors, omissions, or additions to this handbook should be brought to the attention of the shop supervisor and CSES Department.

General Shop Information

Address & Phone
1000 Lenora St.
Seattle, WA 98121
206-726-5144

Access and Hours

- Fabrication studio hours are 9am-8pm Monday-Friday unless otherwise posted
• Keys and door codes will be distributed to individuals based on their shop use privileges. These are not to be shared with any non-authorized users.

Shut down and Lock-up
At the end of the day, the following must occur:

• All tools picked-up and/or locked in appropriate cabinets
• Stationary tool kill-switch in office is in OFF position
• All doors closed and locked
• Heaters unplugged
• Welding gas turned off
• Air compressor turned off
• Turn off all lights, fans, and other equipment (unless specifically required to remain on)

Waste Disposal

• Labeled bins are located throughout the shop for the disposal of waste and recycling.
• Trash should be emptied at the end of every work day into the dumpster. Should be under daily duties.
• Be mindful of placing waste in the appropriate container.
• Educate new shop users to the locations of bins.

Roles and Responsibilities
All students, faculty and staff who use the Cornish College Fabrication Studio are expected to take responsibility for their own safety, health and security, as well as for the safety of those with whom they work, mentor, teach, and interact. The Cornish Fabrication Studio Technicians are responsible for providing reasonable access to PPE, SDS and training for anyone who is unfamiliar with the safety practices and standards outlined in this manual.

Faculty/Staff
Responsibilities:

• Inform new shop users of the safety policies, procedures, and rules of the shop.
• Ensure all shop users follow safety policies, procedures, and rules of the shop.
• Train all shop users to properly use all tools and equipment
• Ensure that required Personal Protective Equipment (PPE) is provided and used.
• Ensure that all tools and equipment are maintained in a safe, working order.
• Take prompt action when unsafe acts or hazardous conditions are reported or noticed.

Faculty and Lab Technicians have authority over shop use and rules. **One of these people must be present for all student work that involves power tools.** How about **Studio use is only available when faculty or staff are monitoring the studio.**

**Students**

Responsibilities:

• Follow all safety policies, procedures, and rules of the shop.
• Follow all directions from studio technicians and/or faculty.
• Report all unsafe acts and hazardous conditions to your supervisor and faculty/staff.
• Report any injury, accident, or near-miss to faculty/staff. Call 911 then Cornish security for emergencies.
• Refrain from using any tools or equipment, or performing any task, for which you are not trained by or authorized by Studio Technicians.
• Take prompt action when unsafe acts or hazardous conditions are reported or noticed.

**Guests & Visitors**

Responsibilities:

• Follow all safety policies, procedures, and rules of the shop.
• Report all unsafe acts and hazardous conditions to faculty/staff.
• Report any injury, accident, or near-miss to faculty/staff. Call 911 then Cornish security for emergencies.
• Refrain from using any tools or equipment, or performing any task, for which you are not properly trained or authorized.

Only authorized students, faculty and resource area technicians are allowed to engage studio processes without prior permission from administration. Guests and visitors are not allowed to enter active studio work areas and may not use studio tools or equipment. Studio guests should remain in the classroom or entry areas of the Fabrication lab.
All guests and visitors must be supervised in the shop at all times. Use of any tools and equipment is at the discretion of the Lab Technicians.

Emergency Procedures

Familiarize yourself with the information provided on the emergency Procedures posters located around the shop.

Contact Numbers

Dial 9 before any number if using a studio landline.

- Medical, Fire, Police Emergency 911
- Cornish Security – 206-726-5038
- WA Poison Center – 1-800-222-1222
- Cornish Facilities – 206-726-5085

Medical Emergency

What To Do:

- Remain calm and do not panic
- Alert any faculty or staff to the medical emergency
- Report all life threatening emergencies to 911 and Cornish Security
- Look for an emergency medical bracelet
- Indicate your location, the nature of the medical problem, and your name.
- Remain with the victim until Cornish officials or emergency personnel arrive.
- If you are trained in first aid, please give aid as needed or as directed.
- Do not move the victim unless there is an immediate threat to safety.
- Once emergency personnel arrive please follow their instructions and directions.

Fire

Exercise caution, most of the materials in the shop are combustible. Welding and grinding produce sparks, therefore paper, sawdust, oil, and all flammable items must be moved away from the work area around these processes. Spray paints, solvents, and other flammable products must be stored in the designated cabinet in the paint area.
Know where the exits are located. Know where the fire extinguishers are and what types we have in the shop.

No smoking!

Handling Liquid Spills

Many of the liquids are poisonous or hazardous. The studio has spill kits to safely contain and clean up liquid chemical spills. **Notify the technician immediately if you spill any materials in the studio** - they'll be able to determine the best method for cleanup and disposal.

