

General Lab Information:

Everyone:

- Please sign in at the front door.
- Please check in to and check out of the lab.

Students/Community Members:

- When entering, make sure the door closes behind you. Please do not prop the door open.
- If you are going to use a press, write your name, the time, and details about your printing job on the sign-in sheet next to the press.

Monitors:

- When entering the lab, turn on all the lights located in the lounge area, table work space, type area, and press room. When leaving, make sure all the lights are turned off.
- When leaving, make sure all doors in the building are locked.
- Make sure that everything is clean and orderly – each press should have a pica ruler, tape, a pencil, scissors and clipboard sign-in sheet.
- Check and refill solvents as necessary.
- Check that all the rollers in the press room are “up.”
- Make sure the board shearer and guillotine handles are down or guards are in place.

Facilities:

- If there is a problem with the building, contact the building manager, Carrie Scharf (number below in “General Safety Information: Emergency Contacts”).
- This may include floods, power outages, electrical issues, suspicious behavior, etc.

Ordering Supplies:

- To order new supplies, contact Karen Zimmermann at kzim@email.arizona.edu.

General Safety Information:

Emergency Contacts:

- Karen Zimmermann: (520) 661-2681
- UA Police: 621-UAPD (8273)
- Campus Security: (520) 621-SAFE (7233)
- Banner Hospital Emergency: (520) 694-0111
- Carrie Scharf, Building Manager: (520) 621-1464

Clothing:

The Letterpress Lab contains heavy and potentially dangerous equipment. It is important to always dress appropriately when in the lab:

- Wear close-toed shoes. DO NOT wear sandals or flats.
- Pull back long hair. Hair can be VERY quickly and easily pulled into a running press and can result in serious injury.
- DO NOT wear any dangling accessories, including but not limited to scarves, hanging earrings, necklaces, or earbuds.
- DO NOT use headphones of any kind while printing.

Equipment:

- Lab equipment must be used correctly and carefully at all times.
- DO NOT use any equipment that you have not been trained to use.
- If you encounter any problems with the equipment, speak to a lab monitor. If a monitor is unavailable or unable to help, contact Karen Zimmermann. Additionally, please place a note on the equipment with the problem detailing the issue and requesting it not be used until the issue is resolved.
- For information about specific equipment, refer to the relevant section below.

Emergency Situations:

- There is a phone available for emergency calls in the press room. Emergency contact numbers are posted near this phone and above under the section "Emergency Contacts."
- Suspicious Behavior
 - If you notice suspicious/threatening behavior or if a non-lab member attempts to enter the building, contact Campus Security and then building manager Carrie Scharf.
- Injury
 - In case of serious injury, call 911 and then contact Karen Zimmermann.
 - If necessary, a first aid kit is located by the telephone in the lab.
- Fire
 - In case of a fire, leave the building immediately and call 911.
 - If asked, the building's address is 1035 Mabel.
 - Fire extinguishers are located throughout the building.

Guillotine/Shearer Procedures:

Shearer Use:

- Adjust the ruler to the proper measurement.
- Lift the blade, place the paper, and clamp down.
- Bring the blade down. When done with the shearer, lock the blade.
- Throw out any scraps smaller than 1 inch wide. Anything wider can be recycled.
- *Important:* Book board can only be cut on TWO large shearers. DO NOT attempt cutting book board with only one.

Shearer Use:

- ➔ Lift the blade up by turning the wheel until it lock in place, ensuring that it will not fall during adjustments.
- ➔ After finding the measurement to cut, place several sheets of scratch paper above and below the paper you are cutting to ensure the blade cuts all the way through.
- ➔ Bring the clamp down until the stack is firmly in place.
- ➔ Bring the blade down CAREFULLY.
- ➔ Double check the blade lever locks when lifting the blade.
- ➔ When done using the guillotine, bring the clamp back down to prevent accidents.
- ➔ Throw out any scraps smaller than 1 inch wide. Anything wider can be recycled.
- ➔ *DO NOT* use a guillotine to cut book board unless it is chipboard specifically provided by the lab.

DO NOT GET DISTRACTED WHILE CUTTING – DO NOT LET ANYONE TALK TO YOU AND ALWAYS WATCH YOUR FINGERS.

