

EMERGENCY PROCEDURES

CENTRE FOR ADVANCED WOOD PROCESSING

To ensure that a safe and healthful environment is maintained in the laboratories, all students are required to read and abide by the following emergency and safety procedures

Major Accidents/Injuries

1. Call the **EMERGENCY NUMBER 911**
2. Specify whether you need **Police, Ambulance or Fire**
3. Give location as:
Centre for Advanced Wood Processing
Room 1935 2424 Main Mall
South-west corner of Agronomy Road & East Mall
Phone: 604 822-8276

Minor Accidents or Illness

1. For minor cuts requiring only a band-aid, there is a 1st Aid kit available in the System Simulation & the Undergraduate Teaching Labs
2. For more serious injuries staff or faculty members can call First Aid Line: 2-4444 (24 hours/day); students must call **911**.

Fire/Explosion

1. Pull **Fire Alarm (Pull Station)**
2. **Dial 911** and:
 - state your name
 - give the address:
 - provide information about the fire (i.e. what floor, how fast the fire is spreading, people trapped, etc.)
3. If possible control fire with available fire equipment
4. If fire cannot be controlled, isolate by **CLOSING THE DOORS**. Do not lock the doors
5. Leave by the nearest safe exit. Walk. Don't run. Shut doors behind you
6. Wait outside the main entrance of the building at the annunciator panel to inform Fire Department of location of fire. All others should move well away from the building
7. Assist in the evacuation of the building if requested to do so
8. Do not re-enter the building until permission is received from the Fire Department

BASIC SAFETY RULES FOR CENTRE FOR ADVANCE WOOD PROCESSING MACHINE LAB & WOOD SHOP

GENERAL SAFETY AND HOUSEKEEPING

- Use of Machine Lab, Wood Shop and machinery must be **BOOKED IN ADVANCE**
- **PERSONAL PROTECTION EQUIPMENT (PPE) MUST BE WORN, ACCORDING TO WCB**
- Users must have proven operator proficiency and safety training before operating machinery and an instructor must be on the shop floor
- Eye protection must be worn at all times while using equipment, assisting or observing the use of equipment
- Hearing and dust protection must be used when necessary
- Steel-toed boots must be worn when working in the Machine lab; substantial footwear required in the Wood Shop
- Never work alone in the Machine Lab; users of the Wood Shop can work alone but are required to check-in with the shop supervisor
- Safety guards or devices must be used to ensure a safe work environment. **NEVER WORK WITHOUT SAFETY GUARDS OR DEVICES IN PLACE**
- Work areas must be kept clean and free of debris to prevent tripping or slipping hazards
- Dust collection must be used when machining or sanding
- Machinery must be **LOCKED OUT** according to WBC regulations before changing tooling or performing maintenance on any equipment and instructor must be informed of the operation to be undertaken
- Do not use compressed air to clean machines, clothing or yourself
- No unnecessary loud noises or yelling. This can startle or distract personnel operating dangerous machinery
- No food or drink in the either locations
- Absolutely no “horse play” or running, etc.
- No loose clothing or neck ties, shirt sleeves must be rolled up, no jewellery to be worn; long hair must be tied back
- **ALL USERS MUST CLEAN UP AFTER THEMSELVES:** Allow 15 minutes at the end of a work session to dust equipment used as well as any surrounding equipment which dust has settled on. Thoroughly sweep work areas. Pick up scrap/garbage, dispose of in provided scrap bins or garbage cans and empty into the dumpster outside. Return all equipment to the appropriate storage area
- Report any malfunctioning equipment or tools to the Technical Supervisor