Minor Chemical Spill Procedures

- Alert people in the immediate area of spill.
- Avoid breathing vapors from spills.
- Put on protective equipment, including safety goggles, suitable gloves, and long-sleeved lab coat (hanging in the Acid Room with the aprons to the right of the door).
- Confine spill to a small area.
- Use appropriate materials to neutralize and absorb inorganic acids and bases.
- For other liquids, absorb spill with vermiculite, dry sand, or absorbent pads. These will be in the spill kit under the large paper soaking sink in the Oil Based Room.
- For solid spills. Cover the spill with a slightly damp paper towel to avoid creating a cloud of dust, push the material into a dustpan or other instrument using the towel - **DO NOT use a broom/dust brush, this will contaminate it and it will need to be replaced**.
- Collect material, used adsorbents/neutralizing agents, etc. in a polyethylene bucket.
- Call Head of Facilities (206) 726-5175 to arrange for collection and disposal of spill residue, if after hours call MCC Security (206)-726-5038

Major Chemical Spill Procedures

A spill automatically becomes "major" in the following instances:

- There is a fire, or the threat of fire, outside of a controlled space (fume hood).
- There is a personal injury or exposure likely to require medical assistance.
- The spill involves unknown or highly reactive material.
- There is a release of a toxic or flammable gas outside of a controlled space.
- Attend to injured or contaminated persons and remove them from exposure.
- Alert people in the area to evacuate. If danger is believed sufficient - pull the fire alarm and evacuate the building.
- If spilled material is flammable, turn off ignition and heat sources if that can be done safely. Keep any static causing tools away from the spill.
- Close doors to the affected area.
- Call MCC Security (206)-726-5038. Provide as much of the following as is known.
  - What chemical(s) are involved?
  - How much was spilled?
  - Where the spill is located?
  - Nature of any injuries?
  - What control measures have been taken?
  - Your name and phone number (or where you will be located)?
  - Meet responders.

**Spill Clean-Up Procedure**

Wear gloves and a mask if you are away from the solvent snakes. Use the spill kit for anything that needs to be absorbed and containerized. These are the common items used in these rooms, for any item not listed here please refer to the SDS sheets which are located on the bookshelf right before the office entry.

**General Shop Safety**

**General Safety Rules**

Follow all rules on the “Shop Safety Rules” poster. Is there a poster? Transcribe it here.

- Be conscious of your surroundings.
- The main causes of accidents are:
  - Insufficient training/knowledge
  - Improper use of tools and equipment
  - Failure to safeguard hazardous equipment
  - Failure to remove faulty equipment
  - Carelessness
  - Taking unnecessary risks
  - Being in a hurry
- Being sick or tired can impact your ability to work safely. Please talk to faculty/staff if you are not feeling well. Take care of your health.
- Do not use studio equipment if you are under the influence of medicinal or recreational drugs.
• Audio earbuds are not allowed in the studio. They impede communication with other users.
• Eye protection that meets ANSI Z87.1 standards must be worn in the work areas of the studio. These types of safety glasses provide front lens impact protection and side shield protection. Regular prescription glasses do not meet these standards and are not sufficient eye protection. Over glasses eye protection is available for prescription eyewear users.

Training

• Before operating machinery or power tools for the first time, you must be trained by a faculty/staff supervisor.
• Always ask for re-instruction or tool use clarification if you are unsure, or if it has been a while since you last used the tool.

Ventilation

• To protect against respiratory hazards, proper ventilation of the shop should be maintained.
• Use dust collection open/close gates for the tools that are equipped with it.
• Use dust collectors to help mitigate dust in the shop.
• Use the Fume Room or Spray Room on the 4th floor for processes that give off vapors.
• Use a dust mask or respirator when appropriate.

Lifting and Moving

• Lift correctly: bend your knees and lift with your legs.
• Communicate with others. If you need help, ask before you start.
• Look where you are going. Create a clear pathway before you start.
• When carrying tall objects, like ladders or wood. Be aware of overhead obstacles.
• If you are losing your grip or something is too heavy, tell the person helping you and stop. Do not unexpectedly drop something and leave the other person with all of the weight.
• Be aware of toes and fingers when setting things down. Good communication is vital to prevent pinching or crushing injuries.
• When leaning objects against a wall, be sure there is sufficient distance between the base of the object and the wall to ensure it will not fall by itself.
Cleaning up

- Each studio user is personally responsible for clean-up and tool return. This includes cleaning up dust and debris from all work surfaces and floors.
- Do not leave tools and supplies out unnecessarily.
- Do not let the work area become too cluttered; this can lead to trip hazards. Clean as you go.
- Remove all nails, staples and screws from reusable materials before putting them into the scrap bin.
- Each student is required to assist in a general clean-up of the shop at the end of each lab, work session, or when deemed necessary by faculty/staff supervisors.

What to do with damaged equipment

- If a tool or equipment seems damaged or is not working properly, immediately stop use.
- Notify faculty/staff of the issue so that it may be resolved. Only studio techs are authorized to make repairs to tools and equipment.