Press Cleaning Procedures:**Cleaning the Cylinder Presses:**

- ➔ Cleaning the press is time consuming, so be sure to allot 30 to 40 minutes while planning out your printing time.
- ➔ First, clean and wash any type or forms while they are still locked on the press bed.
 - Press Wash (California Wash) should be used for wood type, polymer (only if necessary), linoleum, woodcut, etc.
 - Use ONLY alcohol to clean lead type.
- ➔ Use ONLY Press Wash (California Wash) to clean the presses themselves.
- ➔ Raise the rollers and apply a thin line of Easy Street along the length of the distribution roller. Then, lower the rollers and turn on the press, allowing the Easy Street to be worked into the ink.
- ➔ After a few minutes, raise the rollers and wipe off as much ink as possible. This should remove most of the ink. Use a dirty rag for this step, as we are primarily concerned with removing excess ink at this stage.
 - Tip: Fold the rag into a tightly packed square to allow you to hold it firmly and easily refold it when one section becomes too inky.
- ➔ While wiping, use long, continuous wipes across the length of the rollers and avoid using a “scrubbing” back-and-forth motion to prevent excess wear on the rollers.
- ➔ Next, we clean the ink reservoir roller. Turn the roller on and firmly press your folded rag in the small space between the press bed and the roller. Slowly move the rag along the length of the roller, cleaning off the excess ink.
 - Be careful not to catch your fingers in the machine’s moving parts.
- ➔ Continue wiping down all the rollers until only a thin film of ink is visible.

- ➔ Using a less dirty rag, drizzle a few drops of press wash onto the rollers or onto the rag, and wipe away the remaining ink film.
 - As before, clean all the rollers on the press. When cleaning, if you do not see a “trail” left by the press wash on the rollers, add a little more.
 - Keep cleaning until only a small amount of ink can be seen after wiping the rollers.
- ➔ Using a clean rag and press wash, wipe down all the rollers one last time.
 - A roller is only clean when the rag wiping it comes away completely clean.
 - Be careful when wiping the rubber rollers, as the rubber will start to wear away when there is no ink left, meaning that over-scrubbing can damage the roller and make it uneven.
 - Leaving even a trace of ink on the rollers can ruin and tint another person’s ink, wasting both time and resources. Be thorough!
- ➔ With the rollers completely ink free, use your rag to wipe down the rest of the press to remove inky spots and smears. Clean the press bed, the handles, the knobs, and anywhere you see ink from usage.
 - Inky fingerprints and smears are easy to miss, but can stain another person’s prints and clothes, so be diligent!
- ➔ Turn the press off, raise the rollers, and cover the press with its canvas cover.
- ➔ Sign the press sheet and note your usage before leaving.

Cleaning the Platen Presses:

- ➔ Clean and remove the chase, along with all the type and furniture contained within it.
- ➔ Place a thin layer of Easy Street on the inking plate and work it into the ink in the manner as you would regularly apply ink.
- ➔ Using a dirty rag, wipe the ink from the plate and the rollers. Be careful – some parts are loose. Be sure not to dislodge them as you clean.
- ➔ Wipe until most of the ink has been removed. Then, take a clean rag and use California Wash to wipe down the rollers and the inking plate until the rag no longer picks up ink.
- ➔ Set the rollers back in place by pulling the springs forward until the bearings are resting on the metal ledge of the press.
- ➔ Wipe down the handles and anywhere else that may have stray ink splatters.

Solvents:

It is important to use the correct solvents when cleaning the presses, types, and other equipment in the lab. Below is a description of the solvents and their proper uses:

- ➔ California Wash/Press Wash:
 - General press cleanup and wood type/wood cuts.
 - Refill canister when necessary.
 - Extra canister wash can be found in the blue container next to the red cabinet. To refill the canister, unscrew the top and pump new wash into the canister by working the lever on the container.
- ➔ Alcohol:

- Used for lead type cleanup.
- Should NEVER be used on the rollers
- ➔ EZ Street
 - Used to loosen the ink on presses and assists with press cleanup.
- ➔ Mineral Spirits:
 - Used for ink slab cleanup.
- ➔ Simple Green:
 - Used for cleaning corrosion.
- ➔ WD40:
 - Spray onto the press and scrub with rags.