BASIC SAFETY RULES FOR CENTRE FOR ADVANCE WOOD PROCESSING FINISHING LAB

WHEN FINISHING WOOD, TAKE THE FOLLOWING PRECAUTIONS

- Most of the materials used to finish wood are flammable. Store them in a separate room, away from the workshop, designed for the storage of flammable materials
- Pay attention to the flash point and ignition spring of the different lacquers – protect from explosion
- Know where the fire blanket & fire extinguisher in the area are located
- **NO SMOKING IN THE FINISHING AREA**
- Extinguish all open flames
- Use explosion-proof equipment (i.e. explosion-proof lamps, switches, etc.). Do not use metal tools. Fire and explosion can be caused by sparks, even a sparking electric motor or switch can cause concentrations of VOC vapors to explode
- Oily rags are a fire risk. They should be open flat and allowed to dry in a well-ventilated area before disposing. **DO NOT MIX OILY RAGS WITH NITROCELLULOSE**
- Inhalation of solvent fumes can be harmful. Follow manufacturers' instructions with regards to toxicity. Wear appropriate personal protection equipment and read the WHMIS for storage and handling instructions
- Provide adequate ventilation and do not spray finishes unless there is proper extraction facilities
- Wear protective gloves when applying wood stains or materials for bleaching
- Wear barrier cream to protect your hands and use a skin cleanser to remove paint/lacquer or other finishes before washing with soap and hot water. Do not use paint/lacquer thinner to clean your hands
- If you splash finish in your eyes, flush them out with water immediately and contact a first aid attendant, doctor or hospital for medical advice
- **NEVER AIM A SPRAY GUN AT ANYONE**
- Before servicing a spray gun, close the valve and disconnect the hose that delivers air to the spray equipment. Squeeze the trigger to clear the hose before disconnecting the gun

GUIDELINES FOR MACHINE USAGE FOR GRADUATE RESEARCHERS IN THE CENTRE FOR ADVANCE WOOD PROCESSING

1. Before any machine usage

Users must read and understand the following documents:

- Emergency Procedures for Centre for Advanced Wood Processing
- Basic Safety Rules for Centre for Advanced Wood Processing Machine Lab and Wood Shop
- Basic Safety Rules for Centre for Advanced Wood Processing Finishing Lab

Users must sign the following documents:

- Safety Contract for Centre for Advanced Wood Processing
Two copies of this document need to be signed - one copy will be kept by the Technical Supervisor for record keeping and the other set will be returned to the user for reference.

Students or personnel **MUST** submit a "Use Request" to the Technical Supervisor by email for time scheduling which takes into account for any events that may be in place.

Note: Only under extraordinary circumstances will machines be allowed to be used after normal day shift business hours (after 4:00 p.m.)

The request must include dates and estimated total usage time for each machine. If the user is not trained on the machine, the user should state the request of requiring assistance from the lab technician in the request form.

Note: Users must provide the proof of training on the required machinery (a record of the machine training log is available from the Technical Supervisor), or the user must provide a trained person or request the lab technician (extra charge required) to operate the machinery.

Speed charts must be provided with the request form, otherwise, no further work will be processed.

2. After the approval

The technician will confirm the time and he will unlock the machine at the scheduled time period.

3. During the scheduled time period

Users **MUST** fill in the 'Machine Time Record' to record the real start and end time of each machine usage time.

GUIDELINES FOR MACHINE USAGE FOR GRADUATE RESEARCHERS IN THE CENTRE FOR ADVANCE WOOD PROCESSING

Users might require demonstration on the proper set-up and usage for the machinery before they can work without supervision.

Someone, other than the user, **MUST** also be present in the lab during the machine usage.

Users are responsible for not allowing other people to use the unlocked machines. Users should tell them to talk to the Technical Supervisor or lab technician to arrange another time for usage.

4. After the usage

Users **MUST** return the machine(s), tools and protective equipment to the default setting or location.

Users must 'LOCK-OUT' the machine(s) ASAP after use.

Users are responsible for all the clean-up on the machines used as well as the surrounding area and the equipment surface.

The lab technician will inspect the machine used and the tidiness of the surrounding area with the user.

5. After the inspection

The lab technician or Technical Supervisor will enter the information of the 'Machine Time Record' in the excel file in the shared drive.

Note: The excel file is *monthly or yearly* based, so all the machine time records for that *month or year* will be in the same file.