Chemical Safety/SDS

- All chemicals and products that pose a health hazard have a Safety Data Sheet (SDS) available from the manufacturer.
- The shop will strive to maintain an up-to-date SDS manual for commonly used products.
- If you are using a product that is new to the shop, ask the supplier or manufacturer for a SDS to add to the shop binder.
- Notify faculty/staff that a new product has been introduced to the shop and provide them with the SDS, or ask them to provide an SDS for the product.
- SDS sheets will be stored in a binder and are available for all shop users to read.
- In case of an emergency involving a particular product or chemical, consult the SDS sheet and make it available to emergency responders.

Personal Protective Equipment (PPE)

Eye Protection

- ANSI Z87.1 is a federal standard that mandates a certain level of protection from impacts at the front and sides of the wearer. This level of eye
protection is required when in the studio work areas. Normal prescription eyewear does not qualify as eye protection.

- Everyone is required to wear eye protection in the work areas of the studio.
- Eye protection is required any time a tool plugs in (electrical or compressed air), creates debris, or poses a splash hazard.
- Face shields are available for tasks that produce larger amounts of debris, such as using the lathe or grinder. Safety glasses must still be worn while using face shields - *shields do not replace safety glasses*.
- Make sure your protective eyewear fits properly and is in good, clean condition. If there are numerous scratches the eyewear should be replaced.

### Hearing Protection

- Ear plugs or muffs are required for all high-noise jobs. This includes, but is not limited to, using the table saw, chop saw, grinder, any metal saw, and pneumatic tools.
- The wood and metals areas are loud environments and it is highly recommended that you wear hearing protection at all times when working in these studios.
- *Audio earbuds are prohibited at all times in the studio.*

### Clothing

- Sturdy, closed-toed shoes are required in the shop. Examples include: boots, athletic shoes and safety shoes. Crocs and sandals are not permitted.
- Loose-fitting clothing, scarves, ties, ID lanyards, jewelry, and other accessories should not be worn when using power tools. Hooded sweatshirts should be removed during work.
- Long hair must be tied back.
- Jeans, flannels and t-shirts with non-offensive logos are acceptable clothing. Do not wear clothing in the shop that you do not want paint, grease, sawdust, or dirt to get on.
- Clothes made from cotton, wool, or leather must be worn when welding or working with flame.
- Do not wear synthetic fabrics such as nylon or polyester (like leggings or yoga pants) in the work areas of the studio.
Gloves

- Vinyl and Nitrile gloves are provided to protect against chemicals or solvents. Ask a Tech about protection appropriate to your task.
- Wear leather gloves to protect hands when welding.
- Do not wear gloves when operating saws, drills, lathes, grinders, or other rotating equipment that could grab the glove and pull your fingers into the machine.

Respiratory/Dust Protection

- Dust collection must be used for tools that are equipped with it.
- Disposable dust masks are available. They are recommended when cutting MDF, sanding, or sweeping up dust. Dust masks DO NOT protect against vapors.
- Respirators are available when working around chemical vapors, including spray paint. It is imperative that a respirator fit properly and seal around your face. Facial hair can make this seal difficult or impossible to achieve.
  **Beginning Fall 2020 all students will be required to provide their own personal respirator**
- There is a spray booth located on the 4th floor of MCC. It should be utilized for spray painting or using other aerosols.

Handheld Tool Safety

General

- Wear eye protection for any and all hand tool processes.
- Always use the correct tool for the job. Do not use a wrench as a hammer, or a chisel as a screwdriver or your hand as a hammer. Ask a technician or faculty which tool best suits your task.
- Ensure the tool is in good working condition before using it. Notify techs of any flaws in tools.
Knives/Blades

- A sharp knife makes a better cut, a dull knife causes more accidents. Replace a dull blade.
- Always be conscious of your cutting direction. Never cut towards your body or your free hand. Ensure your free hand or other body parts won’t be in the way if the blade slips.
- Dispose of all blades in the designated container. DO NOT throw into garbage.
- If possible, always retract the blade when not in use.

Hot Tools

This section applies to tools such as a heat gun, hot glue gun, hot knife, etc.

- Do not leave tools unattended while hot.
- Be conscious of how the heat will affect the materials around you.
- Remove flammable items from the work area.
- Always unplug the tool when you are finished.
- Work on a non combustible surface like a square of sheet rock

Pneumatic Tool Safety

- Always wear eye protection when using pneumatic tools.
- It is best practice to point the tool away from yourself and others when connecting the air supply.
- Keep fingers off the trigger except when ready to shoot a fastener.
- Make sure the safety works and does not stick or jam.
  - NOTE: The pneumatic fabric stapler does not have a safety. Use extra caution when using this tool.
- Keep hands clear of the area where the fastener is to be driven. If the staple or nail encounters an imperfection in the wood, it may bend and poke out of the material unexpectedly. Use clamps to hold material in place if necessary.
- Notify faculty/staff if hose connections do not fit, get jammed, or leak excessive amounts of air.
- Do not carry a pneumatic tool by the hose.
- Always disconnect the air supply from the tool before performing any maintenance, such as reloading fasteners in the tool or removing a jammed fastener.
- Only use fasteners intended for use with the specific tool. Ask faculty/staff if unsure which fasteners to use or how to load the tool.
• Never point or shoot a pneumatic tool in the direction of someone else. This is a zero tolerance policy!
• Most pneumatic tools should be lubricated before each use. Please see faculty/staff for guidance on how to properly lubricate pneumatics.

