

School of Architecture Shop SAFETY Policy and Procedures

UPDATED 1-11-12

INTRODUCTION

The School of Architecture shop facility is located in Room 150 of the Donald W. Reynolds School of Architecture Building, but these policies and procedures apply to any work done by School of Architecture students on OSU property.

GENERAL POLICY FOR SHOP USAGE

Since the facility is for the support of instructional activities, the tools are not to be used for personal projects or organizations outside of the School of Architecture. This rule holds for students, staff members, and faculty members. Similarly, no tools, machines, or supplies are to be borrowed or removed from the building unless approved by the faculty shop supervisor or the Head of the School of Architecture.

Any student observing other students operating tools in a dangerous manner must mention this to those involved and/or a supervising faculty member.

GENERAL RULES

The shop and tools from the shop can only be used by students who have been admitted to the Professional Program in the SOA. In addition, students can only use the shop in conjunction with a project executed in a ARCH prefix upper-division course and with the permission of a faculty member teaching the course..

The Shop can only be used when the School of Architecture Administrative Office is open, normally M-F, 8:00 am – 5:00 pm. Faculty members who are teaching a course that is utilizing the shop facility can give students permission to work in the shop after 5:00 pm, on weekends, or on holidays or days when the university is closed, but under NO circumstance can the shop be used between 10:00 pm and 8:00 am.

TRAINING

All students must first complete MSDS and General Safety training and pass two related quizzes before they can use the shop facility or any tools contained within. The MSDS quiz is the standard OSU quiz found at – <http://ehs.okstate.edu/MODULES/hazcom/msds.htm>. The General Safety quiz can be administered by your course instructor, or shop supervisor. An updated list of all students who have successfully completed the safety training and meet the requirements for using the shop will be kept in the shop.

EQUIPMENT

- **IT IS VERY IMPORTANT THAT YOU CLEARLY UNDERSTAND HOW TO USE THE POWER TOOLS!** If you are unclear how a tool operates or what the safety features of the tool are, you must refer to the tool manuals that are in the shop (the notebook of these manuals can be found in the upper cabinets).
- **IT IS PROHIBITED TO BRING PERSONAL POWER TOOLS TO THE SHOP AREA.**

CLEAN UP

- You must clean up your mess! If you use a tool, put it up when finished. Failure to clean up your mess or put up tools could result in a revocation of your access to the shop.

WORKING ALONE

NEVER WORK ALONE IN THE SHOP!

FOOD, DRINK, TOBACCO

- Concurrent with OSU policy, no tobacco, in any form, may be used inside any OSU building. This includes snuff and chewing tobacco.
- No drinks, candy, or food are to be consumed or brought into the shop.

CELL PHONES/ HEADPHONES

- Students must silence cell phones when working in the shop. Also, students must leave the shop area to text or talk on the phone. Use of these devices can be distracting to you and others who may be operating dangerous tools.
- The use of headphones is prohibited in the shop.

PETS

- No pets of any kind should be brought to the shop. Assistance animals that are approved by Student Disability Services are acceptable.

DRESS CODE

- **SHOES:** Anyone in the shop or working on projects in the courtyard areas outside of the shop must wear shoes that cover the entire foot. No flip flops, sandals, house shoes, slippers, clogs, or any other kind of open-toed shoe is permitted in any of the work areas.
- **HAIR:** No long hair, including ponytails or pigtails, is permitted around any of the power tools. If the student/staff member has long hair, it must be secured in some fashion, such as tucking it under a cap, putting it inside a shirt, or clipping it securely to the top of your head. Long hair can become tangled in rotating machinery and can result in severe injury.
- **CLOTHING:** Anyone in the shop or working on projects in the courtyard areas outside of the shop should wear long pants. No loose, floppy clothing is permitted on persons working with any of the tools. Long shirtsleeves must be rolled up. Do not wear short pants or skirts.
- **JEWELRY:** No necklaces, chains, pendants, bracelets, etc. are to be worn for the reason that they can become entangled in rotating tools. Rings and watches must be removed or completely covered with tape.

EYE/FACE PROTECTION

- Safety glasses must be worn by all personnel (students, faculty, employees, and visitors) at all times when anyone is working with power tools in the shop. Safety glasses must also be worn in any areas when there is a danger of flying debris due to use of tools. For persons requiring regular eyeglasses, safety glasses or goggles must be worn over the eyeglasses. Safety glasses are located in the overhead cabinet.

HEARING PROTECTION

- Hearing protection shall be worn in areas of high noise. If the sound level of a tool is high enough that it is difficult to talk to a person standing two feet away, without shouting, then ear protection is required. Ear plugs are available in the overhead cabinet.