The shared file will generate a summary for administrative purposes and record.

SAFETY CONTRACT

CENTRE FOR ADVANCE WOOD PROCESSING

To ensure that a safe and healthful environment is maintained in the Machine Lab and Wood Shop, all personnel are required to read and follow the Safety Regulations. To indicate that you have read and understand the safety regulations, you are to sign and date this upon completion of the safety session

1. Machine Lab and/or Wood Shop and machinery must be booked in advance
2. Personal Protective Equipment (PPE) must be worn at all times while using equipment, assisting or observing the use of equipment
3. Safety guards or devices must be used to ensure a safe work environment. **NEVER WORK WITHOUT SAFETY GUARDS OR DEVICE IN PLACE**
4. Machinery must be LOCKED OUT according to WCB regulations before changing tooling or performing maintenance on any equipment
5. Do not use compressed air to clean machinery, clothing or yourself
6. Work areas must be kept clean and free of debris to prevent tripping or slipping hazards
7. Dust collection must be used when machining or sanding
8. No food, beverage, or smoking is permitted in either the lab or wood shop
9. No unnecessary loud noises or yelling. This can startle or distract personnel operating dangerous machinery
10. Absolutely no "horse play" or running, etc
11. No loose clothing or neck ties, shirt sleeves must be rolled up, no jewellery to be worn; long hair must be tied back
12. Know the proper fire drill procedures. Know the locations of fire extinguishers, emergency eyewash/showers, first aid kits and fire exits.
13. **ALL USERS MUST CLEAN UP AFTER THEMSELVES:** Allow 15 minutes at the end of a work session to dust equipment used as well as any surrounding equipment which dust has settled on. Thoroughly sweep work areas. Pick up scrap/garbage and dispose of in provided scrap bins or garbage cans and empty into the dumpster outside
14. Return all equipment to the appropriate storage area
15. Report any malfunctioning equipment or tools to the Technical Supervisor
16. Recognize and heed all safety symbols and cautions
17. Report all incidents/accidents to the instructor immediately, no matter how minor
18. Be alert and proceed with caution at all times when working in the lab/shop
19. **Never work alone** in the Machine Lab; users of the Wood Shop can work alone but are required to check-in with the shop supervisor

I, _____, have read and agree to abide by the safety regulations
(Please print) as set forth above and also by any additional printed instructions provided by the Technical Supervisor and/or Technician.

_____ Date

_____ Student Signature

Emergency Contact Information

Name: _____ Phone #: _____ Relationship to you: _____

Name: _____ Phone #: _____ Relationship to you: _____

Return signed form to Technical Supervisor

**SAFETY CONTRACT
CENTRE FOR ADVANCE WOOD PROCESSING**

a place of mind



**THE UNIVERSITY OF
BRITISH COLUMBIA**

Department of Wood Science
2900 – 2424 Main Mall
Vancouver, BC V6T 1Z4
Canada
Tel: 604-822-9352
Fax: 604-822-9157
www.wood.ubc.ca

Assumption of Risks – Release of Liability

(in regard to the use of the Centre for Advanced Wood Processing equipment)

I _____, understand that the use of woodworking and other equipment in the Centre for Advanced Wood Processing may involve exposure to certain inherent risks, including potentially serious injury. Furthermore, I freely assume these risks and release the University of British Columbia, its faculty and staff from any liability arising from my use of such equipment, excepting and loss or injury attributable to negligence on the part of the University.

I acknowledge that it is my sole responsibility to ensure that I maintain personal insurance coverage including but not limited to personal property, medical, dental, accident benefit or disability insurance. I acknowledge that I have received adequate training, including safe operating procedures, on the machines(s) listed below I intend to use, and resolve to only use those machines on which I have received training, listed below. I agree that any failure on my part to maintain adequate personal insurance shall impose no financial obligation on the University.

Date: _____

Signature: _____

List of machinery on which training received:

Machine name	Trainer	Trainer Signature	User Signature	Date

Return signed form to Technical Supervisor