Portable Electric Tool Safety

• Always wear eye protection when using portable hand held tools.
• Do not wear gloves with any rotary hand held tool.
• ALWAYS disconnect power from the tool before servicing, such as changing blades or making adjustments.
• Double check that the switch is in the OFF position prior to plugging in a tool.
• Always allow the tool to come up to full speed before engaging it to the material.

Power Drill

• Secure the workpiece before drilling. Very large pieces may be stable on their own, but smaller pieces should be clamped to the work surface.
• When drilling metal, use a punch to make a dimple in the metal to keep the bit in place.
• If using a corded drill, keep the cord away from the drilling area.
• Large drills and bits may be powerful enough to twist your wrist or arm if they catch. Use a drill with a secondary handle to control the drill when using larger bits. Make sure you have a stable footing and stance when drilling.
• Begin drilling by gently engaging the bit to the surface to form a small divot, then increase speed to full and gently drill through the material. Never force the drill into the material.

Impact Driver/Hammer Drill/Rotary Hammer

• Wear hearing and dust protection with this tool.
• Check with lab techs or facilities staff before drilling into any walls or concrete slabs.
Circular Saw

- Position material so that it is stable and stationary. Smaller pieces need to be clamped securely.
- Make sure you can cut from a balanced and comfortable position.
- Be sure the path of the blade under the workpiece is clear. Common obstacles include the table, sawhorse, or power cord.
- Never hold or place your free hand in front of the saw.
- Start the tool with the base of the tool resting on the material to be cut and the blade away from the material. The saw will kick back if the blade is touching the material when you pull the trigger.
- Do not set the tool down until the blade has stopped rotating.
- Make sure the blade guard is working smoothly. Do not set the tool down on an unprotected blade.
- Never jam the blade guard so it is forcefully propped open.

Hand Held Router

- Make sure the work surface is secure, stable, and/or clamped.
- Hold the router with both hands during use.
- Start with the base of the router resting securely on the work surface and the cutting bit away from the workpiece. Let the tool reach full speed before cutting.
- Always cut against the rotation of the bit, generally clockwise for an interior cut, counter-clockwise for an exterior cut.
- Do not remove in a single pass more than half the thickness of the bit being used. Example: if you're using a 1/2" bit, do not remove more than a quarter inch of material with each pass.

Jigsaw

- Choose the correct blade for the material being cut. Replace any blade that becomes bent or otherwise damaged. Generally fine toothed blades are for metal and coarse tooth blades are for wood.
- Keep the power cord clear of the cutting area.
- Never hold or place your free hand in front of the saw while cutting.
- Start with the tool base sitting securely on the material with the blade away from the material.
- Be aware of what is below what you are cutting (like the table or sawhorse).
- Wait for the jigsaw to stop completely before lifting it away from the wood or metal being cut.
- Keep the base firmly in contact with material being cut.
Reciprocating Saw

- Choose the correct blade for the material being cut. Replace any blade that becomes bent or otherwise damaged. Generally fine toothed blades are for metal and coarse tooth blades are for wood.
- Keep the power cord clear of the cutting area.
- Start tool with base securely against material and the blade out of contact with material.
- Stand to the side of your cut, not in the path of the saw.
- Be aware of what is behind what you are cutting.
- Use both hands to safely control the tool.
- Keep the base shoe firmly in contact with material being cut.

Angle Grinder

- Check that there are no flammables in the area before grinding.
- Make sure the work piece is secure before grinding.
- Always use both hands to operate the grinder. Adjust the guard and hand hold bar to keep that hand protected from the grinding disc.
- Be conscious of where the sparks are going, taking care not to endanger yourself or others.
- Never remove the disc guard.
- Grinding will cause the workpiece to get very hot. Use caution, wait for the piece to cool or use appropriate gloves to pick it up.

Stationary Tool General Safety

- ALWAYS unplug the tool before servicing, such as changing blades or making adjustments.
- Turn on dust collection for any tool that uses it.
- Do not wear gloves while operating any rotating tool.
- Yes. Wear approved eye protection.
- Always allow the machinery to come up to full speed before engaging materials to the equipment.