PROTECTION FROM DUST AND PAINT EXPOSURE

- All persons engaged in sanding materials that generate dust (e.g., wood, composite material, metals, plastics, etc.) must wear dust masks or respirators. Dust masks are provided in the overhead cabinet.
- If sanding is to be done to remove paint from a machine or structure, the surface shall be tested for lead content. An inexpensive test kit for lead paint is available at all paint stores and at most builders' supply stores. If lead paint is detected, no sanding is to be done.
- Spray painting and/or spray glue is prohibited in or around any portion of the Donald W. Reynolds School of Architecture Building.
- Work areas must be cleaned by the persons doing the painting or sanding. Sanding dust must be collected.
- When possible, perform operations that create dusty conditions out-of-doors.

- A shop fan is located near the exterior door so that you may evacuate the shop air of dust and odors.
- Projects should be cleaned up daily in order to remove potential dust from building up.
- Do not open the windows to the corridor to relieve ventilation issues (this will create further problems for the rest of the building).

ACQUISITION AND STORAGE OF CHEMICALS

- Any chemical (including oils, fuels, glues, paints, thinners, fluxes, solvents, acids, etc.) must have an MSDS, or Material Safety Data Sheet. The sheets must be kept in a file in the room in which the material is being used, and the file must be labeled. Each material has ratings that apply to flammability, toxicity, etc. Some materials will have to be stored in one of the flammable liquids storage cabinets provided in the DML.
- The shop supervisor must be informed as to what chemicals are brought into the lab, and he must be supplied with the MSDS sheet. It is the duty of the student to acquire the MSDS sheets from the vendor who sold the material or from a database. No chemical is to be brought into the lab without the proper MSDS sheet.
- Do not pour chemicals (including paints) down the drain.
- Discarded materials such as paint thinner and/or solvents must be turned in to the lab supervisor, who will store these materials in safe, labeled containers until they can be picked up by OSU personnel who handle hazardous wastes. If unknown chemicals are mixed in a container, the contents will have to be analyzed, which is a very costly process. Violators who mix chemicals without complete labeling will have the analysis and disposal costs charged to their bursar accounts.

ELECTRICAL SAFETY

- *Very little current is required to cause electrocution!*
- The following list of safety rules applies to shop applications.
 - GROUNDING
 - All 120-volt circuits in the lab have a "hot" wire, a neutral wire and a ground wire. The plugs for most power tools have three prongs on the end for these three wires. The longest prong is the ground. Only extension cords having the three-prong plugs should be used.
 - Some of the plastic or hard rubber power tools have only two blades on the plug, with one blade being wider than the other. This is a polarized plug and will normally fit into a wall outlet only one way. These tools are referred to as being "double insulated" and are not connected to ground. You will also see this type of plug on consumer products such as drill motors, saws, hair dryers, etc. Bear in mind that these tools are safe from shock hazard only because the plastic parts do not conduct electricity. The blades of these plugs should never be altered or forced into a socket.
 - USE OF ELECTRICAL TOOLS IN WET AREAS
 - The rule for this is: DON'T!!
 - Most electrical codes now require the use of ground fault circuit interrupters (GFCI) on circuits having outlets close to sinks or on circuits used outdoors. The GFCI has internal circuit breakers that compare current in the "hot" wire with that in the neutral wire. If there is a difference, a small relay will trip, indicating that some of the current is leaking away, through a short, or frayed wire, or through someone's body. GFCI plugs are available on extension cords for outdoors use.

APPROPRIATE WORK AREAS

- Students performing manual production or assembly activities should only do so in the designated shop area, or with the supervising faculty member's approval, in the outdoor courtyard space directly

outside of the shop to the north. No other portion of the building can be used to build or assembly projects using power tools or paint.

PROCEDURES FOR PERSONAL INJURY

- All injuries, regardless of severity, must be reported to a SOA faculty or staff member. If the injury to the student or staff member is relatively minor, he/she can be treated with the contents of the first-aid kits available in the shop. These kits contain materials for bandaging small cuts or dressing small burned areas. Minor cuts, fractures, burns, and abrasions can be treated at University Health Services (1202 W. Farm Road) during their normal business hours, which are 8:00 a.m. until 6:00 p.m. These services are available to students and to employees and the charges incurred are to be paid for by the injured party.
- If the injured person is incoherent, comatose, or otherwise in trauma, he/she should be transported by ambulance directly to the Emergency Room at Stillwater Medical Center. The ambulance is called by dialing 911.

BLOOD-BORNE PATHOGENS

- Any body fluids deposited on the floor, on machines, or on furniture must be dealt with as being a pathogenic material. A kit is available for this type of cleanup, which includes absorbent powder, storage bags, plastic gloves, and disinfectants. Only trained/designated personnel should clean up blood or other bodily fluids. If there is any doubt about the severity of the situation, OSU Environmental Health Services should be called immediately at extension x4-7241. Our first concern is for the safety and well being of the injured party. However, any person who is bleeding, even for minor cuts and abrasions, should control the bleeding as soon as possible to prevent contamination of lab machinery, tools, furniture, etc.

ONLINE SAFETY RESOURCE LIBRARY

- The Oklahoma State University online safety resource library can be accessed by the following link:
http://www.ehs.okstate.edu/links/index.htm?option=com_extcalendar&Itemid=59