Using the Presses:

Tympan Preparation:

- ➔ First, loosen the inset screws on the gripper bar and slide out the tympan sheet.
- ➔ Roll the cylinder down the press bed until you can see the ratcheting bar.
- ➔ Pull up the ratchet cath and unwind the tympan from the bar and remove it.
- ➔ Replace the packing sheets to your desired thickness, using digital calipers to determine the thickness of the sheets.
 - If in doubt, replacement sheets should add up to the same thickness as the old sheets, which are under-packed to prevent damage to the cylinder and press.
- ➔ Insert new tympan sheet into the gripper bar and hand tighten the screws.
- ➔ Crease the corner of the tympan to ensure it lies flat as it wraps around the corner of the bar.
- ➔ Slip the other end of the tympan into the slot on the ratchet bar and tighten until the tympan is pulled tight against the cylinder. Ensure the packing and the tympan are aligned.

Roller Preparation:

- ➔ Before printing, check the roller height. Use the roller gauge (the metal “lollipop”) by sliding it on its side, under the left side of the back roller and then turning it vertical and pulling it underneath only the back roller. Turn it to its side again to pull the gauge out.
- ➔ The line that appears should be about the thickness of a nickel. If it looks like it needs adjustment, turn the corresponding knob on the side. Counterclockwise raises the rollers and clockwise lowers them. After each adjustment, test again with the roller gauge until the proper height is reached (make sure to clean off the gauge each time).
- ➔ Repeat this process on the other side of the back roller.
- ➔ Return to the first side and check the height again, as adjusting the height on one side can affect the height on the other.
- ➔ Repeat the process for both sides of the front roller.

Inks:

- ➔ All inks in the lab are translucent unless labelled “black” or “opaque white.”

- This allows the paper color to show through, as well as other inks printed on the paper.
- Colors can be mixed with recipes from the Pantone Formula Guide.
- ➔ All ink cans should be labelled as either rubber or oil based ink.
 - If a can is not labelled, open the can. If there is a skin or film on top of the ink, it is oil based. If not, it is rubber based.
- ➔ Oil Based Inks:
 - Dries quicker
 - Oils are glossier
 - Can't be left on the press overnight
 - Comes in metallic and fluorescent colors
 - Great for printing on coated papers
 - Can mix with additives like high gloss and varnish
 - Produces brighter colors
- ➔ Rubber Based Inks:
 - Thicker and dries slower
 - Can be left on the press overnight (Lab Policy: Do not leave ink on the press overnight unless you are returning the next morning before 10 AM. If so, leave a note with your name and phone number)
 - Matte colors
 - Takes longer to dry on papers
 - Consistent colors
 - Great for general use and projects
- ➔ Black Ink:
 - The Lab has both mixing black and dense black inks.
 - Mixing black ink is translucent.
 - Dense black ink is not translucent.
- ➔ Opaque White:
 - Needed to print white on darker paper.
 - Opaque white is still slightly transparent, but will show up on darker colors and will have a blueish hue.
 - Consider using silver ink to achieve a similar effect with less hue.
- ➔ Before opening a new can of ink, be sure to use up all other available ink.
- ➔ When opening a new can of ink, throw out the piece of wax paper and cardboard on top.
- ➔ Do not open a new can of ink if a similar color is already available.
- ➔ Throw away old cans of ink. If you are using the last can of ink, email Karen Zimmermann to let her know.

Inking Procedure:

- ➔ DO NOT mix oil and rubber based inks.
- ➔ When taking ink from the can, SKATE, don't GOUGE:
 - "Skate" the palette knife across the surface of the ink to gather a small amount.
 - You do not need to scoop or gouge ink out.
- ➔ Put the cap and wax paper back on the ink so it doesn't dry out.

- ➔ Using the knife, apply the ink in dabs or in a thin line across the front roller of your press.
- ➔ Turn on the press and engage the rollers to let the ink spread evenly across all the rollers.

Cleaning the Ink Cans:

- ➔ Ink cans will need cleaning to take out dried up bits of ink or if something falls in.
- ➔ Using a palette knife and a piece of phone book paper and scrape pieces out, then wipe the knife on the paper.
- ➔ Keep in mind that you should not be gouging scoops out of ink while doing so and try to keep the ink as smooth as possible for the next person.
- ➔ Spray the ink with “anti-skin” spray from on top of the red cabinet to prevent a skin from forming.
- ➔ Place a new sheet of wax paper between the lid and the can to prevent it from sealing closed.