SawStop Table Saw

- Make sure that the blade guard is in place before starting. Remove the guard ONLY if it is absolutely necessary for the type of cut being performed. The guard must be re-installed immediately after completing the cut(s).
- Make sure the fence is locked in place so that it doesn't shift during cutting. Always use the fence,
- NEVER cut “free hand” on the table saw.
- Ensure that the table surface is clear of materials, tools, and other debris.
- Check the height of the blade BEFORE turning on the saw and beginning the cut.
- Use a partner to help support large sheet goods.
- Push sticks, feather boards, and other holding devices must be used whenever the operator’s hands are too close to the blade to cut safely.
- Hands should always be at least 8” from the blade.
- Push material all the way past the blade. Do not let go of your wood between the blade and the fence, this can easily result in a kick back.
- If you tilt the blade for a cut, make sure that it is restored to vertical before you walk away.
- Sweep up any dust off the floor in front of the table saw to prevent slipping while using the tool.
- If you are performing a task that requires use of the saw for an extended period of time or for several cuts, please allow others to use the saw when appropriate and then return to your task.
- Only faculty/staff may change the saw blade or supervise changing the blade.
- Check that the material has no nails or screws prior to cutting. These could damage the blade and pose other hazards while cutting

The SawStop prevents serious injury by stopping the blade immediately when your finger or hand contacts the blade. It reacts to the moisture/conductivity of your body.

Do not attempt to cut
- Damp, green or wet wood
- Metal or metallic substances like mirrored plexi.

Talk to a tech about approved ways of cutting these materials. If you activate the SawStop safety shut off, do not attempt to change the cartridge by yourself. Inform the faculty/staff that it has been set off.

Sliding Compound Miter Saw

- Do not place hands within 8 inches of the blade, follow all indicators on the tool.
- Hold all pieces securely against the fence while cutting. Clamp any materials that are too close to the blade to be held by hand.
- Make sure all miter and tilt adjustments are locked before cutting.
- Make sure the blade guard is working correctly before using the tool.
- Cut by moving the saw/blade towards the fence, moving the blade away from you.
• Let the blade come to a stop before lifting it from the cut.

Panel Saw

• Use the panel saw for cross cutting sheet goods. Do not use it for rip cutting. Cross cutting vs ripping is about geometry, not material grain.
• Make sure the material to be cut is stable on the tool’s rack before cutting.
• Hold the material with your free hand well away from the saw and cut path.
• Do not force the blade through the cut. At the end of the cut, let the blade come to a complete stop before retraction.

Band Saw

• Ensure that the table is clear of any material, tools, or debris.
• The blade guard should be kept at a height just above the thickness of the material being cut.
• Approximately 1/4” or the thickness of your pinky finger.
• Keep fingers at least 3” from the blade.
• Use a push stick to keep fingers well clear of the blade.
• Use relief cuts to avoid having to back out of a long cut. Never back out of a long cut with the tool running.
• Do not force the workpiece along a tighter radius than the blade will allow. The blade will bind or break.
• Make sure the blade comes to a stop before walking away.
• Do not change blades or make adjustments to the band saw tension wheels. Ask a tech if adjustments need to be made.

Stationary Sander

• Be aware that both the belt and disc are moving while the tool is turned on.
• Wearing a dust mask is strongly recommended
• Keep the work surface you are not using clear to keep items from shifting into the sandpaper.
• Follow markings on the table to keep to safe sanding area on the disc sander.
• Always keep your material in contact with the tool bed.. Do not hover material in the air while engaging the sandpaper. The sandpaper can grab your material and pull your hands into the sander.
• Keep your fingers well clear of moving sandpaper
• Use light pressure when sanding items
Router Table

- Set fences and bit guards to expose as little of the router bit as is necessary for the cutting task.
- Use a push stick(s) to guide the workpiece through the bit. Keep fingers well clear of the rotating bit.
- Feed material against the rotation of the bit, generally right to left.
- Lower bit into table or remove bit when table is not in use.

Planer

- Make sure stock is long enough to engage both rollers. **Show Minimum Length!**
- Do not plane more than 3/32” per pass.
- Stand to the side of the planer in case a kick-back occurs.
- Keep hands well away from the planer table. Watch for loose items that could get caught by the wood feeding into the machine.
- If the wood gets stuck, turn off the machine and unplug before trying to clear the jammed piece.
- Clear chips frequently to avoid a hazardous build-up of debris.

Drill Press

- Be sure the table is securely locked in place.
- Always use sharp drill bits and check that the speed is appropriate for the bit and material. Techs or faculty can help you determine proper bits and speeds.
- REMOVE CHUCK KEY BEFORE TUNING TOOL ON. The chuck key could be thrown from the machine or the cord could get wrapped around the spindle causing damage.
- ALWAYS clamp down material being drilled.
- Pay attention to what is below your material and be aware of how deep you are drilling. Do not drill into the drill press table. Use scrap material under the workpiece if needed.
- Use lubricating oil when drilling through metal.
- Keep your hands clear of the bit when the tool is on. Roll up sleeves and be mindful of anything that could get caught in the rotating spindle. Eye protection and ear plugs/muffs are required during operation.
- If material becomes loose or a drill bit gets stuck, turn off the tool immediately.
Cold Saw

- All stock must be clamped tightly in the vice before cutting. If material begins to slip, stop cutting.
- Check that the blade will not contact the vice jaws while cutting. This is especially true after making any adjustments to the miter angle of the saw.
- Frequently clear chips and other debris from the vice area. A build up can jam the vice and prevent it from fully tightening onto the material to be cut.
- Ensure that coolant is flowing over the blade before starting the cut. The coolant is necessary to protect the blade and lubricate the cut. Notify faculty/staff if there is an issue with the coolant.
- Be careful of sharp edges and/or metal burrs on cut pieces. It is recommended to grind off all burs as soon as practical.

Bench Grinder

- Do not wear gloves when operating the grinder. The glove could catch in the wheel.
- Check that there are no flammables in the area.
- Make sure the tool rest is about 1/16” away from the grinding wheel. A larger gap will more easily grab or pinch the work piece.
- Only grind on the front edge of the grinding wheel, not the side.
- The workpiece should be moved back and forth slightly while grinding to avoid creating a groove in the grinding wheel.
- Do not use heavy pressure while grinding, it can stress the machine and unnecessarily heat the work material.
- Small work pieces should be held with vice grips to keep your hands away from the grinding wheel and protect against heat. Use caution, small pieces are more easily pinched and grabbed by the machine.
- A face shield is required in addition to safety glasses.

Step Shear

- Cut only clean single thickness sheet metal. No welds, plasma cut blurs or folds.
- Maximum thickness capacity: 18 gauge mild steel or 22 gauge stainless steel.
- Only cut sheet metal on the step shear.
- Only cut one piece at a time.
- Keep all body parts clear of blade and guard.
- Do not remove or adjust guard.
- Keep all body parts out from under the foot pedal.
• If operating shear with a second person, maintain communication. Always ask each other “fingers clear?” before operating shear.
• Place scraps and trimmings in a scrap metal bin.

Magnabend Brake

• Maximum thickness capacity: 16 gauge mild steel.
• Bend only clean single thickness sheet metal. No welds, plasma cut burrs or folds.
• This machine uses powerful electromagnets. Do not use if you have any medical devices or conditions that may be affected by magnetic fields.
• Only one person may operate the machine at a time.
• Keep all body parts away from bending area when the machine is activated.
• Keep fingers clear of hinges at all times.
• Do not place anything other than sheet metal under the clamp bar

Pedestal Bender

• If operating bender with a second person, maintain communication. Always ask each other “fingers clear?” before operating the bender.
• Maximum thickness capacity: ½” round bar, 3/16” flat bar
• Ensure all pins are securely in place and pass through both holes in the frame before operating.
• Ensure a full swing arc of the bender arm is clear before operating.

Ring Roller

• Maximum thickness capacity: ¼” round bar, ½” flat bar.
• Tighten handle a maximum of 1 turn per pass.
• Remove stock entirely from the machine before tightening the handle.
• Keep all body parts clear of machine rollers and gearing while operating the ring roller.

Welding Safety

• Weld only bare mild steel on the Miller MIG welders. Remove all paint, rust, oil, and coatings with sandpaper, degreaser, and scotch brite pads as required.
• Remove any flammable materials from your work area. This can include rags, sawdust, paper, oils, etc.
• Know the location of fire extinguishers in case something unintentionally catches fire.
• The arc welding process creates bright light, spatter, and high temperatures. Specific clothing must be worn to protect against these hazards.
  • Wear long sleeves and pants made of natural fibers: cotton, wool, and leather.
  • Synthetic fibers can melt and burn your skin.
  • Welding specific leather gloves are required to protect your hands while welding. These gloves are also necessary for handling recently welded metal until it has cooled.
  • Sneakers or similar shoes with lots of mesh panels are not recommended. Shoes made of leather or canvas are better.
  • A full face welding helmet must be worn when welding or watching welding.
• Protect others in the shop from seeing the arc by using welding screens around your work area.
• Ensure work is properly grounded (ground clamp has a conductive pathway to work).
• Announce “WELDING” before you pull the trigger so that those around you know to look away.
• Ensure there is enough ventilation to remove welding fumes from your work area.
• Be conscious of hot metal while you are working. This also includes any clamps near the weld area. Feel for heat without touching before picking up any metal without gloves.
• Guard hot metal until it has a chance to cool.
• If someone comes to help you move a recently welded frame, inform them of hot areas and ensure they wear gloves.

Heated Bending/Forging Safety

• Do not heat up any metal unless it has been approved by a technician. Certain metals will release harmful fumes when heated.
• Only heat bare metal. Remove all paint, oil, and coatings before heating. (Rust OK)
• Remove all flammable materials from the work area.
• Ensure that your work area is clear of obstructions and trip hazards.
• Have a bucket of water on hand to quench metal. Ensure the quench bucket is stable and accessible.
• The following protective equipment and clothing must be worn when working with hot metal:
  ○ Fire-retardant welding jacket
  ○ Long pants made from natural fibers
  ○ Leather gloves. Gloves must be loose enough to be easily shaken off the hand.
- Safety glasses
- Closed-toe shoes (leather or canvas preferred)
- Hearing protection (if forging)

- Ensure adequate ventilation.
- Clearly label hot areas if work is left unattended.
- Use only metal or wet wood bending forms. Dry wood bending forms will catch fire.

**Plasma Cutter Safety**

- Do not plasma cut any metal unless it has been approved by a technician. Certain metals will release harmful fumes when heated.
- Only plasma cut bare metal. Remove all paint, oil, and coatings before cutting. (Rust OK)
- Remove all flammable materials from the work area
- The following protective equipment and clothing must be worn when working with hot metal:
  - Fire-retardant welding jacket
  - Long pants made from natural fibers
  - Leather gloves
  - Face shield over shaded safety glasses (#5 shade or above)
  - Closed-toe shoes (leather or canvas preferred)
  - Hearing protection

- Ensure adequate ventilation.
- Ensure the ground clamp is attached to the cutting table.
- Be careful not to cut through ground or torch cable.
- Clearly label hot areas if work is left unattended.

**Electrical and Electronics Safety**

- Disconnect all circuits from power before working on them.
- Always assume a circuit is live unless you have checked it with a multimeter.
- Discharge any large capacitors before working on a circuit.
- Remove all flammables and liquids from the work area.
- When testing circuits, plug them into a power strip equipped with a circuit breaker rather than directly into a wall outlet. Then, switch them on via the power strip. This will prevent overloads and make it easier to shut off power quickly.
- When designing circuits, make sure all wiring, current sources, and components are properly rated for the current (amps) they will experience when the circuit is live.
- Only solder on a fire-resistant surface such as sheetrock.
• Use proper ventilation when soldering.
• Use only lead-free solder.
• Do not lay hot soldering irons flat on the work surface. Use a soldering iron stand.
• Discharge hand (touch a large metal object) before handling circuit boards.

Laser Cutting Safety

• Do not use the laser cutters without training by a technician and signing the safety certification sheet
• Do not put anything inside the laser cutter that is not laser-compatible. Check with lab techs to ensure safety
• Do not stack materials; for example attempting to cut two or more sheets of material at a time. Multiple sheets are more likely to burn.
• Clean out leftover bits inside the laser cutter when it builds up.
• Never leave the laser cutter unattended while operating – **always stay within sight**. Look inside frequently
• A small, candle-like flame where the laser beam strikes the material is normal. This flame should move with the laser and should not remain lit when the laser has moved past. If there is a lasting flame inside the laser cutter that does not extinguish when the laser has moved past:
  o **DO NOT PANIC**
  o Open the laser cutter lid, this will trigger the automatic shut off to the laser beam.
  o Tamp fire out with leather glove next to the laser cutter
  o If it is safe to do so pull the material out of the laser cutter and on to the floor and stamp out.
  o Notify a lab technician **AFTER** the fire is out or yell for assistance.

3D Printing Safety

• The 3d printer has many moving parts. Be aware of pinch points and remove obstructions from around the printing bed.
• Never touch the printer while it is in operation. The bed and extruder nozzles get extremely hot and will burn you when the machine is operational.
• Wait 15-20 minutes until after your print has finished before removing it from the print bed.
Work Equipment

Ladders

- Use ladders and step stools to access elevated work areas. Never climb on railings, shelves, stools, tables, and chairs for such access.
- Follow all manufacturers’ requirements and information related to each type of ladder used.
- Ladders must be inspected for defects before and after each use, and taken out of service for repair or replacement if any are found.
- Always face the ladder and maintain three points of contact when ascending or descending.
- Fold and/or carry a step ladder to move it; do not drag an opened ladder from place-to-place.
- Use a line and bucket to hoist tools, materials, and equipment up the ladder; do not carry such items when ascending or descending.
- Make sure the ladder is on firm, level, and stable base and adequately supported before ascending.
- Do not stand on the top three rungs of a straight ladder or extension ladder.
- Do not stand on the top cap or top step of a stepladder.
- Ladders are not to be painted, except minimally for identifying and labeling purposes.
- Manufacturer’s labels and markings must never be covered.
- Ladder rungs and steps must be kept free of dust and debris.
- Do not leave tools, hardware, materials, or anything else on the top of a ladder. Objects may fall if ladder is moved and present a hazard to those below.
- Do not use a step ladder as a straight ladder.
- All ladders must extend three feet beyond the supporting object when used as an access to an elevated work area.
- A good rule of thumb for the slope of an extension ladder is that standing with your feet at the base of the ladder, you should grasp the side rails of the ladder with your arms fully extended and parallel to the ground.
Emergency Procedures

Medical Emergency

What To Do:

- Remain calm and do not panic
- Alert any faculty or staff to the medical emergency
- Report all life threatening emergencies to 911 and Cornish Security
- Look for an emergency medical bracelet
- Indicate your location, the nature of the medical problem, and your name.
- Remain with the victim until Cornish officials or emergency personnel arrive.
- If you are trained in first aid, please give aid as needed or as directed.
- Do not move the victim unless there is an immediate threat to safety.
- Once emergency personnel arrive please follow their instructions and directions.

Fire

What To Do:

- Exercise caution, most of the materials in the shop are combustible.
- Spray paints, solvents, and other flammable products must be stored in the designated cabinet in the dye room.
- Know where the exits are located. Know where the fire extinguishers are and what types we have in the shop.
- Flame use in the shops requires training and approval from the staff
- There is No smoking

If it is a SMALL fire (no larger than a waste basket)

- Alert people to evacuate the area.
- If possible, smother fire or use appropriate fire extinguishers.
- Always maintain an accessible exit route.
- Avoid smoke or fumes.
- Be prepared to evacuate the building if fire grows.
- Alert someone to call 9-911 and Cornish Security.

If it is a LARGE fire (larger than a waste basket)
• Alert others and evacuate the building.
• If safe to do so, close doors to contain the fire.
• Move people to a safe distance.
• Call 9-911 and Cornish security once outside.

What Not To Do:
• Do not ignore alarms or assume they are false alarms.
• Do not return to your building until you are notified that it is safe to do so.

Earthquake

How To Prepare:
• Look at your surroundings and think about where you could seek shelter from falling objects.
• Become familiar with all the exits from the building.
• Be familiar with Earthquake preparedness protocol as suggested by your local, state and federal government officials.

What To Do:
• If using any sewing machines, or dyeing equipment, safely and immediately end your process.
• Take cover under a freestanding table or desk and hold onto whatever you are under.
• Stay away (and face away) from glass and other items on the walls.
• Do not leave cover until shaking has completely ended.

What Not To Do:
• Do not rush outside
• Do not use the telephone and only call 911 if a real emergency exists (fire, injury, or serious damage)
• Do not use matches, lighters, or other open flames.
• Do not turn on lights or other electrical equipment.

What To Do After:
• Evacuate the building. Remember, additional shocks or tremors may occur. Watch for falling debris or electrical wires when leaving the building.
• Watch for fallen or spilled items on the floor as you are exiting.
• Assist others if they need help to exit.
• Do not enter buildings until it is determined that they are safe.
Armed Intruder

What To Do:

- Notify security if you are aware of any threats or have other information that make you suspect an event involving an armed intruder might be possible. IF OCCURRING, determine what action below gives you the best chance to survive – quickly evaluate and then act.
- **ALERT.** Use Plain and Specific Language: The purpose of the ALERT is to inform as many people as possible within the danger zone that a potentially life-threatening situation exists. This can be facilitated via many different methods. No matter the method of delivery, the objective should be a conveyance of information, not an issuance of a command. The use of plain language, sent through as many delivery channels as possible, is the best way to ensure awareness within the danger zone. The goal is to empower as many individuals as possible with the ability to make an informed decision as to their best option to maximize chances of survival.
- **LOCKDOWN.** Barricade the Room. Silence Mobile Devices. Attempt to locate a space that can be barricaded, provide concealment and, most importantly, create distance between the threat and you.
- **INFORM.** Communicate the Shooter’s Location in Real Time. Information should always be clear, direct and, as much as possible, should communicate the whereabouts of the intruder.
- **COUNTER.** Create Noise, Movement, Distance and Distraction with the Intent of Reducing the Shooter’s Ability to Shoot Accurately. Counter focuses on disruptive actions that create noise, movement, distance and distraction with the intent of reducing the shooter’s ability to shoot accurately. Creating a dynamic environment decreases the shooter’s chances of hitting a target and can provide the precious seconds needed in order to evacuate. Counter is a last-ditch and worst-case scenario option. Counter is about survival. It is about the last moments between a shooter and a potential victim; anything a person can do to gain control is acceptable. It is the opposite of passive response because every action taken is a proactive step towards survival.
- **EVACUATE.** When Safe to Do So, Remove Yourself from the Danger Zone. Evacuating to a safe area is always the number one option. If the opportunity exists – EVACUATE away from the threat and move toward a safe area.

What Not To Do:

- Do not leave the room to try to “see what’s happening.”
- Do not confront or try to apprehend the intruder unless you must defend yourself.
- Do not assume that someone else called 9-911 and security.
What To Do After:

- Attempt to remain calm.
- Keep your hands visible at all times.
- Avoid screaming, pointing, and/or yelling.
- Follow all instructions provided by emergency responders.
- If you witness any injuries or deaths, identify yourself to authorities as soon as it is safe to do so.